Media Constructions of Sustainability: Upper Elementary





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Providing materials, training, and support to help teachers prepare students for life in today's media-saturated world.



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Mission Statement

Project Look Sharp is a not-for-profit, mission driven initiative committed to providing teachers with the training and materials they need to integrate media literacy, critical thinking and 21st century learning into the curriculum.

Project Look Sharp provides staff development workshops and consulting.

Please Consider Donating

All our curriculum kits are available **free** of charge on our web site. Please contact *Project Look Sharp* to make a donation.

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About The Kit

This kit provides upper elementary teachers and community educators with the materials needed to engage students in a dynamic and constructivist process of learning how sustainability has been presented in the media with a particular focus on issues related to food, natural resources, water and media production. Each lesson integrates media literacy and critical thinking with a content focus on a particular aspect of these topics. Themes throughout the kit include

- Human impact on earth systems,
- Taking action on environmental and social concerns,
- Personal choice and decision-making,
- Persuasion in media messages,
- Analyzing diverse points of view,
- Learning to ask good questions.

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Media Constructions of Sustainability: Upper Elementary

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INTRODUCTION

Overview, Objectives, Learning Standards, & Accessing Materials

Overview

This kit provides upper elementary teachers and community educators with the materials needed to engage students in a dynamic and constructivist process of analyzing the representation of sustainability in the media with a particular focus on issues related to food, natural resources, water and media production. Each lesson integrates media literacy and critical thinking with a content focus on a particular aspect of these topics. Themes throughout the kit include:

- Human impact on earth systems
- Taking action on environmental and social concerns
- Personal choice and decision-making
- Persuasion in media messages
- Analyzing diverse points of view
- Learning to ask good questions.

Companion kits dealing with similar topics in the Project Look Sharp environment series include:

- Media Constructions of Sustainability: Food, Water & Agriculture
- Media Constructions of Sustainability: Finger Lakes (upstate New York)
- Media Constructions of Sustainability: Early Elementary
- Media Constructions of Sustainability: Middle School
- Media Construction of Global Warming
- Media Construction of the Environment: Chemicals in the Environment
- Media Construction of the Environment: Endangered Species
- Media Construction of the Environment: Resource Depletion

Objectives

• Students will learn key information about the sustainability of food, water and natural resources.

• Students will analyze and evaluate a variety of perspectives on how our food, water and natural resources have been impacted by human activity and how people work to help protect human and natural communities.

• Students will be trained to ask and answer key questions about authorship, purposes, content, techniques and the impacts of media constructions that help form knowledgeable and well-reasoned opinions.

• Students will engage in complex, reflective, open-minded analysis, and use critical thinking to develop reading, listening and visual decoding skills and attitudes that support life-long democratic citizenship.

• Students will take well-reasoned and self-reflective positions on controversial issues and consider actions that are consistent with their beliefs and knowledge about sustainability.

Learning Standards

Each lesson plan and assessment overview includes a listing of specific standards taught or evaluated in that lesson or assessment. This kit addresses specific standards from the following frameworks:

Common Core English Language Arts Strands

- Reading: Informational Text
- Reading: Literature
- Writing
- Speaking and Listening
- Language

Common Core Math Domains

• Measurement & Data

- Number & Operations Fractions
- Number and Operations in Base Ten

Next Generation Science Disciplinary Core Ideas

- Natural Resources, Roles of Water in Earth's Surface Processes
- Human Impacts on Earth Systems
- Interdependent Relationships in Ecosystems

National Council for the Social Studies C3 Dimensions

- Developing questions and planning inquiries
- Applying Disciplinary Tools and Concepts in Civics, Economics & Geography
- Evaluating Sources And Using Evidence
- Communicating Conclusions and Taking Informed Action

Constructivist Media Decoding

All materials in this collection are designed for teaching with a pedagogy based on the use of constructivist questions that unearth student meaning making and support metacognition.

Constructivist questions are inquiry-based and interactive, inviting collective readings about media construction. They provide opportunities for students to sustain and extend their thinking through consistent probing.

- What messages are communicated?
- Using what techniques?
- Who made this document?
- For what purpose?

Constructivist questions probe for evidence in the document in order to sharpen students' critical thinking skills and to help them to reflect on the ways in which each individual constructs their own knowledge of the world.

- Where do you see the evidence for that in the document?
- How did you arrive at that conclusion from viewing this document?

Constructivist questions are complex, inviting multiple readings that represent the nuanced

interpretations that each individual brings to understanding the meanings within media documents.

- Why do you think that?
- How might different people understand this message differently?

Constructivist questions encourage the development of moral reasoning as students clarify their own interpretations, listen to the analysis of their peers, and discuss ethical issues.

- What do you learn about yourself from your interpretation?
- What actions might you take in response to this message?

Accessing Materials: Slides, Video and Print

All print and media materials for this kit are available for download free of cost at http://www.projectlooksharp.org. The media materials include the PowerPoint slideshows, video clips as MP4s, and print materials as PDFs. Educators will need access to a computer and digital projector or multiple devices so that the class can identify key details in each slide and video. For further ideas on how technology can be used to enhance students' interactions with the lesson materials provided, see *How To Use These Materials*. Teachers will want to review the lesson and make copies of student handouts and assessments prior to instruction.

In some lessons, students will be asked to view media documents individually or in small groups in preparation for a class presentation. In these instances, a note will appear in the directions of the *Teacher Guide* explaining to provide the media to the students or have them access the materials *from the Project Look Sharp homepage* http://www.projectlooksharp.org.

While the kits are available for free online, mobile non-Internet based versions are also available with the purchase of a digital media device.

MEDIA CONSTRUCTIONS OF SUSTAINABILITY UPPER ELEMENTARY



INTRODUCTION

How To Use These Materials

Lesson Organization

The lessons in this kit have been organized within the following framework:

Unit 1 explores food choices using English Language Arts (ELA), math and social studies.
Unit 2 explores natural resources using ELA, math, science and social studies.
Unit 3 explores water using ELA, math, science and social studies.
Unit 4 explores media production in sustainability using ELA and social studies.

The lesson design throughout this kit is consistent in order that teachers and students may become familiar with constructivist media decoding as a process that requires inquiry, reflection, evaluation and action, always leading back to a new round of questioning. Most lessons are designed with the following activity sequence:

- Compelling questions brainstorm about the lesson topic
- Full-class collective decoding of media document(s)
- Paired or small group decoding activity tied to standards
- Group review of decoding answers and understandings
- Summary reflective questions
- Action steps brainstorm
- Further questions
- Extended activities.

Adapt for your needs

Although some teachers may elect to teach this curriculum in its entirety, most will select certain lessons, activities or media documents that are best suited to their teaching objectives. This format is intended for use in a flexible manner based on a teacher's past experience with constructivist media decoding and on students' prior content knowledge of the topic. You might choose to excerpt portions of activities and worksheets to be used as a quick mini-assessment for particular skills, as a five minute opening or ending exercise or as culminating assessments following a unit of study. We encourage teachers to carefully review the **Table of Contents**, **Lesson Plans** and **Teacher Guides** in order to determine which lessons and activities might work best for their individual purpose.

As you review the specific steps in the **Teacher Guide** be prepared to adapt the suggested steps to meet the learning needs of your students. You might elect to work on vocabulary questions as they arise rather than up front as suggested. You might want to offer the partner exercises as individual or small group work. Some activities might be given as a homework assignment. In cases where you are extending a lesson over several periods you might begin each session with reminders about previous learning about content and media literacy. ("What did we learn yesterday about...?").

Leading a Decoding

Constructivist decoding assumes that each student constructs their own meaning from the interaction between the document (video clip, web page, print article, etc.) and her/his own unique identity (age, experience, views, etc.). It is the role of the teacher to ask questions that will result in the richest discussions. The art of leading a constructivist decoding is more improvisational than scripted – with the teacher fluidly deciding where and how to respond to each student comment - considering how it will be interpreted by the other students. The teacher must be open to where student meaning making leads while also staying focused on the learning goals.

The choice of document, questions, structure (e.g. whole group vs paired work), and facilitation of the analysis should always be driven by the teacher's

goals for each activity. The teacher may want to start the decoding with open-ended questions (e.g. *What do you see here?*) to unearth students' background knowledge, interpretations or feelings in response to the media document(s). Or the teacher may want to immediately focus on specific content analysis (e.g. *What are the messages here about...?*). Or the teacher may want to get right to critical literacy questions (e.g. *What is the point of view here about...?*).

While the choice of documents and where to probe should always reflect one's goals, typically the decoding will move from more open ended questions, to content focused questions to literacy questions as the students move from personal to document/evidenced based to more metacognitive thinking. Ultimately the teacher may move to probing that asks students to reflect on their own conclusions (e.g. *Which of these documents best matches your own position and why?*) and action (e.g. *What might you do about it...?*).

The Project Look Sharp website includes professional development support for leading a decoding including annotated video models illustrating media decoding at different grade levels and for different subject areas (see *Videos about Project Look Sharp*) and a *Tips for Decoding* downloadable document. For a more detailed exploration of media literacy see the book, *The Teacher's Guide to Media Literacy* by Scheibe and Rogow.

Curriculum Elements

Each lesson in this kit has a one or two-page *Lesson Plan* that includes objectives, standard alignments, vocabulary, media forms, materials, time required and lesson procedures. The *Teacher Guide* includes a step-by-step plan for teaching the lesson.

Most lessons begin with a class discussion that includes opening questions, a review of vocabulary and a lesson introduction that introduces the topic and lesson objectives to the students. Most lessons include probe *Media Sample Questions & Answers* that ask students to apply their knowledge of science, social studies and media literacy in each media document. *Possible Answers* are included to model evidence-based responses that address key scientific, social studies and media literacy concepts and information. However, there is rarely one right answer to any of these interpretative questions, and teachers should encourage multiple readings and a diversity of responses as long as students present evidence to back up their interpretations. It is important that students recognize that all people do not interpret media messages in the same way. It is also important to encourage students to begin to ask their own media literacy questions, especially as they become more familiar with this form of critical analysis.

Following the class discussion most lessons move on to partner work using *Student Worksheets* and/or *Student Handouts. Media Sample Questions & Answers* are provided to help with in-class review of student work. The lesson wrap-up includes a summary reflection activity asking students, "What have we learned about our opening questions?" and a brainstorm of actions that students might take based on what they have learned.

Further Questions and Extended Activities

prompt students to move beyond media-based analysis to discuss issues, make personal connections, conduct follow-up research or take social action. Teachers will add their own questions as a means to encourage holistic understanding. The documents provide an opportunity for teachers to probe into fundamental questions about how we come to know about food, water and natural resources and how sustainability themes such as human impacts on the environment, personal values and collective action intersect with one another.

Accessing Materials

While many document decodings within this curriculum are whole class activities, some lessons call for students or small groups to independently analyze media documents for inclass presentations followed by a full-class discussion. The **Teacher Guide** describes how students can access the media documents from the Project Look Sharp home page. It may be helpful for students to be able to **access videos and PowerPoint slides on individual devices** to enable pausing as needed to make notes and to zoom in on images and text. If these devices are not available, consider making print copies of individual slides for close reading. Other options for student viewing and accessing webpage images are to **go directly to the source URL** (located in the reference list at the end of each PowerPoint). You could then project the source onto a whiteboard or provide the URL to the students to navigate on their individual devices.

Integrating New Technology

Using technology that allows students to interact with the media documents being analyzed can enhance the constructivist media decoding process. Through the use of smart boards, tablets and computer programs, students can zoom in for more details or mark supporting evidence. This can also be done through paper and pen or on a projector. Web resources can also be helpful. The website *Vialogues* allows for time-stamped video discussions. The application *Explain Everything* allows for narration of compiled presentation.

The use of individual devices can provide further flexibility for students to interact with the media texts since they are able to pause videos when they want, zoom in on distinct parts, or mark up documents with their observations and questions. When students are using their own devices it is advised that teachers devise a way to collect student annotations to capture the individual decoding process. This can be done through PDF editors, remix programs (such as The LAMP's *MediaBreaker* for video, or *Mixxx* for audio) or Screen capturing software (such as *Quicktime*, *Camtasia* or *Jing*).

Worksheets provided in the lessons can be digitized and distributed to students through technology devices if teachers have adopted this method in their classroom.

Assessments

Units 1-3 include unit assessments with *Student Worksheets* and/or *Student Handouts* and an

Assessment Overview which lists objectives, standard alignments, materials needed, possible answers for worksheets and evaluation criteria for the writing assignment. It is not essential that you teach all unit lessons to deliver this assessment.

Time and Coverage

The time it takes to deliver these lessons will vary depending upon the knowledge of the students, the experience of the teacher with this form and these materials, the amount of further questions asked, and how many of the media documents the teacher uses. Although teachers may sometimes need to edit the number of documents used, they should avoid the temptation to sacrifice student interaction for content coverage. The power of the lessons emerge when students actively apply their knowledge, identify evidence, articulate their interpretations, analyze authorship and point of view, and discuss meaningful issues.

Do No Harm

One of the key requirements of constructivist pedagogy is to pay deep and constant attention to the healing and harmful power of words and images. The issues raised in this curriculum can provoke powerful emotions from students (e.g. responses to the videos on hunger). It is essential that the teacher monitors the emotional climate of the class and be willing to ask, "How are you feeling?" It is essential that the teacher create a setting in which personal sharing of feelings will not be obstructed by laughter, side comments or crosstalk that can hurt individuals and make it harder to discuss the sensitive issues that are at the core of this kit.

Teaching Students to Ask Good Questions

One of the key goals of this curriculum is to help students become better questioners. Several lessons include activities in which students are invited to work together to come up with their own document-based media literacy questions (U1L4, U2L3 & U3L4). Each unit also includes lessons where students are asked to come up with their own math word problems (U1L2, U2L5 & U3L3). For these lessons you might ask students to defend why the question they came up with is a good one. It's important that teachers take the time after these activities to engage with students in dialogue about what makes a good question and what makes a not-so-good question and why.

Teachers can begin this opportunity to practice creative questioning by having a discussion as to why people in general ask questions, why teachers in particular ask questions and what's the value of asking good questions. As they work on these units you might suggest that students develop their own "question toolbox" in which they begin identifying and organizing questions into different types – media literacy vs. content questions or, in the vernacular of the C3 social studies dimensions, compelling vs. supporting questions. An advanced activity might be to invite students to prepare and lead their own document decoding activity, following your model for good inquiry-based questioning.

Scaffolding

There are a wide variety of practices and tools that teachers might consider using to help students enter into media document decoding practice. The simplest of these is to encourage note-taking as students review videos or slides. Be prepared to pause after projecting media documents to allow students to work, alone or together, to deepen their own thinking before opening to full-class discussion. In some instances we've provided Tcharts as a model to support note-taking while viewing. For several of the writing assignments we've provided some graphic organizers to help students scaffold their learning. You might want to add to the PowerPoint slides your own slides with initial discussion questions, vocabulary and bulleted worksheet directions to help students with auditory processing issues.

For students who need greater challenges consider developing some of the *Extended Activity* ideas into full-scale projects. Ask students to go to the original sources to find out more about the perspectives of the authors and creators of these media materials. Assign students to track down their own "counterpoint examples" for looking at points of view not expressed in the materials presented in the lessons.

Professional Development Support

There are many options for further teacher support available on Project Look Sharp's website. These include:

Videos: of teachers using constructivist media decoding in the classroom URL: <u>http://www.projectlooksharp.org/index.php?actio</u> <u>n=videos&category=media_decoding</u>

Webinars: on topics related to sustainability and media literacy education URL: <u>http://www.projectlooksharp.org/index.php?actio</u> <u>n=webinars</u>

Articles on media literacy pedagogy URL: <u>http://www.projectlooksharp.org/index.php?actio</u> <u>n=medialitarticles</u>

Handouts for classroom support URL: <u>http://www.projectlooksharp.org/index.php?actio</u> <u>n=medialithandouts</u>

Do-It-Yourself (DIY) Guide for integrating media decoding into core content teaching URL: http://www.projectlooksharp.org/index.php?actio n=diy

Workshop opportunities to hands-on teacher support. URL: <u>http://www.projectlooksharp.org/index.php?actio</u> <u>n=workshops</u>

We encourage you to make use of all of these as you seek to further incorporate media literacy education into your teaching.

INTRODUCTION

Media Literacy and Democratic Citizenship

The founders of the United States articulated the need for a literate citizenship as core to the development of a deep and enduring democracy. We live in an age when the most influential messages about pressing social issues and events are delivered through mass media, such as television, magazines and the Internet. Most students use the Internet as their primary source of information, yet few have any formal training in assessing the credibility of information in the media. It is essential to the success of our democracy that young people consciously and consistently analyze and evaluate media messages. They need to be taught to seek out current, accurate, and credible sources of information; they need to understand the influence of media messages on their understanding of the world and themselves; and they need training in identifying and using various techniques for communicating messages in different media forms. Without these critical skills, we risk losing the diversity and freedom of thought that underpins a culture of true democracy.

Collective Reading of Media Messages

This curriculum is based on the classroom practice of collective reading, in which the teacher leads the class through the process of decoding images, sounds and text as a way of developing a range of critical thinking skills while teaching core knowledge. This constructivist approach encourages the development of moral reasoning as students clarify their own interpretations, listen to the analyses of their peers, and discuss ethical issues. Decoding of the documents in this curriculum will help train students to distinguish fact from opinion, analyze point of view and identify bias, interpret historical documents, and use evidence to back up a thesis. The classroom decoding process is particularly effective in involving students who rarely share their opinions about print-based material, including students with reading disabilities, visual learners, and students for whom English is a second language. The teacher should consider calling on students or going around the room to ensure participation by all students in the collective reading process.

Encouraging Multiple Readings

Although the Teacher Guides for each lesson include possible answers to the questions, the teacher should encourage multiple readings and a diversity of responses for most of the questions posed. It is important that students give evidence in the document to explain their conclusions. Occasionally a question has only one right answer (e.g., "who created this video?"), and students should learn to distinguish between objective and subjective questions. The suggested answers given in the scripts are intended to reflect typical responses that address key scientific, historical and media literacy concepts and information. However, it is important that students recognize that all people do not interpret media messages the same way. Depending upon each reader's background, including life experience, age, gender, race, culture, or political views, he or she may have very different interpretations of a particular text. The collective reading experience provides the opportunity to explore these differences and discuss the important concept that readers interpret messages through their own lenses.

Reading Bias

A major theme of these materials is the recognition that all media messages come from a particular point of view and have a bias that reflects the intent and perspective of the producer and sponsor. With these materials, teachers can train students to recognize bias and point of view. The teacher should encourage students to ask critical questions about any media messages encountered inside or outside the classroom using the *Key Questions To Ask When Analyzing Media Messages*, a downloadable document from www.projectlooksharp.org.

Bias in this Curriculum and in the Classroom

This series of lessons, like all media, also has a point of view and a bias. As teachers use the lessons, they may identify opinionated language, selective facts, missing information, and many other subjective decisions that went into constructing this view of sustainability. The same questions the curriculum applies to other documents can be applied to this media construction: Who produced this curriculum for what purpose and what is its bias? Teachers and students could and should be asking critical questions about the editorial choices that went into constructing these lessons. For instance, why did we choose to focus on certain topics, but not others? And, what is your evidence for these conclusions? When using these materials teachers will make their own decisions of what to include and to edit, what guestions to use and what issues to avoid.

All of these decisions, both by the creators and users of the curriculum, will influence the view of history that students receive. Teachers should encourage students to thoughtfully analyze and discuss the stories, the perspectives, and the biases celebrated and criticized within our own classrooms. Those skills and practices are core to an educated democratic citizenship.

Additional Resources

For more information about media decoding; download these documents from the project Look Sharp website:

- Key Questions to Ask When Analyzing Media Messages
- Tips for Media Decoding
- Core Principles for Media Literacy Education

Fair Use of Media Documents

The classroom critique of political and cultural documents (e.g. paintings, TV news clips, excerpts from films, web pages) is essential to the development of core literacy skills in our media saturated democracy. To enable educators to fulfill the mission of teaching these core civic objectives, Project Look Sharp has created media literacy integration kits using a variety of different media documents for critical analysis in the classroom. Project Look Sharp provides these media documents and lessons free of charge for the purpose of commentary, criticism, and education as provided for by the fair use clause of the US Copyright Act of 1976. The documents in this curriculum are presented for the purpose of direct critique and are solely to be used in an educational setting.

For more information about fair use in Media Literacy Education, go to the Media Education Lab at Temple University at www.mediaeducationlab.com.

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LESSON PLAN



How Do We Decide What to Eat and Drink?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will consider how food choices impact personal health.
- Students will analyze web pages and food diagrams to discern messages.
- Students will note similarities and differences in point of view within different texts.

S	Standards		Activities
	Common Core ELA	CCSS.ELA-LITERACY.RI.5.6	Worksheet 4-5
		CCSS.ELA-LITERACY.RI.5.7	Worksheet 1-3
		CCSS.ELA-LITERACY.RI.5.9	Worksheet 6

Vocabulary:

Domain Specific: USDA, nutrition, calorie, balanced diet, vegan diet, physically active, solid fats, added sugars, real savings

Academic: sparingly, incorporate, gender

Media Type(s): web pages

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the *How to Use Materials* section associated with this kit.

Materials for the Lesson:

- Six-page Teacher's Guide: How Do We Decide What to Eat and Drink?
- Two-page Student Worksheet: What to Eat and Drink?
- Seven slide PowerPoint (download from website or via Unit 1, Lesson 1 digital media folder) Additional Support:
- From the website, view Media Decoding Examples demonstrating classroom media analysis.
- Download the <u>Key Questions for Analysis</u> for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 45 minutes

Lesson Procedures

- Ask "Why do we eat food?" and "How do we decide what to eat and drink?"
- Present the Lesson Introduction to the class.
- Lead a media document decoding of two food pyramids asking for messages with evidence from the document.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to work in pairs to complete the *Student Worksheet: What to Eat & Drink?* Here they will decode messages and compare points of view about what our bodies need to be healthy.
- Review student work as a class.
- Lead a summary discussion on how food choices can help promote health.
- Brainstorm action steps students can take at home or while eating out based on what they have learned.

TEACHER GUIDE

How Do We Decide What To Eat and Drink?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask two questions in turn: "Why do we eat food?" and then "How do we decide what to eat and drink?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about our need for food and our personal food choices. These are questions that many students have never considered. Take time to help students think beyond initial responses.
- Introduce some of the key vocabulary for this lesson:

 <u>Nutrition</u>: the study of nutrients, the chemical substances that our bodies need to live. Examples of nutrients are vitamins, protein and fats;
 <u>Calorie</u>: a unit of heat that measures the energy in food;
 <u>Balanced diet</u>: eating and drinking the right amount of nutrients for a healthy diet;
 <u>Vegan</u>: a person who does not eat or use animal products.
- **4.** Introduce the lesson. Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Lesson Introduction

In this activity you are going to be detectives working to discover how food choices can help you stay healthy and strong. We're going to compare what three different websites tell us about the nutrients we all need for a balanced diet. Do you think they will all say the same thing? What would you predict?

5. Project PowerPoint slides, Media Documents 1-2 and lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this image?" or "What questions do you have about this media example?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages, *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.



Evidence: • foods at the bottom are all mixed up

Possible Answer: Our bodies need exercise to stay healthy.

- **Evidence:** figure climbing the staircase
 - "Steps to a healthier you"

need to be healthy? Where do you see the

in the image?

clues about the message

PARTNER WORK:

- 6. Have students work in pairs to complete the worksheets. Distribute the *Student Worksheet: What to Eat and Drink*. Explain how students can access the PowerPoint slides of the web page documents in the *Student Materials* section on the Project Look Sharp homepage, <u>www.projectlooksharp.org</u>. Or, if you prefer you can make copies and distribute the Food Choices Lesson 1 PowerPoint slides, Media Documents 3-5.
- 7. After students have completed their worksheets, project the PowerPoint Media Documents 3-5 and review their work using the *Media Sample Questions & Answers* that follow. *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the media example even when the answer may seem readily apparent.



Media Document 3 Let's Eat for the Health of It



Media Sample Questions & Answers

1) What are the messages about what our bodies need to be healthy? Where do you see the message in the media document? **Possible Answer:** We need to choose a balanced diet containing the five food groups: fruits, grains, vegetables, dairy and protein.

Evidence: • MyPlate diagram at center right

- healthy plate image bottom left
- family meal in the top photo
- people eating family style by choosing their own portion size

Possible Answer: We need to eat the right amount of food.

Evidence: people eating family style by choosing their own portion size

Possible Answer: We need to exercise regularly.

- **Evidence:** image of family riding bikes
 - "be physically active your way"



5) Name some differences in points of	Possible Answer: Media documents 3 & 5 suggest eating only small amounts of sweets. Media document 4 offers sweets at each meal.
needed for healthy bodies.	Media documents 3 & 4 suggest meat as a protein potion. Media document 5 shows no meat options.
	Media documents 4 & 5 suggest buying their products to help stay healthy (McDonald's food and Vegan Food Pyramid poster). Media document 3 isn't selling any products.

WRAP UP:

8. Engage in a summary reflection activity. Ask students: What have we learned about our opening questions?

Why do we eat food, and how do we decide what to eat and drink?

Invite further inquiry by asking:

What don't you know that you want to know about this topic or these media documents? What sources might help you to find out what you want to know?

9. Brainstorm *Action Steps* students can take at home or while eating out based on what they have learned. What can you do now that you know about how media messages can influence our choices about what to eat and drink? You might want to list suggestions as a chart.

Ideas might include:

- Identify media messages about food and drink choices.
- Ask your parents and friends about media messages when you eat or shop together.
- Decide what menu choices could make a balanced diet at your next restaurant visit.
- Write a letter to a restaurant owner about their food choice advertising.
- Work with other students to increase awareness about healthy food choices in your school cafeteria.

FURTHER QUESTIONS

What's the difference between a vegan diet and a vegetarian diet?

A "weasel word" is a word or phrase that is used in advertising to make a claim seem true when on closer examination it proves not to be telling the full truth. A weasel word example from media document 4, the McDonald's webpage, is the phrase "can be" in the sentence underneath "A Balancing Act:" "Many nutrition professionals agree that McDonald's food can be part of a healthy diet..." It sounds like eating McDonald's food leads to a healthy diet. This is only true if the customer pays close attention to all their food choices, something few of us do all the time. The phrase "can be" provides a lot of wiggle room for the company to suggest that its food is part of a balanced diet when it may not be. What other "weasel words" can you find in media advertisements for food and drinks?

EXTENDED ACTIVITIES

Imagine that you are a researcher for a group that addresses global food inequality. Research ways the world's resources are unequally distributed and make a report to your peers on the results with suggested solutions to the significant problem.

Imagine that you are a scientist working for the Intergovernmental Panel on Climate Change. Categorize foods into those that increase greenhouse gases and those that reduce greenhouse gases. Based on this, what would the ideal diet consist of to improve our environment? Make a poster presentation of your results to a conference panel.

Imagine you are a researcher for the Food and Drug Administration (FDA). On your next visit to a fast food restaurant look carefully at which foods are the cheapest or displayed most prominently in the restaurant (take a to-go menu and mark it up). Make a report to your FDA team on which foods are most highly encouraged through advertising and low prices. Make a new menu highlighting foods that represent a well balanced diet and suggest any cost changes or additional information that should be included (such as calories, nutrition facts, etc.).

Imagine you are a CEO of McDonalds in a group deciding what changes to make in the McDonalds menu that would improve nutrition without harming sales. What changes might you recommend to your group?

Being a parent is a tough job! Imagine you are your mom, dad or guardian and responsible for grocery shopping every week. Make a grocery list (and perhaps meal plan too) with food items that provide a well balanced diet for your hungry family. What factors besides nutrition do you need to consider and how do these influence your choices (budget, preferences, time, etc.)?

The clock is ticking slowly and it's almost lunch time at school! Before you gobble up all your food take a quick snapshot of your meal. Once you are full and content, print the photo (or bring it into a computer editing program) and label the food categories you consumed. Was your meal well-balanced? How was it portioned? Compare your marked up meal with government guidelines such as MyPlate (check to see if interactive online tracking resources are available by the government as well.)

Student Worksheet- What to Eat and Drink?

NAME_____

DATE _____

Task: For each media document example write the messages about what our bodies need to be healthy. Tell where you see the message in the media example.

Media Document 3



1. What are the messages about what our bodies need to be healthy? Where do you see the message in the media document?

Example: We need exercise. Exercise is shown in the picture of the bike riders.

Media Document 4



2. What are the messages about what our bodies need to be healthy? Where do you see the message in the media document?

Media Document 5



3. What are the messages about what our bodies need to be healthy? Where do you see the message in the media document?

Review the three media documents and answer the following questions.

4. What are some similar points of view shared by all the media documents about what's needed for healthy bodies?

5. Name some differences in points of view about what's needed for healthy bodies.

LESSON PLAN



How Do We Decide How Much To Eat And Drink?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will compare messages about food servings in two texts.
- Students will analyze web pages and food diagrams to discern messages and sources.
- Students will solve and create math words problems that require dividing whole numbers into fractions or mixed numbers.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.RI.5.5	Step 5
	CCSS.ELA-LITERACY.RI.5.7	Worksheet 1-3
	CCSS.ELA-LITERACY.RI.5.9	Steps 8 & 9
	CCSS.ELA-LITERACY.W.5.4	Worksheet 6
Common Core Math	CCSS.MATH.3.MD.A.2	Worksheet 4
	CCSS.MATH.5.NF.B.3	Worksheet 5 & 6

Vocabulary:

S

Domain Specific: food group, food pyramid, beta-carotene, carbohydrates **Academic**: sponsor, complex; increase, exclusively.

Media Type(s): web pages

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

- Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**
- Six-page Teacher Guide: How Do We Decide How Much to Eat and Drink?
- Two-page Student Worksheet: ELA & Math How Much to Eat?
- 4 slide PowerPoint (Access online or via Unit 1 Lesson 2 digital media folder)

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 90 minutes

Lesson Procedures

- Ask "How do we decide how much to eat and drink?"
- Present the Lesson Introduction to the class.
- Lead a media document decoding of two web page food choice diagrams asking about messages, techniques and sources.

NOTE: See *How to Use These Materials* document for support in leading a constructivist media decoding lesson.

- Direct students to work in pairs to complete the *Student Worksheet: How Much to Eat?* where students will solve and create math word problems from information in the food choice diagram web pages.
- Review student work as a class.
- Lead a summary discussion on how food serving choices can help promote health.
- Brainstorm action steps students can take at home or while eating out based on what they have learned.

TEACHER GUIDE

How Do We Decide How Much To Eat And Drink?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask, "How do we decide how much to eat and drink?" Solicit a wide range of possible answers without critiquing or analyzing them. Guide students to make the connections between math and nutrition by asking what sorts of skills they need to answer questions about "how much." The kids will quickly understand that nutrition involves calculation and measurement.
- 3. You may want to introduce some of the key vocabulary for this lesson: <u>Food group:</u> foods that give your body the same kinds of nutrients; <u>Food pyramid</u>: an outline of what to eat each day based on dietary guidelines; <u>Sponsor:</u> a person or organization that provides funds for a project.
- **4.** Introduce the activity: Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Activity Introduction

Like a car needs gasoline in order to fuel the engine that makes it move, animals and humans need food. But how much? Does everyone need the same amount of "fuel"? In this activity you're going to be math sleuths working to discover how much food you need to stay healthy and strong. We're going to compare what two different websites tell us about the number of daily servings from each of the food groups that are needed for a balanced diet. Do you think they'll offer the same serving suggestions? Let's find out.

5. Project PowerPoint slides, Media Documents 1 & 2 and lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this image?" or "What questions do you have about this media document?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages *Possible Answers* are included to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.

Media Sample Questions & Answers

1) How did the designer of each web page use words and pictures to make the page interesting and inviting? **Possible Answer:** The designer of Media Document 1 used bright colors and a cartoon-like character of an older male to catch the eye and encourage a laugh and a look. The designer of Media Document 2 invites the viewer to look at the eagle landing on the top of the pyramid and then downward at the contents of the pyramid below it. The fruits and vegetables are shown in bold colors to invite the viewer to see those particular groups.

/	\setminus
Media Document 1 The New Four Food	Groups
1) Who sponsored or paid for this web page? What evidence do you see in the media document that supports your guess?	Answer: The Physicians Committee For Responsible Medicine made it.Evidence: Iower right textbox with the letters PCRM
 2) Where in this media document do you see math information? Media Document 2 Native American Foo 	Answer: The line beneath each food group lists recommended serving numbers. Recommended serving sizes are above the pictures of each food group.
1) Who sponsored or paid for this web page? What evidence do you see in the media document that supports your guess?	 Answer: The Prairie Band Potawatomi Health Center, part of the Prairie Band Potawatomi Nation sponsored it. Evidence: banner titles at top center logo at the top left.
2) Can you guess what the Prairie Band Potawatomi Nation might be?	 Answer: It is an Indian or Native American tribe. Evidence: If the menu: "Program for Indians" "Native American Food Guide Pyramid." Iogo - sacred hoop with eagle feathers
3) Where in this media document do you see math information?	Answer: Recommended daily serving amounts for each food group are listed along the sides of the pyramid.
4) Can you guess why the Prairie Band Potawatomi nation might highlight diabetes prevention in the left side menu?	Answer: Many communities in the U.S. experience problems with diabetes. This is especially true for communities without access to fresh fruits and vegetables where meals often consist of packaged foods that are high in sugar and starches.
PARTNER WORK

- 6. Have students work in pairs to complete the worksheets. Explain how students can access the PowerPoint slides of the web page documents in the *Student Materials* section on the Project Look Sharp homepage, <u>www.projectlooksharp.org</u>. If you prefer you can make copies and distribute the Food Choices PowerPoint media documents 1 & 2. You might ask students to explain in writing how they arrived at their answers. Sharing these in a group could provide students with a broader range of possible problem-solving strategies. Distribute the *Student Worksheet: ELA & Math How Much to Eat & Drink*.
- 7. After students have completed their worksheets, project the PowerPoint slides and review their work using the *Student Worksheet Answers* that follow. *Answers* are included to model application of key knowledge through evidence-based analysis.

Student Worksheet Answers – How Much to Eat & Drink

1) How many servings of vegetables should you eat every day? Where did you find the answer?	Answer: 3 or moreEvidence: Media Document 1 suggests 4 or more servings (top right) and Media Document 2 suggests 3-5 servings (middle left).	
2) How many servings of	Answer: 2 or more.	
beans should you eat	Evidence: Media Document 1 suggests 2-3 servings (middle left -	
every day? Where did	legumes) and Media Document 2 suggests 2-3 servings (top right –	
you find the answer?	Dry Beans).	
3) How many servings of	Answer: Very few	
candy should you eat	Evidence: Media Document 1 has sweets at the top of the pyramid	
every day? Where did	with the note, "use sparingly." Media Document 2 doesn't	
you find the answer?	include sweets at all in its recommended diet.	
4) According to media document 1 how many cups of raw vegetables should you eat every day?	Answer: 4 cups Computation: Serving size: 1 cup raw vegetables X 4 servings a day	

5a) If six people harvested 32 cups of vegetables from a community garden and divided them equally among their group how many cups of vegetables would each person receive?	Answer: 5 1/3 cups Computation: 32 cups divided by 6 people
5b) If each person only took enough for their recommended daily servings of vegetables how many other people could receive a full daily share of vegetables?	Answer: 2 other people Computation: 32 cups divided by 4 cups = 8 divided by 4 cups

6) Work with your partner to make up two word problems using information from both web pages. Your goal is to create word problems that will be interesting and achievable – not too hard and not too easy – for your classmates.

MATH OPERATIONS - Make sure your word problems require dividing whole numbers into fractions or mixed numbers.

Evaluation Criteria <u>Math skill:</u> Create and solve word problems that require dividing whole numbers into fractions or mixed numbers.

<u>ELA skill</u>: Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

<u>Following Directions</u>: Create word problems that are interesting and achievable – not too hard and not too easy – for classmates.

WRAP UP

8. Engage in a summary reflection activity. Ask students, "What have we learned about our opening question? - How do we decide how much to eat and drink?"

Invite further inquiry by asking, "What don't you know that you want to know about this topic or these media documents?" and "What sources might help you to find out what you want to know?"

9. Brainstorm *Action Steps* students can take at home or while eating out based on what they have learned. What can you do, now that you know about how media messages can influence our choices about how much to eat and drink? You might want to list suggestions as a chart.

Ideas might include:

- Identify media messages about food and drink portion sizes.
- Decide what menu choices are within recommended serving sizes and which are much larger or smaller at your next restaurant visit.
- Write a letter to a food or drink company about the portion sizes portrayed in their advertising.
- Compare the recommended serving sizes and daily requirement information on a food container with the USDA website to check for accuracy.

FURTHER QUESTIONS

Which foods recommended in Media Document 2 are not included in Media Document 1?

Compare the new four food groups webpage (Media Document 1) with the Native American pyramid (Media Document 2). Which Media Document educates more clearly about serving size? Why?

Compare the vegan pyramid (lesson 1, Media Document 5) with the Native American pyramid (lesson 2, Media Document 2). Which media example seems to more clearly educate about serving size? Why?

According to Media Document 2 how many servings of oats (dry cereal) would you need to fulfill your minimum daily recommendation from the bread and cereal group if you only ate oats that day? Five cups of oats weigh one pound. How many cups would there be in a 50-pound bag of oats? If 12 people shared a 50-pound bag of oats equally, how many pounds would each person receive? How many cups? Use information from Media Document 1 to determine how many days it would take to empty a 50-pound bag of oats while eating the daily recommended amount of whole grain only from that bag.

EXTENDED ACTIVITIES

Imagine that you are a Native American who is a member of the Prairie Potawatomi Nation. You just had a doctor's visit where you were informed about diabetes. Using resources (such as websites) produced by your tribe, further investigate what diabetes is and why a doctor may bring it up to you specifically. Are there certain dietary actions you should take to help prevent the disease?

Imagine that you are a school dietician. Make a chart showing the main nutrients provided by each of the food groups represented in these two documents.

Imagine that you are an analyst for the Center For Food Policy. Using pie charts or visual representations, compare the portions presented in magazine food ads with the health experts' recommendations. Write a brief research report that includes your visuals to give to the food companies providing suggested revisions they can make to more accurately depict a proportional meal.

You signed up for a nutrition challenge where you are required to keep a food journal for 1-5 days. After the dedicated time period is up analyze and reflect on your food journal: What kinds of foods did you eat? What were your portions? How did you feel? Compare your collected data with your peers into a line plot based on servings per food group. Put the average portions of each food group consumed by the class on top of the Food Pyramid to visually assess your collective eating habits.

Imagine you are a well-known author who has helped kids across the country become healthy eaters. Your most recent project is to make a kids picture book teaching children aged 4-6 about food portions and healthy eating habits. If possible, hold a special author's reading and share your work with younger students!

Student Worksheet – How Much to Eat & Drink

NAME ___

DATE _____

Task: Study both web pages to find the answers to the questions. Tell where you found your answer in the media document.



Media Document 1



Media Document 2

Use both Media Documents 1 and 2 for questions 1-3.

- 1. How many servings of vegetables should you eat every day? Where did you find the answer?
- 2. How many servings of beans should you eat every day? Where did you find the answer?
- 3. How many servings of candy should you eat every day? Where did you find the answer?

Use only Media Document 1 for questions 4-5 (continued on next page).

4. According to media document 1 how many cups of raw vegetables should you eat every day?

Student Worksheet – How Much to Eat & Drink

5a. If six people harvested 32 cups of vegetables from a community garden and divided them equally among their group how many cups of vegetables would each person receive?

5b. If each person only took enough for their recommended daily servings of vegetables how many other people could receive a full daily share of vegetables?

6. Work with your partner to make up two word problems using information from both media document examples. Use a separate sheet of paper.

Your goal is to create word problems that will be interesting and achievable – not too hard and not too easy – for your classmates.

MATH OPERATIONS - Make sure your word problems require dividing whole numbers into fractions or mixed numbers.

	WORD PROBLEM DESIGN TIPS
FIND	the numbers information within your media examples
MAKE UP	an interesting story that uses the numbers information from the media examples
CONSIDER	the math operations required : dividing whole numbers into fractions or mixed numbers
ASK	a math question from your story about the media examples that uses the required operation
SOLVE	your own word problem

LESSON PLAN



NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will identify resources used in the production and transportation of food.
- Students will reflect on why food origins matter.
- Students will analyze videos to discern messages, techniques and sources.
- Students will compare evidence from multiple sources in order to draw conclusions.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.RI.5.6	Worksheet 4
	CCSS.ELA-LITERACY.RI.5.7	Worksheet 2
	CCSS.ELA-LITERACY.W.5.1	Worksheet 5
	CCSS.ELA-LITERACY.L.5.5	Worksheet 3
C3 Framework Social Studies	D2.ECO.3.3-5	Worksheet 1
	D4.1.3-5	Worksheet 5

Vocabulary:

S

Domain-Specific: calorie, processed food, fossil fuel, climate change, natural resources, sustainability, agricultural, trait technologies

Academic: mission statement, educational initiative, licensing

Media Type(s): documentary film, Internet commercial

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

- **Preparation:**
- Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**

Five-page Teacher Guide: Where Does My Food Come From? Three-page Student Worksheet: ELA & Social Studies - Where does my food come from? Two video clips (Access online or via Unit 1 Lesson 3 digital media folder)

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 90 minutes

Lesson Procedures:

- Ask "Does it matter where your food comes from? Why or why not?"
- Present the Lesson Introduction to the class.
- Play the brief video clip, Why Eat Local & America's Farmer Economy.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to work in pairs to complete the worksheet, *ELA & Social Studies Where does my food come from?*
- Review student work as a class.
- Lead a discussion on how food choices can help promote health.
- Brainstorm action steps students can take at home or while eating out based on what they have learned.

TEACHER GUIDE

Where Does My Food Come From?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

2. Ask "Do you know where your food comes from before it gets to the store or market?" and "Does it matter where your food comes from? Why or why not?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the origins of our food supply and why food origins matter.

3. Introduce some of the key vocabulary for this lesson:
<u>Calorie:</u> a unit of heat that measures the energy in food or fuels;
<u>Processed food</u>: food in which the raw ingredients have been changed by physical or chemical means. It usually refers to foods that are packaged in boxes, cans or bags;
<u>Fossil fuel</u>: energy sources such as oil, natural gas and coal that were formed in the ground over millions of years from the remains of dead plants and animals;
<u>Climate change:</u> a long-term change in the earth's climate, especially a change due to an increase in the average atmospheric temperature;
<u>Natural resources</u>: substances such as minerals, forests, water, and soil that occur in nature and can be used to earn profit;
Mission statement: a written summary of the aims and values of a company.

4. Introduce the activity: Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Activity Introduction

Was that tomato in your salad grown around the corner or around the world? Does it matter? In this activity we will be trackers, investigating the distances travelled by our food. You will view two videos with different ideas about "food miles" – or the distance food travels to get to our table. Do you think that the values of the group that makes a video help to shape the message in the video? We'll find that out too.

5. Play the brief video clips, *Why Eat Local* and *America's Farmer Economy* several times to allow students to engage in a deeper read of the documents while they take notes.

PARTNER WORK

- **6.** Have students work in pairs to complete the worksheets. Distribute page 1 and 2 of the *Student Worksheet: Where does my food come from?*
- 7. After students have completed the worksheet review their work using the *Student Worksheet Answers* that follow. *Possible Answers* are included to model application of key knowledge through evidence-based analysis. You might begin by asking what was most memorable in each video. Discuss answers as a class and see if everyone wrote down the same things. Then talk about resources and techniques.



Video Clip 1 & 2 Why Eat Local, 1:59 min. clip, 2009 America's Farmers Economy, 1:05 min. clip, 2009



Student Worksheet Answers - Where Does My Food Come From?

1) What resources are used to bring food to the table? Resources include people, money and natural resources. **Possible Answer Video Clip 1:** Fossil fuels for transportation, truck drivers and other transport workers, farmers, farm land, labor and materials for food processing.

Possible Answer Video Clip 2: Ships and other food transport vehicles, farmers, agricultural infrastructure (silos, farm machinery, warehouses), food service workers (baker, forklift operators, chefs, stockers), investment in agricultural companies.

2) How did the producer of the video use images, music and words to make their message interesting and appealing?

Possible Answer Video Clip 1: The speaker is filmed in a kitchen with bright flowers making it seem like you're talking with him at home. The truck's motion is in fast frames indicating how far it is from farm to home. Comments about the path of lettuce are illustrated by images of a farm worker's hands picking lettuce and a salad plate served at the table.

Quiet guitar background provides a calming feeling when the speaker talks about supporting farmers and farm landscapes.

		Possible Answer Video Clip 2: The volume and pace of the soundtrack move toward a crescendo to increase excitement. The familiar images invite connection with the viewer by showing family and community scenes: a diner, a fitness center, kids with parents, eggs on the griddle. The everyday food "business of America" is illustrated with a restaurant opening, a barge traveling on a river, a worker passing loaves of bread, a chef cooking a meal. "As farming grows" is illustrated by a full produce section in a supermarket, a growing child playing and a farmer opening a cotton spool.	
	3a) Explain the meaning of these figurative language phrases from	Possible Answer: Eating local farm products keeps farmers in business and farm landscapes from being developed.	
	the videos. What do you think the speaker in video clip 1 means when he says, "Eat your view?"	Evidence: "If you don't support these agricultural landscapes around you they will be sprawledcovered with houses and highways and shopping malls and the way to keep them open is to eat from the farms that constitute that view."	
	3b) What do you think the narrator in video clip 2 means when he says, "America's farmers grow	 Possible Answer: Farmers are an important foundation for entire the U.S. economy. Evidence: "Who grows our economy? Who ships nearly one hundred billion dollars of groups and group due to mercure stigge? Who are stigged with a mercident. 	
	America?" 4a) Read the mission	more than 24 million jobs here at home? Who? America's farm families." Answer: <u>Nourish</u> made video clip 1.	
statements below of the makers of the videos you saw. Guess which producer made which video. I think video clip 1, "Why Eat Local?" was made by (circle one) <u>Monsanto</u> or <u>Nourish</u> . My reasoning for my answer is	 Evidence: The mission statement for Nourish highlights the word "community" twice in the two sentences. The speaker's argument supports local transportation, farmers and agricultural views. 		
	4b) I think video clip 2, "America's Farmers Economy" was made by (circle one) <u>Monsanto</u> or <u>Nourish</u> . My reasoning for my answer is	 Answer: <u>Monsanto</u> made video clip 2. Monsanto's mission statement: "famers all around the world, " products for "farmers throughout the world." The images of barges shipping products for export "Who ships nearly one hundred billion dollars of crops and products to many nations?" 	

8. Lead a brief discussion on whether the values of the group that makes a video help to shape the message in the video.

WRAP UP

9. Distribute the third page of the *Student Worksheet: – Where does my food come from? Writing Task.*

Writing Task:

5) Write a short essay of 3-4 paragraphs on the question "Should I eat food grown close to home or food grown far away?

Evaluation Criteria

<u>ELA skill</u>: Introduce the topic clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.

<u>Critical Thinking Skill</u>: Construct arguments using claims and evidence from both videos.

<u>Following Directions</u>: Essay should be between 3-4 paragraphs in length. Opening and concluding paragraphs should include a choice statement and argument for local or long distance food.

- **10.** Engage in a summary reflection activity. Ask students, "What have we learned about our opening question? Does it matter where your food comes from?" Invite further inquiry by asking, "What don't you know that you want to know about this topic or these media examples?" and "What sources might help you to find out what you want to know?"
- **11.** Brainstorm *Action Steps* students can take at home or while eating out based on what they have learned. What can you do, now that you know about how media messages can influence our choices about where our food comes from? You might want to list suggestions as a chart. Ideas might include:
 - Identify markets and restaurants that have options for local or long distance food.
 - Identify food and drink advertising that appeals to local food consumers and that appeals to long distance food consumers.
 - Write a letter to a food or drink company about their choices to buy food from locals or long distance sources.
 - Investigate where the food in your school cafeteria comes from.

FURTHER QUESTIONS

What is local food? From your city? Your state? Your part of the country? Your country? Your hemisphere?

What food items are exported from your state to other states or nations?

What farms are nearest to your school? What do they produce?

Where can you buy local foods in your community?

What information is left out of each video and why could the information be important to know?

EXTENDED ACTIVITIES

Imagine that you are an advertiser for a local foods group. Using evidence from classroom texts, make a print ad for your community's monthly newspaper persuading people to eat local rather than internationally-imported foods.

Become a student journalist. Communicate with other students in a community outside your state to ask about their ideas about local vs. long distance food chains. What foods are they able to produce in their area? How are these similar and different from your community? Write an article with quotes from your source for a student publication or website focused on food issues.

Imagine you are an investigative reporter. Visit a local farm and interview the workers there on their opinions about local vs. long distance food chains. Then interview big-supermarket managers on the same questions. Using photos and audio recordings from your site visits and interviews, make a visual podcast or simple video sharing the views you learnt about on the topic.

Vegetables and fruits are holistic, healthy food choices to try incorporating in your diet, but where are these important foods coming from? Take out your detective cape and magnifying glass to investigate the trip your food has been on. Look closely at the little sticker on a selected piece of fruit or vegetable to determine it's origin. Now, imagine you are the grocery store owner who is out of that item! How long will you have to wait to get more (what is the distance it will have to travel and the time it will take)? Making a map with this information may help you really understand the ground the little fruit or veggie has to cover. And how much money will it cost to get that item to you (gas prices for traveling that distance)? How much time do you think you will have to house that item on your store's shelf before it goes bad? It's important to think of all these elements because you don't want grumpy customers!

A meme is a message in which a common phrase is given a new, often fun, meaning through the addition of a photo. Brainstorm some common figurative language food quotes (such as "you are what you eat") and create some fun memes to visually represent what the quotes mean to you and how they represent some larger themes explored in this lesson.

Student Worksheet - Where Does My Food Come From?

NAME _____

DATE _____

Task: Use information from the video clips to write about arguments for eating food from local or long distance sources.

1. What resources are used to bring food to the table? Resources include people, money and natural resources.

Video Clip 1 – *Why Eat Local?*

Video Clip 2 – America's Farmers Economy

2. How did the producer of the video use images, music and words to make their message interesting and appealing?

Video Clip 1 – *Why Eat Local?*

Video Clip 2 – America's Farmers Economy

Student Worksheet – Where Does My Food Come From?

Whenever you describe something by comparing it with something else, you are using figurative language. For example, a metaphor such as "you are what you eat" draws a verbal picture by the use of comparison.

3. Explain the meaning of these figurative language phrases from the videos.

a. What do you think the speaker in video clip 1 means when he says, "Eat your view?"

b. What do you think the narrator in video clip 2 means when he says, "America's farmers grow America?"

The messages in a media document are shaped by the goals of the producer. For example an advertiser designs TV commercials to sell products while a teacher designs a power point presentation to help students learn a lesson.

4. Read the mission statements below of the makers of the videos you saw.

<u>Monsanto</u>..."We deliver agricultural products that support farmers all around the world....We strive to make our products available to farmers throughout the world by broadly licensing our seed and trait technologies to other companies." http://www.monsanto.com/whoweare/pages/default.aspx

<u>Nourish</u>... "An educational initiative designed to open a meaningful conversation about food and sustainability, particularly in schools and communities...With a distinctly positive vision, Nourish celebrates both food and community." <u>http://www.nourishlife.org/about/the-initiative/</u>

Guess which producer made which video:

a. I think video clip 1, "Why Eat Local?" was made by (circle one) <u>Monsanto</u> or <u>Nourish</u>. My reasoning for my answer is...

b. I think video clip 2, "America's Farmers Economy," was made by (circle one) <u>Monsanto</u> or <u>Nourish</u>. My reasoning for my answer is...

Student Worksheet – Where Does My Food Come From? Writing Task

Write a short essay of 3-4 paragraphs on the question:

"Should I eat food grown close to home or food grown far away?

You can use information from the notes you made for Question 1 about the resources that are used to bring food to the table.

	ESSAY WRITING TIPS
Introductory paragraph	Clearly state the question you are addressing. State your own opinion on the question.
Middle paragraph(s)	Give reasons for your opinion that include at least three pieces of evidence from the videos.
Concluding paragraph	Provide a concluding section about why you feel the way you do about this question.
Consider including key vocabulary	food, farmers, consumers, business, climate change, open land, jobs, international trade and transportation.



LESSON PLAN

Who's Selling Me This Food?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will consider the goals and impacts of food advertising.
- Students will analyze videos and comics to discern messages and sales techniques.
- Students will pose and respond to questions related to media messages and production.
- Students will reflect on positive and negative incentives that influence food choices.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.SL.5.1	Steps 6-17
	CCSS.ELA-LITERACY.SL.5.2	Steps 6-17
C3 Framework Social Studies	D1.2.3-5	Step 16
	D2.ECO.2.3-5	Worksheets

Vocabulary:

S

Domain-Specific: food marketing, advertising

Media Type(s): Internet commercials, digital comic book

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**

- Six-page Teacher Guide: Who's Selling Me This Food?
- Two-page Student Worksheet: ELA & Social Studies Who's Selling Me This Food?
- 8-slide PowerPoint slideshow

Two video clips (Access online or via Unit 1 Lesson 4 digital media folder)

Additional Support:

• From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.

Download the <u>Key Questions for Analysis</u> for supporting questions.
 <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage

Time: 45-60 minutes

Lesson Procedures:

- Ask "Why do companies spend so much money on advertising?" and "How do advertisers persuade kids to buy stuff?"
- Present the Lesson Introduction to the class.
- Lead a media document decoding of the video clip, *Baby Carrots* asking about authorship and purpose.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to read the Captain Citrus comic panels and to work in pairs to complete the *Student Worksheets: Who's Selling Me This Food?* in which they reflect on production techniques, authorship and purpose.
- Lead a media document decoding of the video clip, *Introducing Captain Citrus* asking about techniques for marketing to kids.
- Review student work and lead a summary discussion on food marketing to children.
- Brainstorm action steps students can take at home or while eating out based on what they have learned.

TEACHER GUIDE

Who's Selling Me This Food?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask "Why do companies spend so much money on advertising?" and "How do advertisers persuade kids to buy stuff?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the goals and impacts of food advertising.
- 3. You may want to introduce some of the key vocabulary for this lesson: <u>Food marketing</u>: the activities that take place within the food system between the farm and the consumer including advertising, shipping, storing, and selling; <u>Advertising</u>: ways of telling people about a product or service in an effort to get people to buy it.
- **4.** Introduce the activity: Suggest a context such as the one provided below for the clue search in the media examples. Name the desired outcome.

Activity Introduction

The Prevention Institute does research and action campaigns on issues related to health and safety. The Prevention Institute has researched what it calls "junk food marketing" or advertising that is made to reach children. This advertising is paid for by the food, beverage, and chain restaurant industry.

See if you can guess what their research shows:

- How much does the fast food industry spend every day on marketing unhealthy foods to children? ANSWER: Approximately 5 million dollars.
- How many food-related ads do kids watch every year? ANSWER: Approximately 4,000 ads
- What percent of food advertisements viewed by children are for products that are high in fat, sugar or salt? ANSWER: 98%

In this activity you'll become a "trick detective" hunting for sales tricks that advertisers use to persuade us to buy their products. Instead of viewing commercials for junk food, though, we'll be watching commercials for foods from the fruit and vegetable groups.

- **5.** Explain that you will now show a 30-second TV commercial. Ask the students to think about who made this commercial and for what purpose. Play the video *Baby Carrots*.
- 6. Use the *Media Sample Questions & Answers* that follow to lead a brief decoding. *Possible Answers* are included to model application of key knowledge through evidence-based analysis. Ask, "Was there anything else about the video that caught your attention?"



PARTNER WORK

- 7. Distribute the first page of the *Student Worksheet: Who's Selling Me This Food?* Have students work in pairs to complete the worksheets. Explain that you will play the clip two more times to allow students to make notes on the left hand column of their worksheet about whatever they notice.
- **8.** Play the same video clip for the second and then a third time. Pause to allow students to use their initial notes to identify production techniques to make the product appealing.
- **9.** After students have completed the left column of the first worksheet page review their work in a class discussion using the *Media Sample Questions & Answers* that follow. Make time for students' noticings not related to production techniques.

Media Sample Questions & Answers

3) How did the advertisers make their product appealing?	Possible Answer: <u>Pumped up volume</u> – narrator, actors, music <u>Action</u> – flying shopping cart, shooting artillery, explosion <u>Young actors</u> – with carrot colored hair <u>Special effects</u> – carrot bullets, pterodactyl, flaming bag <u>Satire</u> – "extreme impossible stunts" and "extreme junk food packaging"
	packaging"

10. Project Lesson 4 PowerPoint slides of Captain Citrus digital comic cover. Use the *Media Sample Questions & Answers* that follow to lead a brief decoding. Ask for evidence from the document even when the answer may seem readily apparent.

Media Document 1 *Captain Citrus Digital Comic,* 2014

PPT



Media Example Questions & Answers

4) Who made this comic?	Answer: Marvel comics made this in association with Florida citrus growers.	
	Evidence: Marvel and Florida Citrus logos appear as co-producers	
5) Why was this made?	Possible Answer: To promote the Florida citrus industry.	
	Evidence: "amazing nutritional values" with Captain Citrus image	

- **11.** Provide the PowerPoint slides of the Captain Citrus comic book. They can also be viewed from the *Student Materials* section on the Project Look Sharp homepage, <u>www.projectlooksharp.org</u>. Have students read the comic pages and fill in the right hand column of their worksheet, *Student Worksheet: Who's Selling Me This Food*?
- **12.** After students have completed the right column of the first worksheet page review their work collectively using the *Media Sample Questions & Answers* that follow.

Media Sample Questions & Answers

6) How did the	Possible Answers:	
advertisers make their	Association: He becomes part of the famous Avengers team.	
product character	<u>Appearance:</u> He's got a brand new superhero costume.	
appealing?	<u>Character:</u> He is willing to face danger to protect his family.	
	<u>Weapons:</u> He fights with "hard light weapons" from "pure Florida	
	sunshine."	
	<u>Green:</u> He uses solar power to defeat his enemies.	
	Heroic: He helped to save the world starting with a glass of orange juice.	

- 13. Explain that you will now show a brief video in which the people who made this comic from both the Florida Citrus Growers and Marvel talk about how and why they created Captain Citrus. Play the video, *Introducing Captain Citrus*. Following the video have students pair up to discuss: "What did you learn about how these advertisers market their products to kids?"
- **14.** After students have had a chance to share, ask the pairs to report out on their conclusions using the *Media Sample Questions & Answers* that follow.



Video #2 *Introducing Captain Citrus* 2:48 min. clip, 2014



Media Sample Questions & Answers

What did you learn about how these advertisers market their products to kids? **Possible Answer:** Companies work together to create appealing platforms to sell to kids.

Evidence: • The Marvel logo is in the top left hand corner.

- The Avengers is a well-known Marvel superhero team.
- Florida citrus is referenced in the lower left corner textbox.

Possible Answer: They make orange juice seem like superhero food.

Evidence: Captain Citrus is featured as a "special guest star" next to the Florida Citrus logo.

Possible Answer: Marvel designs this new hero to appear strong, hopeful and environmentally concerned, hoping that these qualities will appeal to their audience.

Evidence: "You instantly see that he's fit...optimistic...green."

Possible Answer: Marvel designs Captain Citrus to remind readers of the product he is representing.

Evidence: "orange and yellow of Florida citrus, not to mention the little green leaves" in the design of the leggings in Captain Citrus' costume

Possible Answer: Marvel & the citrus industry take their products to schools to market directly to kids in their classrooms.

Evidence: "We're consolidating our efforts with Marvel...We're going to be in over 4,000 schools." The Marvel spokesman states that teacher's guides will allow teachers to help students "make the right choices" to use this product.

15. Distribute the second page of the *Student Worksheet: Who's Selling Me This Food?* Explain that students now get to become teachers and ask questions. After students have completed the second worksheet page review their work as a class. Ask students why they chose the questions they did. Invite the class to respond to some of the student-posed questions using the criteria below for evaluation. Afterward ask students to reflect on what makes a good media question and why.

Evaluation Criteria

<u>ELA skill</u>: Pose questions that follow the themes of the activity discussions regarding advertising directed at sales to children.

Critical Thinking Skill: Create open-ended questions that further the discussion.

<u>Following Directions</u>: Create at least one question for both the Captain Citrus and baby carrots campaigns.

WRAP UP

- **16.** Engage in a summary reflection activity. Ask students, "What have we learned about our opening question? How do advertisers persuade kids to buy stuff?" Invite further inquiry by asking, "What don't you know that you want to know about this topic or these media examples?" and "What sources might help you to find out what you want to know?"
- **17.** Brainstorm *Action Steps* students can take at home or while eating out based on what they have learned. What can you do, now that you know about how advertisers influence our food choices? You might want to list suggestions as a chart. Ideas might include:
 - List advertising tricks aimed at selling to children.
 - Go on a grocery scavenger hunt looking for advertising tricks on food and drink packaging.
 - Keep a weekly log of food and drink advertising and tricks used to sell products.
 - Write a letter to a food or drink company about your feelings on advertising to children.
 - Make your own advertising campaign to educate kids to be "trick detectives."

FURTHER QUESTIONS

Name some of your favorite food commercials. What do you like about these commercials? How do they catch your attention? Do you ask your parents to buy foods you see in these commercials? If so, how do your parents respond? If you've eaten these foods, how do they compare to how they appear in the commercials?

Should food advertising be allowed during kids TV programs? Why or why not? Are there any ages that are too young for advertisers to target? Why or why not?

Do you notice sales in grocery stores or does your family use coupons when shopping? Do you think these sales and coupons are helpful your family's eating or harmful? Explain.

EXTENDED ACTIVITIES

Imagine that you just got a job with the Prevention Institute. Design an advertising campaign to get kids to think about a certain aspect of their food choices (nutrition, serving sizes, local vs. long distance food, awareness of advertising tricks, etc).

Imagine that you have been hired by as local advertising firm. Using media-literacy skills learned in this unit, make your own advertisement for a food you think kids should eat more of. Prepare an accompanying short report that highlights each media-literacy skill you used in your advertisement.

Imagine you are a food company trying to sell a specific food product, create a short commercial trying to get your target audience to buy the product. While making the ad think about the selling and production techniques you are using to persuade your clients.

Find a food commercial and add your commentary about the techniques being used to sell the product. This can be done verbally with screencasting your narration over the ad you play on your computer or can be done visually by marking up a print ad.

Student Worksheet - Who's Selling Me This Food?

NAME _____

DATE _____

Task 1: Make notes about the ways that advertisers make their product appealing in the *Baby Carrots* commercial and the Marvel comic, *Avengers: Captain Citrus*.



Bolthouse Farms baby carrots commercial



Marvel Comics digital comic, Captain Citrus and the Avengers

Student Worksheet – Who's Selling Me This Food?

NAME _____

DATE _____

Task 2: Work with a partner to ask two good media literacy questions about the comic and the videos. **Some examples of media literacy questions are listed below. You can choose one of these or make up another good question.**

WHO?	Who made this?	
WHAT?	What does it mean?	
WHY?	Why did they make it?	
HOW?	How did they make it interesting?	
THANKS!	Who might it help?	
OUCH!	Who might it hurt?	
MONEY?	Who paid for it?	
TRUE?	Does it tell the truth?	
MISSING?	What's left out that's important to know?	

Our question for the Baby Carrots commercial is:

Our question for the Captain Citrus comic and video is:



What About Hunger?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will consider the reality of hunger in the U.S.
- Students will analyze videos to discern themes, character development and story-telling techniques.
- Students will reflect on possible strategies to address the problem of hunger.

S	Standards		Activities
	Common Core ELA	CCSS.ELA-LITERACY.RL.5.2	Step 5 & Worksheet 1
		CCSS.ELA-LITERACY.RL.5.5	Worksheet 2 & 3
	C3 Framework Social Studies	D4.7.3-5	Worksheet 4 & 5

Vocabulary:

Domain-Specific: fixed income, minimum wage

Media Type(s): Internet video

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the How to Use Materials section associated with this kit.

Materials for the Lesson:

- Five-page Teacher Guide: What About Hunger?
- Two-page Student Worksheet: ELA & Social Studies What about hunger?
- Two videos (Access online or via Unit 1 Lesson 5 digital media folder)

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the <u>Key Questions for Analysis</u> for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 60 minutes

Lesson Procedures

- Ask, "Is hunger a problem in our country?" and "Can we do anything to help with the problem of hunger in the United States?"
- Present the Lesson Introduction to the class.
- Play the video, *Hunger Has Many Faces* and lead a media document decoding about character development and messages about hunger.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Play the video, *Kids Respond to Child Hunger and* direct students to work in pairs to complete the *Student Worksheet: What about hunger*? in which they reflect on storyline themes and construction.
- Review student work as a class.
- Lead a discussion on whether video production is a good way to work to fight childhood hunger.
- Brainstorm action steps students can take to fight hunger.

TEACHER GUIDE

What about hunger?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask, "Who goes hungry in our country?" and "Can we do anything to help with the problem of hunger in the United States?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the reality of hunger in the U.S. and about possible strategies to address the problem of hunger.
- 3. You may want to introduce some of the key vocabulary for this lesson:
 <u>Fixed income</u>: an income from a social security or from an investment that is set at a particular figure and does not change;
 <u>Minimum wage</u>: an amount of money that is the least amount of money per hour that workers must be paid according to the law.
- **4.** Introduce the activity. Suggest a context such as the one provided below for the clue search in the media examples. Name the desired outcome.

Activity Introduction

Is hunger a problem in your country? In your state? In your community? In this activity we will be anti-hunger activists, working together to understand how we can help to end hunger where we live. You will view two videos about hunger in the United States and we'll think about the stories the videos tell to help us in our campaign to end hunger.

5. Play the video, "Hunger Has Many Faces" and lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What feelings do you have when you view this video?" or "What questions do you have about this video?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages *Possible Answers* are included to model application of key knowledge through evidence-based analysis.



PARTNER WORK

6. Play the brief video clip, *Kids Respond to Child Hunger* twice. Pause in between each viewing to have students work in pairs to discuss and take notes on what they notice about the theme of the video and how the theme is introduced to the viewer. Do not give the worksheets out until after you've shown the film.

7. Distribute the *Student Worksheet: What about hunger?* Have students work together in pairs to complete the worksheet. After students have completed the worksheet page review their work using the *Student Worksheet Answers* that follow. *Possible Answers* are included to model application of key knowledge through evidence-based analysis. You might begin by asking what was most memorable in the video. Discuss answers as a whole class.



Video Clip 2 *Kids Respond to Child Hunger* 2:49 min. clip, 2015



Student Worksheet Answers - What About Hunger

1) What is the main theme of this video? Give evidence for your answer.	Possible Answer: Kids care about the fact that other kids are hungry.
	 Facial expressions of surprise, sadness, distress. "Makes me want to cry." "It's kind of unfair." "What are we gonna do to fix this?" "It is possible (to fight hunger) and you're not too young to do it."
	Possible Answer: Kids have ideas about how to fight hunger.
2) Write numbers to indicate the order of the questions on the paper bags in the video.	 Evidence: Images of kids posting ideas to wall. Audio of kids telling their ideas. Image of large wall filled with ideas. The title: "Kids Respond to Child Hunger" Answers: What is your favorite food ever? What food do you dislike most? What do you do when someone gives you food you don't like? Did you know that 1 out of every 5 kids doesn't have enough food to eat in the U.S.? What is something we can do to help fight hunger together?
3) Why do you think the producers asked the questions in the order that they did? For instance, why did they choose the first question to be first and the last one to be last?	 Possible Answers: Q1 is a good "get to know you" question. Q2 follows Q1 naturally – likes followed by dislikes. Q3 introduces the idea of refusing food by choice. Q4 turns Q3 upside down – "What if you didn't have enough food? Would you be less choosy then?" Q5 focuses on action steps for positive change after introducing the awareness of the widespread problem of hunger in Q4.

4) Which student ideas for fighting hunger seemed best to you? How might those ideas help to fight hunger? **Possible Answers:** Donate money; make Thanksgiving every day; take foods to homes; post video; canned food fort; build a food machine

Possible Answers: Answers will vary. Make sure students respond to the second question on how these ideas help fight hunger.

8. Lead a brief discussion on who might benefit from a video like this one and whether video production is a good way to work to fight childhood hunger.

WRAP UP

- **9.** Engage in a summary reflection activity. Ask students, "What have we learned about hunger in the United States?" Invite further inquiry by asking, "What don't you know that you want to know about this topic or these media examples?" and "What sources might help you to find out what you want to know?"
- **10.** Review the action steps that students recommended in questions 4 & 5. Consider selecting one or more of these as class action projects.
 - Study hunger in your community.
 - Start a drive to raise funds for a local food pantry.
 - Make a video about kids working to end hunger where you live.
 - Write letters of concern about hunger to your elected officials or to a local newspaper.

FURTHER QUESTIONS

Why was each video made?

Why might these videos matter to me?

What story-telling techniques did the video creators use to make the viewer interested?

How was music used in each video to reflect emotion?

How can you find out more about the groups that posted these videos, Take Part and Soul Pancake?

Whenever you describe something by comparing it with something else, you are using figurative language. What does the narrator mean in the first video when she says, "Hunger comes in all shapes and sizes?" What does the narrator mean in the second video when she says, "The tiniest ripples make the biggest waves?"

EXTENDED ACTIVITIES

The first video says, "50 million people in America don't know where their next meal is coming from." The second video says, "One out of every five kids doesn't have enough food to eat in the United States." Imagine you are one of these hungry individuals. How does a lack of food affect other aspects of your life? Write a diary entry explaining what a day without breakfast is like.

[Following the previous prompt] Investigate whether there are any resources or supports in your community or school to help you. How many others are also in need of this help in your community?

Imagine you are a student anti-hunger activist. Talk with the others on your anti-hunger team to brainstorm possible actions you can take to address the problem of hunger in your community. Design a media campaign to call others to action! Plan what media platforms you'll use (posters, social media, videos, etc.) and how you'll reach different people. After the experience, reflect on whether the media campaign worked and how you could improve it if you were to do it again.
Student Worksheet – What About Hunger?

NAME _____

DATE _____

1. What is the main theme of this video? Give evidence for your answer.

2. Write numbers (1-5) to indicate the order of the questions on the paper bags in the video.

- () What do you do when someone gives you food you don't like?
- () What is your favorite food ever?
- () What is something we can do to help fight hunger together?
- () Did you know that 1 out of every 5 kids doesn't have enough food to eat in the U.S.?
- () What food do you dislike most?

3. Why do you think the producers asked the questions in the order that they did? For instance, why did they choose the first question to be first and the last one to be last?

4. Which student ideas for fighting hunger seemed best to you? How might those ideas help to fight hunger?

5. What hunger fighting idea would you add to the idea wall? How might your idea help to fight hunger?

ASSESSMENT OVERVIEW

Deciding On Our Food Choices

Assessment Objectives:

- Students will demonstrate the ability to write a clear and coherent letter, drawing evidence from graphic posters to support their reflection.
- Students will demonstrate the ability to apply democratic principles of cooperative decisionmaking within their school.
- Students will demonstrate the ability to think critically about food choice messages and persuasion techniques in posters.

S

Standards	
Common Core ELA	CCSS.ELA-LITERACY.W.5.4
	CCSS.ELA-LITERACY.W.5.9
C3 Framework Social Studies	D2.Civ.7.3-5
	D4.1.3-5

Materials Needed:

• Two-page Student Worksheet: Deciding On Our Food Choices

Possible Answers: Student Worksheet T-chart

Why did they make it?	Poster 1 To sell fast food To support the band	Poster 2 To encourage healthy food messages To remove junk food ads from schools
How did they make it interesting?	Showing big portions Using bright colors	Showing a smiling kid at a lunch table Different fonts and sizes of letters
Who might it help?	The fast food restaurant The school band	Kids eating healthier meals Parents who encourage healthy eating
Who might it hurt?	Encouraging kids to eat Junk food hurts kids	The band is less likely to get the money from the fast food restaurant if kids stop eating fast food because of this ad

Evaluation Criteria: Letter

<u>ELA skill:</u> Write in a clear and coherent manner. Reference 3 pieces of evidence from the posters. Accurate spelling, punctuation and grammar.

<u>Critical Thinking Skill:</u> Compare relative persuasion of poster choices. Reflect on community benefit in recommending which poster to select.

<u>Following Directions</u>: Include introduction and conclusion. Include at least 4 paragraphs. NAME _

DATE _____

Student Worksheet- Deciding On Our Food

There's a debate in your school about displaying food-related posters in the cafeteria. Some people want to post a fast food restaurant advertisement in exchange for the restaurant's donation of \$500 for the school band. Others want to put up a poster supporting the government's new "Eat Healthy" campaign without any donation.

Your principal has researched food choices just like you have, and knows that fast food can be unhealthy, but really wants the money for the band program. Your principal has a solution: put them both up. Your principal believes the 'Eat Healthy' poster is so persuasive that kids will be convinced to make healthy choices for themselves.

Is your principal right, or is the 'Fast Food' poster so persuasive that it might cause kids to make unhealthy food choices?

A. Complete the T-Chart on the other page to compare and contrast how the authors of these two posters attempt to influence children's food choices. Then, use your analysis to determine which poster you believe more successfully influences children's food choices.

B. Write a letter to the principal that argues which poster is more persuasive and recommend which poster or posters the principal should hang up.

When you are finished writing, be sure to review your essay to see that you have written a wellorganized essay of at least 4 paragraphs, and have included:

- An introduction
- A statement about why you support the poster(s) that you do
- At least 3 pieces of evidence from the posters to support your decision
- A conclusion
- Accurate spelling, punctuation and grammar to the best of your ability



Poster 1





MEDIA CONSTRUCTIONS OF SUSTAINABILITY: UPPER ELEMENTARYSTUDENT WORKSHEETUNIT 1: FOOD CHOICESCULMINATING ASSESSMENT: ELA & SOCIAL STUDIES

Poster 1	Poster 2
Why did they make it?	Why did they make it?
How did they make it interesting?	How did they make it interesting?
Who might it help?	Who might it help?
Who might it hurt?	Who might it hurt?

Unit 2: Natural Resources

Lesson	1: Lesson Plan
Lesson	2: Lesson Plan
Lesson	3: Lesson Plan
Lesson	4: Lesson Plan
Lesson	5: Lesson Plan
Unit A	ssessment: Teacher Guide133 Student Assessment135



LESSON PLAN

Natural Resources - How Do We Use Them?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will consider how the use of natural resources for energy affects the environment.
- Students will analyze web pages to discern messages & persuasion techniques.
- Students will note similarities and differences in point of view within different texts.

	Standards		Activities
S	Common Core ELA	CCSS.ELA-LITERACY.RI.5.6	Worksheet 2, 3, 5, 6, 8, 9, 11,
			12
		CCSS.ELA-LITERACY.RI.5.7	Steps 5-9
		CCSS.ELA-LITERACY.W.5.1	Writing task
	Next Generation Science	4-ESS3-1	All
	C3 Framework Social Studies	D2.ECO.3.3-5	Worksheet 2, 5, 8, 11
		D2.GEO.4.3-5	Steps 5-9

Vocabulary:

Domain Specific: natural resource, renewable resource, non-renewable resource, fossil fuel, coal, oil, solar, hydro-electric, wind power, energy security, energy independence, climate stability, noise pollution, oil spill

Academic: exports, collateral damage, upheaval, relocate

Media Type(s): web pages, report cover, magazine cover, book cover,

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**

- Ten-page Teacher's Guide: Natural Resources How do we use them?
- Three-page Student Worksheet: Natural Resources How do we use them?
- Seven slide PowerPoint slideshow (Access online or via Unit 2 Lesson 1 digital media folder)

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 60 minutes

Lesson Procedures

- Ask ""What are natural resources?" and "How does people's use of natural resources affect the environment?"
- Present the Lesson Introduction to the class.
- Lead a media document decoding introducing two images related to hydropower asking about services provided and environmental impacts.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to work in pairs to complete 1 & 2 of the *Student Worksheet Natural Resources: How do we use them?* in which students decode media documents related to coal, wind, oil and solar power for messages about services provided and environmental impacts.
- Review student work as a class.
- Direct students to complete page 3 of the *Student Worksheet Natural Resources: How do we use them?* in which students write about their perspectives about energy resources and the persuasive techniques used in the media documents they've studied.
- Lead a discussion on the costs and benefits of natural resource use for energy use and media persuasion techniques driving resource use.
- Brainstorm action steps students can take based on what they have learned.

TEACHER GUIDE

Natural Resources - How do we use them?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask two questions in turn: "What are natural resources?" and then "How does people's use of natural resources affect the environment?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about our need for energy resources and the impact of resource use on the environment.
- Introduce some of the key vocabulary for this lesson: <u>Natural resource</u> – material that comes from nature and is used to meet the needs of all living things, including people; Renewa<u>ble Resource</u> - natural resource that can be replaced quickly by natural processes;

<u>Non-Renewable Resource</u> - resource that cannot be replaced once it is used up; <u>Fossil Fuel</u> - a nonrenewable resource formed in the ground over millions of years from the remains of prehistoric plants and animals that is used to produce energy.

4. Introduce the lesson. Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Lesson Introduction

In this activity you are going to be investigators exploring the benefits and costs of people's use of natural resources to power our human world. We're going to comb through different media documents looking for evidence to help us with our investigation. Does everyone agree on which energy sources are the best? Together we'll look for plenty of answers.

5. Project PowerPoint slides, Media Documents 1-2 and lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this image?" or "What questions do you have about this media example?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages, *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.



PARTNER WORK:

PPT

- 6. Have students work in pairs to complete the worksheets. Distribute pages one and two of the *Worksheet: Natural Resources: How do we use them?* The PowerPoint slides of the web page documents can also be accessed from the *Student Materials* section on the Project Look Sharp homepage, <u>www.projectlooksharp.org</u>. Or, if you prefer you can make copies and distribute the Natural Resources Lesson 1 PowerPoint, Media Documents 3-10.
- 7. After students have completed their worksheets, project the PowerPoint Media Documents 3-10 and review their work using the *Media Sample Questions & Answers* that follow. *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the media example even when the answer may seem readily apparent.





Media Sample Questions & Answers

1) What natural resource is shown in this document pair?	Answer: Coal	
2) Is this a renewable energy resource or a fossil fuel?	Answer: Coal is a fossil fuel formed over millions of years from the remains of prehistoric plants and animals.	
3) According to these media documents what goods or services does this natural resource provide?	 Possible Answer: Coal provides energy. Evidence: Power plant with smokestacks indicating coal burning for energy production "Coal: The Foundation of American Energy Security" 	
4) How does human use of this resource affect the environment?	 Possible Answer: Burning coal causes air pollution. Evidence: Coal plant smokestacks billowing white smoke. Possible Answer: Coal mining destroys habitat. Evidence: Large coal pile stands where natural surroundings have been destroyed. 	

PPT	Media Documents 5 Book cover 2013 YouTube webpage 2	& 6 013
	Med 5) What natural resource is shown in this document pair?	ia Sample Questions & Answers Answer: Wind
	6) Is this a renewable energy resource or a fossil fuel?	Answer: Wind is a renewable energy source.
	7) According to these	Possible Answer: Wind provides jobs and energy.
media documents what goods or services does this natural resource provide?		Evidence: Subtitle: "America's Journey to jobs, energy independence."
	8) How doos human usa	Possible Answer: It creates noise pollution.
	of this resource affect the	Evidence: "Neighborhood's nightmare – noise pollution
	environment?	Possible Answer: It stabilizes climate since it emits no greenhouse gases
		Evidence: Subtitle: "and Climate Stability "
Ррт	Media Documents 7 Book cover 2011 Report Cover 2015	& 8 U.S. Crude Oil Exports Dereffs for America Commons Dereffs for Ameri
	Med	ia Sample Questions & Answers
9) What natural resource Answer: Oil is shown in this document pair?		Answer: Oil
	10) Is this a renewable energy resource or a fossil fuel?	Answer: Oil is a fossil fuel.
	11) According to these	Possible Answer: Oil provides export income for the U.S.
	media documents what goods or services does this natural resource provide?	Evidence: "U.S. Crude Oil Exports: Benefits for America's economy and Consumers"
	12) How does human use	Possible Answer: Oil can spill and pollute marine habitat.

Media Documents 9 & 10 Web page 2012 PPT Magazine Cover 2014 Media Sample Questions & Answers 13) What natural Answer: Solar energy resource is shown in this document pair? 14) Is this a renewable **Answer:** Solar is a renewable energy resource. energy resource or a fossil fuel? 15) According to these **Possible Answer:** Solar provides energy for transportation. media documents what goods or services does "a plane fueled by the sun" Evidence: • this natural resource image of plane with solar panels on the wings provide? 16) How does human use Possible Answer: Large solar plants can destroy animal habitat. of this resource affect the Evidence: • environment? "Relocate desert tortoises from the upheaval caused by the...solar plant" Image of tortoise walking on solar panels

WRAP UP

8. Distribute page three of the *Student Worksheet: Natural Resources: How do we use them?* Project the PowerPoint Media Documents 11 (slide 8). Have students complete the writing task.

Writing Task

Pick a media document from today's lesson that you feel effectively persuades others to take your position about one of the four energy resources we've studied today (coal, wind, oil, solar). Write two paragraphs about why the media document persuades so well. In each paragraph you should give one reason why you think the media document is persuasive and give evidence from the document to back up your idea.

Model first paragraph based on the first hydropower slide:

I think hydropower is a resource we should consider to power our world. One reason the NHA webpage "Why Hydro?" is effective at persuading people to use hydropower is that it uses a child standing over a peaceful dam-formed lake as a way to help the reader picture a secure future with hydropower. The webpage designers have placed the child in the center, looking to his right, in the same direction as the "play" arrow, beneath the words "America's New Energy Era" and above the words "For our future." This makes it seem like we are looking with the child toward a bright future with hydropower.

Evaluation Criteria

<u>ELA Skill</u>: Introduce the topic clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.

Critical Thinking Skill: Construct arguments using claims and evidence from the media documents.

<u>Following Directions</u>: Both paragraphs should include a different rationale supporting the persuasiveness of the media document including evidence from the document.

- **9.** Engage in a summary reflection activity. Ask students: What have we learned about our opening questions? What are natural resources? How does people's use of natural resources affect the environment? Invite further inquiry by asking: What are the positive and negative incentives used by media producers to influence people's decisions about energy use? What don't you know that you want to know about this topic or these media examples? What sources might help you to find out what you want to know?
- **10.** Brainstorm *Action Steps* students can take based on what they have learned. What can you do now that you know about how media messages communicate both costs and benefits of using natural resources for energy? You might want to list suggestions as a chart.

Ideas might include:

- Identify media messages about energy choices.
- Ask your parents and friends about media messages related to natural resource use.
- Decide what questions you have about natural resource use for energy production.
- Write a letter to an energy provider about their use of natural resources.
- Work with other students to increase awareness about the sources of energy your school uses.

FURTHER QUESTIONS

People modify their environment when they use natural resources to produce energy. In what other ways does human culture change the environment?

In this lesson you've looked at five natural resources that are used for energy production – water behind dams (hydropower), sunlight (solar energy), wind, oil and coal. What are some other natural resources that are used to make energy for human use? Which of these are renewable and which are not? [Examples include these non-renewable sources - natural gas and uranium (in nuclear fuel), and these renewable sources - ocean waves, geothermal and biomass]

Who might benefit from the media messages in this lesson? Who might be harmed by them?

Which of these media messages do you consider to be the most credible or trustworthy? Which seem least credible? Why?

Which media messages do you think were made by individuals and which were made by companies or groups? [Media documents 2 – Free the Rivers slide and #6 – Bergey's Turbines YouTube page were made by individuals. The rest were produced by companies or associations.]

EXTENDED ACTIVITIES

Imagine that your class lives near the Mojave Desert solar plant (document #9). Divide the class into three groups: 1) "Friends of the Desert Tortoise," 2) "Supporters of the Mojave Desert solar plant" and 3) "We Want the Sun and the Tortoise too." Write a research supported speech debating your stance on whether the solar plant should be built.

Imagine that you are part of an investigative report team for the local newspaper. A group of people want to build a large wind farm in your county, arguing that it will bring jobs and provide renewable energy. Some local people have expressed opposition to the wind farm saying that it will be ugly, cause noise pollution and that the turbines will kill songbirds. Decide whom you need to interview to cover the story from a variety of viewpoints. Make a short documentary on the pros and cons of this project.

Imagine that you are part of an energy corporation that's looking for opportunities to invest in your community. Which local natural resources will make your community a good place for investment? Write a report for your shareholders on which natural resource(s) they should use to make an investment in your community.

Student Worksheet - Natural Resources: How Do We Use Them?

NAME _____



Media Document 3



Media Document 4

1. What natural resource is shown in this document pair?

2. Is this a renewable energy source or a fossil fuel?

3. According to these media documents what goods or services does this natural resource provide?

DATE _____

What is your evidence from the documents?

4. How does human use of this resource affect the environment?

What is your evidence from the documents?



5. What natural resource is shown in this document pair?

6. Is this a renewable energy source or a fossil fuel?

7. According to these media documents what goods or services does this natural resource provide?



Media Document 5

Media Document 6

What is your evidence from the documents?

8. How does human use of this resource affect the environment?

What is your evidence from the documents?

MEDIA CONSTRUCTIONS OF SUSTAINABILITY: UPPER ELEMENTARY STUDENT WORKSHEET **UNIT 2: NATURAL RESOURCES** LESSON 1: ELA, SCIENCE & SOCIAL STUDIES



Media Document 7



Media Document 8

9. What natural resource is shown in this document pair?

10. Is this a renewable energy source or a fossil fuel?

11. According to these media documents what goods or services does this natural resource provide?

What is your evidence from the documents?

12. How does human use of this resource affect the environment?

What is your evidence from the document?

13. What natural resource is shown in this document pair?

14. Is this a renewable energy source or a fossil fuel?

natural resource provide?



Media Document 9

What is your evidence from the document?



Media Document 10

16. How does human use of this resource affect the environment?

15. According to these media documents what goods or services does this

What is your evidence from the document?



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Writing Task

Pick a media document from today's lesson that you feel effectively persuades others to take your position about one of the four energy resources we've studied today (coal, wind, oil, solar).

Write two paragraphs about why the media document persuades so well. In *each paragraph* you should give one reason why you think the media document is persuasive and give evidence from the document to back up your idea.

Model first paragraph based on the first hydropower slide:

I think hydropower is a resource we should consider to power our world. One reason the NHA webpage "Why Hydro?" is effective at persuading people to use hydropower is that it uses a child standing over a peaceful dam-formed lake as way to help the reader picture a secure future with hydropower. The webpage designers have placed the child in the center, looking to his right, in the same direction as the "play" arrow, beneath the words "America's New Energy Era" and above the words "For our future." This makes it seem like we are looking with the child toward a bright future with hydropower.

ESSAY WRITING TIPS		
INTRODUCTORY SENTENCE	Clearly state what you want people to know about: 1 – the investment opportunity in our company's use of 2 - the potential environmental effects of using	
MIDDLE SENTENCE(S)	Give reasons for why people should take action 1 – you should invest because 2 – you should be concerned because	
CONCLUDING SENTENCE	Appeal for action on your information 1 & 2 – You should act now to	
CONSIDER Including Key Vocabulary	natural resource type (coal, oil, solar or wind), renewable energy source, fossil fuel, economy, jobs, security, pollution, cost, climate, environment.	

LESSON PLAN

Dams and Rivers: To Build or to Remove?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will understand the human benefits and environmental impacts of hydropower.
- Students will analyze videos to discern messages and techniques.
- Students will engage in collaborative discussions and report conclusions clearly.

Standards		Activity
Common Core ELA	CCSS.ELA-LITERACY.SL.5.1	Presentation preparation
	CCSS.ELA-LITERACY.SL.5.2	Presentation delivery
	CCSS.ELA-LITERACY.SL.5.4	Presentation delivery
Next Generation Science	5-ESS3.C	Messages

Vocabulary:

S

Domain Specific: tributary, reservoir, TVA (Tennessee Valley Authority), hydropower, dam removal, renewable electricity, salmon, spawn, habitat, Klallam tribe, fish, passage, environmental footprint, restoration, estuary, watershed, restoration, greenhouse gas emissions

Academic: dispatch, drudgery, stature, adversity, manual operation, automated, benefit and cost, dismantle, advanced technology

Media Type(s): documentary video, web video

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the How to Use Materials section associated with this kit.

Materials for the Lesson:

- Six-page Teacher's Guide: Dams and rivers: To build or to remove?
- Three-page Student Handout: Dams and rivers: To build or to remove?
- Three videos (Access online or via Unit 2 Lesson 2 digital media folder) Additional Support:
- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 90 minutes

Lesson Procedures

- Ask, "What is hydropower?" "What is 'clean energy'?" and "What sort of impact on a community or an ecosystem might building a dam have?"
- Present the Lesson Introduction to the class.
- Lead a decoding of a brief video made by National Hydropower Association.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to work in teams to prepare presentations in which they analyze two videos identifying messages and storytelling techniques.
- Have students present their findings and raise questions.
- Lead a discussion on dam construction and removal and effective storytelling.
- Brainstorm action steps students can take related to the benefits and costs of human efforts to control free-running rivers.

TEACHER GUIDE

Dams and Rivers: To Build or to Remove?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Introduce the topic by asking, "What is hydropower?" "How does it work?" "Why would someone want to create hydropower?" "What is 'clean energy'?" and "Is hydropower clean?" Encourage students to think critically about the potential impacts of hydropower by asking, "What sort of impact on a community might building a dam have?" "How about on an ecosystem?" Solicit a wide range of possible answers. This is intended to be a brief opening exercise designed to get students thinking about hydropower, the concept of "clean energy" and the potential environmental impact of renewable energy sources.
- 3. Introduce some of the key vocabulary for this lesson: <u>Storytelling_techniques</u> - the ways in which a storyteller tells the story to make it interesting; <u>Hydropower</u> - renewable energy source generating electricity from the force of moving water; <u>Restoration</u> - process of restoring a damaged ecosystem; <u>Tennessee Valley Authority</u> – a government agency that built and maintains dams on the Tennessee River to bring electricity to poor rural areas.
- **4.** Introduce the lesson. Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Lesson Introduction

In this activity you are going to work as research teams investigating reasons to build or to remove dams on free-flowing rivers. Teamwork will be key as you look for evidence to support your team's position.

5. Play the video, *Hydropower in America's New Energy Era*. Lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this video?" or "What questions do you have about this media example?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages, *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.



PARTNER WORK:

- 6. Divide students into two teams to prepare for presentations about the two videos. Each team will be subdivided into two squads one will investigate messages and the other will investigate storytelling techniques. Distribute the *Student Handout: Dams and rivers: To build or to remove?* Go over the instructions in detail to make sure students understand the assignment. Explain how students can access the videos in the *Student Materials* section on the Project Look Sharp homepage, www.projectlooksharp.org, or you may download and provide the videos separately.
- 7. After students have completed their work and teams are ready for their presentations, play the video, *The Valley of the Tennessee*. After playing the video have the first team present its findings. Allow the other team to ask questions and add observations of their own. Play the video, *The Restoration of the Elwha River* and repeat the presentation process. Use the *Media Sample Questions & Answers* and *Evaluation Criteria* that follow to help support and evaluate student work.



Video Clip 2 *The Valley of the Tennessee* 4:00 min clip, 1944



Explain that this is an excerpt of a documentary film made in 1944 describing the Tennessee Valley Authority (TVA) and its impact on the people of the Tennessee River valley.

Media Sample Questions & Answers

1) What are the messages in this video? Where do you see the clues about the message in the video? **Possible Answer:** Dams control water supply to prevent damage from droughts or floods.

- **Evidence:** "releasing the water when it is needed, holding it in check..."
 - image of topographical display of dam system

Possible Answer: Hydropower symbolizes national constructive energy.

- **Evidence:** images of great dams
 - glorified narration of dam names

Possible answer: Hydropower provides power for people.

Evidence: • the word "power" repeated over and over

• images of human needs from dams

2) What storytelling techniques are used in this video? Where do you see the technique?

Possible Answer: Animation illustrates water control.

Evidence: topographic map animation shows path of water controlled by dam system

Possible Answer: The musical score matches the images.

- **Evidence:** drums and horns underscore patriotic power when dams are named
 - flutes provide uplift as uses of power are named

Possible Answer: Poetic listing in scripting commands viewer attention.

- **Evidence:** dam names
 - uses for electrical power



Video Clip 3 *The Restoration of the Elwha River* 5:24 min clip, 2011 The Restoration of the Elwha River

Explain that this is a webisode made in 2011 for the Olympic National Park website.

1) What are the messages in this video? Where do you see the clues about the message in the video?

- **Possible Answer:** Early European settlers built dams for electric power on the Elwha River.
- **Evidence:** "Thomas Aldwell's plan to harness the Elwha River and generate electricity was received with great enthusiasm in the community"
 - early photos of dam construction

Possible Answer: The dam blocks salmon from swimming upstream to spawn.

- **Evidence:** "the dam prevents salmon from reaching 90% of their habitats in the Elwha"
 - images of salmon beneath the dam

Possible Answer: The Klallam people have historically relied on salmon for their survival and want the dam removed.

- **Evidence:** "hopes are that our grandkids will see the same Elwha River that our grandparents saw"
 - old photos of Klallam people with large salmon they had caught

Possible Answer: Blending sound effects and music adds to the impact. 2) What storytelling techniques are used in **Evidence:** guitar blends with rushing waters this video? Where do you see the technique? Possible Answer: Old photos meshed with old music provides historical context. Evidence: • black and white photos from 1900s player piano music from that era Possible Answer: Interview with Klallam elder brings human sense of traditional reliance of Klallam people on king salmon Evidence: • Adeline Smith in contemporary interview Adeline Smith in old photo as a child ٠ **Evaluation Criteria for Student Presentations** Science awareness: Human activities have had major effects on earth systems and communities do things to protect Earth's resources. ELA skills: Engage effectively in collaborative discussions and report clearly on a topic using evidence to support conclusions. Following Directions: Team presentation on all three topics -messages, virtues and techniques - with at least three different presenters. WRAP UP: 8. Engage in a summary reflection activity. Ask students: What have we learned about how dam projects impact human and Earth communities? What have we learned about storytelling techniques in film and video production? Invite further inquiry by asking: What don't you know that you want to know about these topics or these media examples? What sources might help you to find out what you want to know? 9. Brainstorm Action Steps students can take based on what they have learned. What can you do now that you know about the benefits and costs of human efforts to control free-running rivers? You might want to list suggestions as a chart. Ideas might include: • Research hydropower facilities and concerns in your region. • Work with classmates to protect plants, animals and habitats near you. • Interview community and business leaders about energy needs. • Write an article or blog post stating your opinion on hydropower as a renewable energy source.

FURTHER QUESTIONS

Reflecting on the three videos that you saw, which one made best use of storytelling techniques? What techniques did you find the most compelling as a viewer and why?

What techniques have you developed as a storyteller in whatever way you most enjoy storytelling? This could include making music, telling spoken word stories, writing, video making or any other way your creativity is expressed.

Where are the nearest hydropower facilities to your home? What environmental impact have the dams had on the surrounding ecosystem? How could you find out about community sentiments when those dams were originally proposed and built?

EXTENDED ACTIVITIES

Imagine that a nearby community is thinking about constructing a hydroelectric dam. You've been asked to submit an opinion piece for your school newspaper on whether they should they do it or not.

Imagine that you are an investigative reporter doing a story on renewable energy sources in your region. Decide whom you need to interview and what sources you need to research. Make a short report – written, filmed or spoken – on your findings to your class, school or community group.

Imagine that you are the head of a video news production team. You are preparing your crew for an upcoming story on flooding in your community. To create the best, most informative piece possible, collect and review news footage from local and national sources to learn how others have covered similar issues. What storytelling techniques did they use to inform their viewers?.

Imagine that you have been asked by your state government representative to host a panel discussion about your community's energy needs for the next decade. You have been asked to include many different points of view on the panel. Research individuals and organizations in your area who can speak about these issues from different perspectives. Include representatives of business, government and community organizations. Include people in favor of fossil fuel solutions as well as supporters of renewable energy. Prepare a list of possible speakers and the reasons for your choices.

Using a map, identify local bodies of water and examine what the surrounding environments consist of. Are there hazardous threats nearby? Are there certain areas worth protecting? Mark up the maps with symbols labeling each.

Student Worksheet - Dams and Rivers: To Build or to Remove?

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	А	IVI	С	

DATE _____

<i>Team 1:</i>	<i>Team 2:</i>
The Valley of the Tennessee	<i>The Restoration of the Elwha River</i>
YOUR JOB Your team represents planners from the Tennessee Valley Authority. Your goal is to convince others of the benefits of building hydroelectric dams in the Tennessee Valley.	YOUR JOB Your team represents leaders from the Klallam tribe. Your goal is to convince others of the benefits of removing the Elwha River dam.

STEP 1: IDENTIFY YOUR SQUADS

Divide your team into two smaller squads to identify messages and storytelling techniques.



STEP 2: SQUAD VIDEO NOTES. Each squad should view the assigned video at least twice. View once for general information, and the second time to take notes. Make notes on the *Notes Page* to list your findings and evidence. Be sure to read the directions on the *Notes Page*.

STEP 3: TEAM CONVERSATION

Come together as a full team to compare notes. Each squad should listen carefully to the other squad reports. Support one another by adding new information for your presentation as each squad shares ideas.

STEP 4: TEAM PRESENTATION

Your team will decide how best to present your information to the rest of the class. Your team should have at least three different speakers who will make their presentations after the rest of the class sees your video.

YOUR GOALS

- To work together to come up with a presentation plan that demonstrates the teamwork behind your collective analysis.
- To state your analysis clearly, telling where you saw evidence in the video to support your conclusion.
- To be prepared to respond to questions from your classmates and to come up with good questions when the other team reports out on their video.

NOTES PAGE: MESSAGES SQUAD

Use these suggestions to help your squad prepare for your presentation. Work together first as a squad and then as a team to come up with convincing analysis and evidence.

Find at least three messages

One message in this video is that...

(State a single idea about what the video makers are trying to communicate)

This message can be seen in the video when...

(Name the evidence in the video that supports your conclusion. For instance "You can see this message when the narrator says..." or "You can see this message when they show...")

NOTES PAGE: STORYTELLING TECHNIQUES SQUAD

Use these suggestions to help your squad prepare for your presentation. Work together first as a squad and then as a team to come up with convincing analysis and evidence.

Find at least three storytelling techniques Storytelling techniques are <u>the ways in which the video producer tells the</u>

story. Examples of storytelling techniques are the script (words), the setting (where filming takes place), the sound (music or sound effects) and the characters (actors or interview subjects). Come up with others of your own.

One storytelling technique in this video is that...

(State a single way that the video makers are trying to communicate their message)

This storytelling technique can be seen in the video when...

(Name the evidence in the video that supports your conclusion. For instance "You can see this technique when the sound changes to..." or "You can see this technique when the setting moves to...")

MEDIA CONSTRUCTIONS OF SUSTAINABILITY: UPPER ELEMENTARYLESSON PLANUNIT 2: NATURAL RESOURCESLESSON 3: ELA, SOCIAL STUDIES & SCIENCE

LESSON PLAN



Oil Spills – What's the Problem?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will consider how oil spills impact human and natural populations.
- Students will analyze newspaper headlines, web pages and videos to discern messages, point of view & techniques.
- Students will pose and answer questions based on videos with different points of view.
- Students will write narratives to develop imagined responses to oil spill effects.

S	Standards		Activities
	Common Core ELA	CCSS.ELA-LITERACY.SL.5.1c	Question Design
		CCSS.ELA-LITERACY.SL.5.2	Question Design
		CCSS.ELA-LITERACY.W.5.3	Written Assignment
	Next Generation Science	5-ESS3.C	All
	C3 Framework Social Studies	D1.2.3-5	Question Design
		D2.Geo.9.3-5	All

Vocabulary:

- **Domain Specific:** oil spill, British Petroleum (BP), exploration well, response, recovery, restoration
- Academic: inconceivable, unprecedented, apocalyptic, intertwined, fishing fleet, federal waters, migration, minimal

Media Type(s): newspaper headlines, web pages, documentary film, Internet video

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

- Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**
- Six-page Teacher's Guide: Oil Spills What's the Problem?
- Two-page Student Worksheet: Oil Spills What's the Problem?
- Five slide PowerPoint slideshow
- Three videos (Access online or via Unit 2 Lesson 3 digital media folder)

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 90 minutes

Lesson Procedures

- Ask "What is an oil spill?" and "Why might an oil company spokesman and a fisherman from an oil-spill area describe the effects of the oil spill differently?"
- Present the Lesson Introduction to the class.
- Lead a media document decoding of headlines and web pages about BP oil spill focused on messages conveyed by text and by images.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Play three short videos and direct students to work in pairs to complete the first page of *Student Worksheet: Oil Spills What's the Problem?* They will make their own media construction questions related to contrasting representations of the BP oil spill.
- Review student work as a class.
- Have students work independently to complete the second page of *Student Worksheet: Oil Spills What's the Problem?* They will write a blog post from the perspective of someone who has been impacted by the spill.
- Lead a discussion on the impact of oil spills and on points of view of media sources.
- Brainstorm action steps students can take based on what they have learned.
TEACHER GUIDE

Oil Spills – What's the Problem?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask two questions in turn: "What is an oil spill?" and "Why might an oil company spokesman and a fisherman from an oil-spill area describe the effects of the oil spill differently?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the impacts of oil spills and the ways in which a speaker's point of view shapes their opinions.
- 3. Introduce some of the key vocabulary for this lesson:
 - <u>Deepwater exploration well</u>: a deep hole beneath the seafloor that an oil company drills in the hope of locating a new source of oil;
 - <u>Oil spill</u>: an accidental release of oil into a body of water, often creating dangers to marine life and the environment;
 - <u>Environmental restoration</u>: the process of returning a damaged ecosystem to its condition before it was disturbed.
- **4.** Introduce the lesson. Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Lesson Introduction

In this activity you are going to be researchers exploring the impacts of oil spills on people and the environment. Your study will focus on the effects of a gas explosion on a deepwater exploration well in the Gulf of Mexico in April 2010 that killed 11 workers and released millions of barrels of oil into the Gulf. British Petroleum or BP, the company that was responsible for the drilling, spent three months working on efforts to seal the well, which was finally closed on July 15, 2010. You're going to seek evidence in headlines, webpages and videos to help you with your study. Do you think that these media sources will offer the same information as we look to draw conclusions from our study? Let's find out.

5. Project PowerPoint slides, Media Documents 1-3 and lead a full class document decoding using the *Media Message Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this image?" or "What questions do you have about this media example?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages, *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.

PPT	Media Document 1 <i>BP webpage, 2015</i>	A constraint of the second of the secon		
	Media Document 1 – Explain that this is a webpage on the BP.com site posted in 2015.			
	Media Sample Questions & Answers			
	1) What are the words and phrases used to describe the event in this webpage?	 Answer: Accident – headline Gas release and subsequent explosion – subtext Leak – Left menu 		
	2)What are the messages in this image? Where do	Possible answers: The scene is pretty and calm.		
	you see the clues about the messages in the image?	Evidence: The bright yellow flame against the backdrop of the dark blue of the evening sky and sea is pretty.The sea and the ships appear to be still and peaceful.		
	3) What other messages can you see in the words, images and layout of this webpage?	Possible answers: Answers will vary.		
PPT	Media Document 2 <i>Newspaper headlines,</i>	2010 GULF OIL SPILL DECLARED WORST IN U.S. HISTORY Obum Imposes new drilling restrictors PAGE 27 Chan emposes new drilling restrictors PAGE 27 Chan empose new dr		
	Media Document 2 – Explain that these headlines were from a daily newspaper in Anniston Alabama.			
	1) What are the words and phrases used to describe the event in these headlines?	Answer: Gulf oil spill		
	2) What are the messages in this image? Where do	Possible answers: Local people feel that the owner of the oil well has stolen their beach.		
	the messages in the image?	Evidence: "BP, We want our beach back" posted on a homemade sign in a neighborhood.		
	3) What other messages can you see in the words, images and layout of these headlines?	Possible answers: Answers will vary.		



6. Lead a discussion about how words and images can change the way we understand an event such as this oil spill. Ask students why BP might have chosen to portray the spill in one way and the Think Progress page might have chosen such a different view.

PARTNER WORK:

- 7. Distribute the first page of the *Student Worksheet: Oil Spills What's the Problem?* Explain that students now get to become teachers and ask questions about the media, and that you will show three short videos about the BP oil spill. Students can optionally work in pairs to come up with one media literacy question about each video.
- **8.** Introduce and show each video in turn using the brief introductions that follow. Pause after each video to allow student pairs to confer on their questions. Review student questions as a class. Ask students why they chose the questions they did. Invite the class to respond to some of the student-posed questions using the criteria below for evaluation. Afterward ask students to reflect on what makes a good media question and why.

MEDIA CONSTRUCTIONS OF SUSTAINABILITY: UPPER ELEMENTARYTEACHER GUIDEUNIT 2: NATURAL RESOURCESLESSON 3: ELA, SOCIAL STUDIES & SCIENCE



Video Clip 1 *Gulf Coast Economic Tourism Recovery* 3:06 min. clip, 2010



Explain that this is a video produced by British Petroleum, the company responsible for the oil spill. It was posted ten weeks after the well was capped and the spill ended.



Video Clip 2 *CFN Visits Gulf to Hear Fisherman* 1:46 min. clip, 2010



Explain that this is a video produced by Coastal First Nations, a group of nine Native American nations from the west coast of Canada. Their video team visited the United Houma Nation people in Louisiana following the oil spill. The "medicines" the man refers to are natural herbal medicines collected in the bayous on Houma land.



Video Clip 3 *"Somewhere Over the Rainbow"* with Oil Spill Images 2:20 min. clip, 2010



Explain that this is a video produced by the Environmental Defense Fund, a national environmental organization that partners with companies to work for a clean environment.

Evaluation Criteria

<u>Science and Social Studies Awareness:</u> Ask and answer questions related to effects of oil spills on human and natural populations.

ELA skill: Pose and answer questions that follow the themes of the activity discussions.

<u>Critical Thinking Skill:</u> Create open-ended questions that further the discussion.

Following Directions: Create at least one question for each of the three videos.

WRAP UP:

9. Distribute the second page of the Student Worksheet: Oil Spills – What's the Problem?

Task: Imagine that you are living near the site of the BP oil spill in the Gulf of Mexico and that you have been personally affected by the spill in some way and you have just watched these videos. Maybe you are a fisherman or a kid just learning to surf. Maybe you are a marine scientist or a worker for BP. Write a one-page blog post, at least four paragraphs in length, to tell about how the oil spill has impacted your life and the life of those you care about.

Evaluation Criteria

<u>ELA skill</u>: Introduce the situation and the chosen narrator; use narrative techniques to develop the story; provide a conclusion that follows from the narrated experiences.

<u>Following Directions</u>: Essay should take the voice of a character impacted by the BP oil spill. Essay should be at least four paragraphs in length.

10. Engage in a summary reflection activity. Ask students:

What have we learned about the impact of oil spills on human and natural communities? What have we learned about how media reports about a particular event can differ based on the point of view of the media source?

What don't you know that you want to know about this topic or these media examples? What sources might help you to find out what you want to know?

- **11.** Brainstorm *Action Steps* students can take based on what they have learned. You might want to list suggestions as a chart. Ideas might include:
 - Investigate past pollution events in your community or region and report your findings.
 - Communicate with students in an area impacted by the BP spill to see how it affects them today.
 - Work with your classmates to establish a quick action plan for the next environmental disaster.
 - Raise funds to support a group the works on environmental and community justice in your area.

FURTHER QUESTIONS

How can a human-made environmental disaster in one place affect people living in other places?

What types of natural and human-made catastrophic events might cause a community to migrate to another location?

What human activities other than oil drilling can have major effects on earth systems?

Which questions from the teacher and your fellow students in this lesson are most memorable? Why?

What media sources in your area might report differently on a local chemical spill? Why might these reports be different?

EXTENDED ACTIVITIES

Imagine that you are a cartographer, (somebody who makes maps). Make an online map marking all the locations in this lesson including the BP oil spill, BP headquarters, the United Houma Nation, the Destin Chamber of Commerce and all other events, organizations and media report locations.

Imagine that you are a research scientist who wants to measure the impact of an oil spill on local human and natural communities. Think about who you will need to talk with to prepare your study. Write a one-page proposal to the National Science Foundation describing the goals and objectives for your study.

Imagine that you are an official for BP Oil who wants to make certain that a major oil spill never happens again. In order to address this, you decided it will be important to hire a new employee with this focus. Write a job description for an "Environmental Protection Manager" for your company. What will their responsibilities and required skillsets be?

Imagine that you are an author who is writing a book entitled "Ask the Best Questions." Work with your classmates to come up with chapter titles describing the kinds of questions that you will explore in your book.

Student Worksheet: Oil Spills – What's the Problem?

NAME _____

DATE _____

Task: Work with a partner to create one media literacy question about each video. Some examples of media literacy questions are listed below. You may adapt the media literacy questions below but make your questions are specific to the particular video.

WHO?	Who made this?	
WHAT?	WHAT? What does it mean?	
WHY?	Why did they make it?	
HOW?	How did they make it interesting?	
THANKS!	Who might it help?	
OUCH!	Who might it hurt?	
MONEY?	Who paid for it?	
TRUE?	Does it tell the truth?	
MISSING?	What's left out that's important to know?	

Our question for video clip 1, *Gulf Coast Economic Tourism*, is:

Our question for video clip 2, CFN Visits Gulf, is:

Our question for video clip 3, Somewhere over the Rainbow, is:

Student Worksheet: Oil Spills – What's the Problem?

Task: Imagine that you are living near the site of the BP oil spill in the Gulf of Mexico and that you have been personally affected by the spill in some way and you have just watched these videos. Maybe you are a fisherman or a kid just learning to surf. Maybe you are a marine scientist or a worker for BP. Write a one-page blog post, at least four paragraphs in length, to tell about how the oil spill has impacted your life and the life of those you care about.

	BLOG WRITING TIPS
Introductory paragraph	Introduce the situation (the oil spill) and tell about the character you have chosen. <i>("My name is I am a An oil spill has")</i>
Middle paragraph(s)	Tell about the impact of the oil spill on you and your family or community. (<i>"When the spill happened… We had to…</i> I felt…")
Concluding paragraph	Provide a concluding section about how your life has been changed by the oil spill.
Storytelling techniques	 To make your blog post interesting consider using dialogue ("She said I replied") descriptive words ("The spill looked like") sensory details ("I could hear and smell") character description ("You might say I am"

PowerPoint Video

LESSON PLAN

Logging - What about Biodiversity?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will understand the impacts of logging on biodiversity.
- Students will analyze videos & children's books to discern messages, target audience and point of view of sources.
- Students will compare and contrast stories on their approaches to similar topics.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.RL.5.6	Step 9
	CCSS.ELA-LITERACY.RL.5.9	Student worksheet
	CCSS.ELA-LITERACY.SL.5.2	Steps 5 & 8
Next Generation Science	5-ESS3.C	All
	5-LS2.A	All

Vocabulary:

S

Domain Specific: interdependent, ecosystem, biodiversity, species, conserve, gene pool, ecosystem services, endangered species, habitat, extinct

Academic: stewardship, sentry, small scale, target audience

Media Type(s): documentary video, web video, children's book

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the How to Use Materials section associated with this kit.

Materials for the Lesson:

- Six-page Teacher's Guide: Logging What about biodiversity?
- Two page Student Worksheet: Logging- What about biodiversity?
- Two video clips
- 25 slide PowerPoint slideshow (Access online or via Unit 2 Lesson 4 digital media folder)
- Optionally: The Truax can be accessed online http://woodfloors.org/truax.pdf.

Additional Support:

- From the website, view Media Decoding Examples demonstrating classroom media analysis.
- Download the <u>Key Questions for Analysis</u> for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 90 minutes

Lesson Procedures

- Ask, "What is biodiversity?" and "How does logging a forest affect biodiversity?"
- Present the Lesson Introduction to the class.
- Lead a decoding of two brief videos with contrasting messages about biodiversity.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to work with a partner to analyze the children's books, *The Lorax* and *The Truax*, for messages about logging, biodiversity and environmental protection.
- Have students present their findings with group discussion of conclusions.
- Lead a discussion on how the writers' points of view influenced how they told these stories.
- Engage in a summary reflection activity.
- Brainstorm action steps students can take related to protecting biodiversity.

TEACHER GUIDE

Logging - What about Biodiversity?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask two questions in turn: "What is biodiversity?" and "How does logging a forest affect biodiversity?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the impacts of logging on biodiversity and the ways in which a media maker's point of view shapes their opinions.
- Introduce some of the key vocabulary for this lesson:
 <u>Logging:</u> business of cutting down trees and transporting the logs to sawmills;
 <u>Biodiversity</u>: all the different kinds of living things within a given area;
 <u>Ecosystem</u>: short for ecological systems, the community of plants, animals and smaller organisms that live and interact in the same environment;
 <u>Interdependence</u>: people, animals or other living things depending on each another.
- **4.** Introduce the lesson. Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Lesson Introduction

In this activity you are going to be detectives looking for clues to identify the causes for the loss of biodiversity in our forests. Some people have suggested that cutting trees for paper manufacturing is causing biodiversity loss. Others say that the reverse is true. They say that logging increases biodiversity. Put on your detectives badges and let's look for evidence to discover all the aspects of this complex case.

5. Explain that you will begin the search by viewing two short videos about biodiversity. Lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this video?" or "What questions do you have about this media example?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages, *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.



Possible Answer: Groups help businesses to preserve biodiversity.

- **Evidence:** "The European Business & Biodiversity Campaign...shows how companies can have a positive effect on biodiversity"
 - images of EBBC logo, researchers and a thumbs up sign next to the biodiversity image

Possible Answer: Businesses preserve biodiversity by releasing clean wastewater, purchasing sustainable forest products and using recycled lumber.

- **Evidence:** "Natural varnishes keep wastewater clean and fish healthy...customers request timber from sustainably managed forests...companies recycle timber"
 - Images of smiling fish, healthy forest, recycling sign
- **6.** Lead a discussion about why people want to protect diversity within complex forest ecosystems. Ask students to reflect on why the producers of a nature program and a business council video might give different reasons for the preservation of biodiversity.

PARTNER WORK:

7. Distribute the *Student Worksheet: Logging- What about Biodiversity?* Have students optionally work in pairs to fill in their worksheets.

NOTE: You may elect to have students read the entire books themselves or to read the pages excerpted in the PowerPoint presentation for this lesson. You may also want to teach readaloud as students proceed with their worksheets.

8. After students have completed their worksheets review their work using the *Media Sample Questions & Answers* that follow. *Possible Answers* are included to model application of key knowledge through evidence-based analysis. Ask for evidence from the media example even when the answer may seem readily apparent. You may want to project the PowerPoint for this lesson to identify evidence in the text to support the message decoding.

1) What is the impact of logging on biodiversity?	LORAX Possible answer: Logging removes essential food sources from animal habitats, forcing animals to leave the ecosystem.
	 Evidence: "Thanks to your hacking my trees to the ground there' enough Truffula Fruit to go 'round" Images of deforested land as the Brown Bar-ba-loots v away
	Possible answer: Logging pollutes water bodies making them uninhabitable for fish.
	 Evidence: "You're glumping the pond where the Humming-Fish hummed! No more can they hum for their gills are all gummed" Images of fish that are unable to live in the pond
	TRUAX Possible answer: Logging forces some animals to leave their habitat hothers thrive in the logged areas.
	 Evidence: "Cutting the tress sends SOME critters running, But others move in" Images of bird and gophers smiling
	Possible answer: Logging enables sunlight to reach the forest floor th increasing biodiversity.
	 Evidence: "A newly-cut forest has sun on the ground and BIODIVERSITY leaps and abounds" Images of bug, worm bird and gophers on recently lo ground
2. What are people doing to protect biodiversity in	LORAX Possible answer: People replant, tend and protect new forests.
the forest?	Evidence: "Plant a new Truffula. Treat it with careGrow a forest. Protect it from axes that hack"
	TRUAX Possible answer: People use forest management, thinning forests to c new habitat.
	 Evidence: "With no opening up of the dark forest floor, there'd be new habitat" "I am Guardbark, ward of the trees – and I like the ward o

WRAP UP

9. Summary Question: "Does a writer's point of view influence how they tell a story?" Tell students that you will now consider how the author's point of view in these children's books might have shaped what they wrote.

Read Lorax Background: Professor Donald Pease of Dartmouth College wrote about the original idea for *The Lorax* written by Ted Geisel whose pen name was Dr. Seuss:

Well there is a story behind the story of The Lorax and it has to do with Ted Geisel's becoming quite upset about the transformation of the La Jolla, California (his home) environment, a beautiful seascape, because of the commercialization of the town. (He told) his wife that he wanted to write a children's tale that would make the next generation more aware of environmental questions than the proceeding one.

Ask: "In what ways can you see Dr. Seuss' point of view about the transformation of his home environment in the story of *The Lorax*?"

Read Truax Background: *Timberline Magazine*, the national newspaper and trading post for the forest products industry, published a story about the origins of *The Truax*, written by Terri Birkett:

Terri, who works for Stuart Flooring Co. in Stuart, Virginia, once visited a 4-H camp where some college students were using The Lorax to preach a liberal environmental message to children. "I don't think Dr. Seuss really meant it to be an all-encompassing statement on losing forests as much as encouraging kids to be in favor of planting trees and things like that," she said. "But it was starting to be used by people who had an environmental slant to scare kids that we were losing all our trees." Terri realized there was a need for an alternative, a children's story that would educate youngsters about the forest products industry.

Ask: "In what ways can you see Terri Birkett's point of view about the forest products industry in the story of *The Truax*?" and "Do you think Terri Birkett was right that Dr. Seuss didn't mean for his story, *The Lorax*, to be a statement on losing forests? Why or why not?"

10. Engage in a summary reflection activity. Ask students:

What have we learned about the impact of logging on biodiversity?

What have we learned about how a media maker's point of view influences how they tell their story?

What don't you know that you want to know about this topic or these media examples? What sources might help you to find out what you want to know?

11. Brainstorm *Action Steps* students can take based on what they have learned. You might want to list suggestions as a chart. Ideas might include:

- Investigate logging practices in your community or region and report your findings.
- Make an inventory of biodiversity in your neighborhood and illustrate your results.
- Create a list of people who might have very different views about the impacts of logging. Contact several of these to interview them for your school newspaper.

FURTHER QUESTIONS

How do you think Dr. Seuss would feel about the *Why is biodiversity important for your business?* video that you viewed at the beginning of this lesson? How would the Wood Flooring Manufacturers Association, publishers of *The Truax*, feel about it? Why?

Some books have more than one target audience. Who might have been the target audiences for *The Lorax* and *The Truax*?

What important information was left out of *The Truax*? What important information was left out of *The Lorax*?

Who might benefit and who might be harmed by the messages in *The Lorax*? Who might benefit and who might be harmed by the messages in *The Truax*?

EXTENDED ACTIVITIES

Imagine that you are a forester. You know that a healthy ecosystem is one in which many species are able to meet their needs in stable food webs. Research the capacity of three different forest types - a recently logged forest, a young forest and a climax forest - to meet the demands of a healthy ecosystem. Make a visual representation of your findings.

Imagine that you work for the Fish and Wildlife Service. A logging company has proposed logging in a National Forest. A rare species of frog may be disturbed by the logging industry. You must hold public hearings in order to allow representatives of many different points of view to express their reactions to the proposal. Who will you invite to attend the hearings? Hold a mock debate between different interest groups on the question of whether or not to allow the proposed logging.

Imagine that you are a playwright. You want to stage a dialogue between the author of *The Lorax* and the author of *The Truax*. Begin with the information quoted in step 9 above and research further into the life stories of the authors. Draft a scene in which Ted Geisel and Teri Birkett meet to talk for the first time. Make a podcast recording this dialogue.

Student Worksheet – Logging: What about Biodiversity?

NAME _____

DATE _____

Task 1: For each children's book make notes on similarities and differences in the ideas about logging and biodiversity in the space provided.



How are the books **similar** in the way they tell about biodiversity and logging?

How are the books **different** in the way they tell about biodiversity and logging?

Student Worksheet – Logging: What about Biodiversity?

Task 2: Use the notes you made on similarities and differences to write a paragraph answering the questions below.

How does each author show the impact of logging on biodiversity? What is each author's point of view on what people are doing to protect biodiversity in the forest?



LESSON PLAN

Renewable Energy Sources – Who's Running the Numbers?

NOTE: Prior to using this lesson, it is strongly recommended that you read the How to Use These Materials section for this lesson. See Preparation and Materials below.

Lesson Objectives:

- Students will analyze written text, web pages and bar graphs to discern messages about renewable energy use.
- Students will solve and create math words problems that require dividing whole numbers into decimals and fractions.
- Students will reflect on the use of graphs and statistics to support a point of view.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.RI.5.2	Steps 5, 10-12
	CCSS.ELA-LITERACY.RI.5.7	Steps 5, 10-12
	CCSS.ELA-LITERACY.SL.5.1c	All
Common Core Math	CCSS.MATH.3.MD.B.3	Worksheet 1, 2, 6. 8, 9, 12, 19
	CCSS.MATH.5.NF.B.3	Worksheet 4, 5, 7, 10, 11, 13
	CCSS.MATH.5.NBT.B.7	Worksheet 16, 17, 18, 20

Vocabulary:

S

Domain Specific: renewable energy, wind power, solar power, green technology, electricity consumption, watt, kilowatt hours

Academic: capacity, per capita, developed nations

Media Type(s): web pages, report, bar graphs

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the How to Use Materials section associated with this kit.

Materials for the Lesson:

- Seven-page Teacher Guide: Renewable Energy Sources Who's running the numbers?
- Three-page Student Worksheet: Renewable Energy Sources Who's running the numbers?
- Eight slide PowerPoint slideshow (Access online or via Unit 2 Lesson 5 digital media folder) Additional Support:
- From the website, view Media Decoding Examples demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 120 minutes

Lesson Procedures

- Ask "Why might we want to encourage the use of more renewable energy sources?" and "How can we encourage the use of renewable energy sources?"
- Present the Lesson Introduction to the class.
- Lead a media document decoding of a web page about renewable energy asking students to infer meaning based on a close reading of word choices.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to work in pairs to complete the *Student Worksheets: Renewable Energy Sources – Who's Running the Numbers* in which they solve and create word problems from media charts related to solar and wind energy.
- Review student work as a class.
- Lead a discussion on how statistics about renewable energy capacity and use can measure a country's progress in achieving renewable energy goals.
- Brainstorm action steps students can take based on what they have learned.

TEACHER GUIDE

Renewable Energy Sources – Who's Running the Numbers?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask, "What is renewable energy?" A simple definition might be: energy created from a resource that can be replaced quickly by natural processes such as wind, solar or geothermal energy. Ask, "Why might we want to encourage the use of more renewable energy sources?" and "How can we encourage the use of renewable energy sources?" Solicit a wide range of possible answers without critiquing or analyzing them.
- 3. You may want to introduce some of the key vocabulary for this lesson: <u>Wind power capacity:</u> the amount of electrical power created from wind energy; <u>Solar power capacity:</u> the amount of electrical power created from sun energy; <u>Watt:</u> a unit of energy for measuring how much electrical power is used; <u>Kilowatt hour:</u> a unit of energy equal to the work done by a power of 1000 watts operating for one hour; Per capita: for each percept

Per capita: for each person.

4. Introduce the activity: Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Activity Introduction

In this activity you're going to be green treasure hunters. The green treasure you'll be searching for will be renewable energy sources. You'll look for clues to find this treasure as you analyze several graphs from organizations devoted to a green energy future. You'll also question how numbers and statistics might either push people to action for sustainability or might keep us dependent on fossil fuels.

5. Project PowerPoint Media Document 1 and lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this webpage?" or "What questions do you have about this media document?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages Possible Answers are included to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.

Lead a discussion about what it means "to slip further behind." To slip further behind in what? Is this a competition? What are the competitors competing for? Could international energy development become a form of cooperation rather than competition? How might this happen?



6. Project PowerPoint Media Document 2. Explain that this and the next slide are graphs from the report entitled "We Must Seize the Energy Opportunity or Slip Further Behind" that you saw in the previous slide. Ask, "Where did the information in this graph come from?" and "How do you know?" The source is listed at the bottom of the slide as Center For American Progress Action Fund analysis of World Wind Energy Association.

PARTNER WORK

- 7. Have students work in pairs to complete the worksheets. Ask students to explain in writing how they arrived at their answers. Sharing these in a group could provide students with a broader range of possible problem-solving strategies. Distribute the first page of the *Student Worksheet: Renewable Energy Sources Who's Running the Numbers?*
- **8.** After students have completed their worksheets project the PowerPoint and review their work using the *Media Sample Questions & Answers* that follow. *Possible Answers* are included to model application of key knowledge through evidence-based analysis.

Student Worksheet Answers – Renewable Energy Sources- Who's Running the Numbers, page 1		
1) According to this graph the U.S. produces about how many watts of wind power per capita?	Answer: about 80 watts Evidence: The U.S. bar extends to 4/5 of the 100 watt line.	
2) According to this graph Denmark produces about how many watts of wind power per capita?	Answer: about 580 watts Evidence: The Denmark bar extends to 4/5 of the line between 500 ad 600 watts.	
3) What fraction of wind power capacity per capita does the U.S. produce compared to Denmark?	Answer: 4/29 or about 1/7 Evidence: 80/580 = 4/29 which is very close to 4/28 or 1/7 [NOTE: a light bulb uses about 80 watts over two hours; a home computer uses about 580 watts over four hours]	
4) What fraction of wind power capacity per capita does the U.S. produce compared to Spain?	Answer : 4/21 Evidence: 80/420 = 4/21which is very close to 4/20 or 1/5	
5) What fraction of wind power capacity per capita does the U.S. produce compared to Germany?	Answer: 16/59 Evidence: 80/295 = 16/59 which is very close to 15/60 or 1/4	
6) What countries produce more than twice as much wind power capacity per capita as U.S.?	Answer: Portugal, Germany, Ireland, Spain & Denmark Evidence: The U.S produces 80 watts of wind power per capita. Twice this is 160 watts. These countries all produce more than 200 watts of wind power per capita, more than 2X the U.S. production.	
7) Work with your partner to make up a word problem using information from the graph.	Answers will vary. If time allows have students work on each other's word problems.	

9. Project PowerPoint Media Document 3. Remind students that this slide is also a graph from the report entitled "We Must Seize the Energy Opportunity or Slip Further Behind." Ask, "Where did the information in this graph come from?" and "How do you know?" The source is listed at the bottom of the slide as the International Energy Agency. Distribute page two of the <i>Student Worksheet: Renewable Energy Sources – Who's Running the Numbers?</i> Have students work in pairs to complete the worksheets.		
Student Worksheet Answers – Renewable Energy Sources- Who's running the Numbers, page 2		
8) According to this graph	Answer: about 2 watts	
the U.S. produces about how many watts of solar power per capita?	Evidence: The U.S. bar extends to 1/5 of the 10 watt line.	
9) According to this graph	Answer: about 46 watts	
Germany produces about how many watts of solar power per capita?	Evidence: The Germany bar extends to 3/5 of the line between 40 and 50 watts.	
10) What fraction of solar	Answer: 1/23	
power capacity per capita does the U.S. produce compared to Germany?	Evidence: 2/46 = 1/23	
11) What fraction of solar	Answer: 1/8	
power capacity per capita does the U.S. produce compared to Spain?	Evidence: 2/16 = 1/8	
12) What countries	Answer: Switzerland, Japan, Spain and Germany	
produce more than twice as much solar power capacity per capita as U.S.?	Evidence: The U.S produces 2 watts of solar power per capita. Twice this is 4 watts. These countries all produce more than 4 watts of solar power per capita, more than 2X the U.S. production.	
13) Work with your partner to make up a word problem using information from the graph.	Answers will vary. If time allows have students work on each other's word problems.	
 10. Project PowerPoint Slide 5- Conclusion. Explain that this is the conclusion to the report we've been exploring. Lead a summary discussion: What is the author's message in conclusion? Why did the editors choose these graphs to support the author's conclusion? 		

- Can graphs and statistics be shaped to reflect a media producer's point of view?
- How might the choice of data benefit one group over another?

11. Project PowerPoint Media Document 4. Explain that this is a webpage from a different source. Ask, "What do you think this company does? How can you tell?" As you did with the first slide encourage wide-ranging and creative responses. Help students to support their conclusions by asking, "Where do you see that in the document?" and "What's your evidence?"		
12. Project PowerPoint Media Doviewed, RenewableElectricity. "How do you know?" The southe Energy Information Admin Energy Sources – Who's Runn worksheets.	acument 5. Tell students that this is a graph from the website we just .com. Ask, "Where did the information in this graph come from?" and arce is listed both at the bottom of the slide and above the graph as histration. Distribute page three of the <i>Student Worksheet: Renewable</i> <i>ting the Numbers?</i> Have students work in pairs to complete the	
Student Worksheet	t Answers – Renewable Energy Sources-	
Who's R	Running the Numbers, page 3	
14) What do the orange and blue bars stand for?	Answer: The orange bars stand for the country's total electricity consumption. The blue bars stand for the country's total electricity from renewable energy.	
	Evidence: The key is on the middle right.	
15) What unit of measure	Answer: billion kilowatt hours	
is used to represent energy use?	Evidence: faint gray letters below the key	
16) Use decimals to the	Answer: .14 of U.S. electricity comes from renewables.	
hundredths to express what portion of U.S. energy comes from renewable energy sources.	Evidence: 527 (electricity from renewables) divided by 3883 (total electricity consumption) = .138	
17) Use decimals to the	Answer: .23 of Germany's electricity comes from renewables.	
hundredths to express what portion of Germany's energy comes from renewable energy.	Evidence: 126 (electricity from renewables) divided by 538 (total electricity consumption) = .234	
18) Use decimals to the	Answer: .36 of Spain's electricity comes from renewables.	
what portion of Spain's energy comes from renewable energy.	Evidence: 87 (electricity from renewables) divided by 244 (total electricity consumption) = .356	
19) What two countries	Answer: Norway and Brazil	
come closest to providing their energy needs with renewable energy sources?	Evidence: The orange and blue bars are closest together indicating a high portion of energy from renewables.	
5/		1

20) Use decimals to the
hundredths to express
what portion of those
country's energy comes
from renewable energy
sources.

21) Work with your partner to make up a word problem using information from the graph. **Answer**: Norway – 1.09 (producing more electricity with renewables than they consume) and Brazil - .96.

Evidence: Norway – 121/111 = 1.09 Brazil – 459/479 = .958

Answers will vary. If time allows have students work on each other's word problems.

WRAP UP

9. Engage in a summary reflection activity. Ask students, "What does this graph tell you about which countries are the greenest in the world?" Invite discussion about how the U.S. and China can lead the world in total electricity produced from renewable energy sources and still come up behind in the portion of total electricity needs provided by renewables. Invite further inquiry by asking, "What questions do you have about the sources and the information behind each chart?" "What don't you know that you want to know about this topic or these media examples?" "What sources might help you to find out what you want to know?"

10. Brainstorm *Action Steps* students can take based on what they have learned. What can you do, now that you know about how your country compares with others in its efforts to expand renewable energy production? You might want to list suggestions as a chart.

Ideas might include:

- Identify media messages about renewable energy and fossil fuel energy.
- Find out what proportion of the electricity in your home and school are provided through renewable energy sources.
- Interview classmates, family members and teachers about their thoughts on the importance of moving to a renewable energy system.
- Research the reasons that experts believe the U.S. is falling behind in renewable energy production.
- Share your findings with others in your school and community.

FURTHER QUESTIONS

Why might pro-renewable organizations like the Center for American Progress and RenewableElectricity.com choose to highlight the fact that the U.S. is so far behind other countries in the efforts to move to a greener energy economy? Do you think their strategy will encourage or discourage energy consumers to push for change? Why?

How could a fossil fuel company like ExxonMobil or Peabody Coal use these graphs to support continued use of their products?

What other graphs would you like to see to better understand how your country's position on renewable energy development?

Look at the latest Carbon Underground spreadsheet of international fossil fuel companies. How many names do you recognize in the top twenty coal companies and the top twenty oil and gas companies? What do you notice about these companies?

What renewable energy companies do you recognize on the website of altenergy.org?

EXTENDED ACTIVITIES

Imagine that you are a marketing manager for a renewable energy company. You want to get the word out about your product. Some people are advising you that you should use graphs and statistics to show the need for renewable energy. Others are advising you to stay away from numbers and go with the "human angle" showing images of sunshine and windmills. Create a marketing presentation that takes both of these perspectives into account.

Imagine that you are an official with the International Energy Administration. You have been asked to do several case studies on the current state of renewable energy development around the world. Pick three countries with very different economic circumstances for your research. Where can you find the most believable and up-to-date information on the renewable energy progress in those countries? Make a brief report on the progress toward renewable energy in those three countries using charts and graphs to illustrate your points.

Imagine that you are an activist with your local "Green Energy Team." Your group has decided to do a major study of the potential for the growth of renewable energy sources in your community. Who can you talk with to get accurate information about the potential for renewable energy development where you live? Make a short video to communicate your findings and share it in your school and community.

Student Worksheet – Renewable Energy Sources – Who's Running the Numbers?

NAME

DATE _____

Task: Study the graph to find the answers to the questions. Use another paper to answer. Explain where and how you found your answer in the media document.



According to this graph the U.S. produces about how many watts of wind power per capita?
 According to this graph Denmark produces about how many watts of wind power per capita?
 What fraction of wind power capacity per capita does the U.S. produce compared to Denmark?
 What fraction of wind power capacity per capita does the U.S. produce compared to Spain?
 What fraction of wind power capacity per capita does the U.S. produce compared to Germany?
 What countries produce more than twice as much wind power capacity per capita as U.S.?
 Work with your partner to make up a word problem using information from the graph.

Student Worksheet – Renewable Energy Sources – Who's Running the Numbers?

NAME

DATE _____

Task: Study the graph to find the answers to the questions. Use another paper to answer. Explain where you found your answer in the media document.



8. According to this graph the U.S. produces about how many watts of solar power per capita?
9. According to this graph Germany produces about how many watts of solar power per capita?
10. What fraction of solar power capacity per capita does the U.S. produce compared to Germany?
11. What fraction of solar power capacity per capita does the U.S. produce compared to Spain?
12. What countries produce more than twice as much solar power capacity per capita as U.S.?
13. Work with your partner to make up a word problem using information from the graph.

Student Worksheet – Renewable Energy Sources – Who's Running the Numbers?

NAME _

DATE _____

Task: Study the graph to find the answers to the questions. Use another paper to answer. Explain where you found your answer in the media document.



14. What do the orange and blue bars stand for?

15. What unit of measure is used to represent energy use?

16. Use decimals to the hundredths to express what portion of U.S. energy comes from renewable energy sources.

17.Use decimals to the hundredths to express what portion of Germany's energy comes from renewable energy.

18. Use decimals to the hundredths to express what portion of Spain's energy comes from renewable energy.

19. What two countries come closest to providing their energy needs with renewable energy sources?

20. Use decimals to the hundredths to express what portion of those country's energy comes from renewable energy sources.

21. Work with your partner to make up a word problem using information from the graph.

ASSESSMENT OVERVIEW

Considering Our Consumer Choices About Natural Resource Use

Assessment Objectives:

- Students will demonstrate the ability to write an opinion piece on consumer choices, supporting their point of view with reasons supported by evidence from media documents.
- Students will demonstrate the ability to identify positive and negative incentives that influence people's consumer decisions.
- Students will demonstrate the ability to explain and compare different approaches to encourage consumers to consider protecting resources as they make buying choices.

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Standards	
Common Core ELA	CCSS.ELA-LITERACY.W.5.1
C3 Framework Social Studies	D2.Eco.2.3-5.
	D4.7.3-5

Materials Needed:

Four-page Student Worksheet: Considering Our Consumer Choices About Natural Resource Use

Possible Answers: Student worksheet T-chart Document #1 Document #2 Buying the right product can support Buying too much of anything hurts Messages a better environment the environment Incentives "High street shopping" welcomes The deflated earth and the quote about consuming with a positive purpose greed discourage any consumerism Techniques A green apple with an image of the The tire tracks on the deflated globe green earth suggests "Buy green!" suggest that consumerism is running over and destroying our living planet Evaluation Criteria: Opinion Piece ELA skill: Write in a clear and coherent manner. Reference 3 pieces of evidence from the book cover and poster. Accurate spelling, punctuation and grammar. Critical Thinking Skill: Weigh positive and negative incentives influencing decisions. Reflect on consumer habits as they impact resource use. Following Directions: Include introduction and conclusion.

Include at least 4 paragraphs.

NAME

DATE _

Another person in the group has brought in a

poster about "Consumerism" as a model for a

way to provide a **negative incentive**.

Student Worksheet - Considering Our Consumer Choices About Natural Resource Use

You are a member of a group called **Save Our Resources** that wants to encourage people to think about the connections between natural resource use and consumerism.

Consumerism is the idea that it's good for people to spend a lot of money on goods (products) and services.

Your group believes that consumers can make choices to save natural resources that are used in making and selling products and services. But different people in the group have different ideas about how *incentives are used to encourage people to think about and to possibly change their habits* as consumers to protect the earth's resources.

One person in the group has offered a book cover called *The Green Consumer Guide* as a model for a way to provide a **positive incentive**.



Your group must agree on an incentive approach that will be most effective in getting consumers to consider ways to change their buying habits to protect the earth's natural resources.

TASK 1: Use the T-Chart on the next page to compare and contrast the media messages of the artists who created the book cover and poster. Then, use your analysis to determine which kind of incentive might work best to influence consumer choices.



What's the message about consumerism and natural resources?



How does the artist use positive or negative incentives to influence people's consumer choices?

What techniques does the artist use to make the message interesting?

How does this image agree or disagree with your own point of view on consumerism and natural resource use?
MEDIA CONSTRUCTIONS OF SUSTAINABILITY: UPPER ELEMENTARYSTUDENT WORKSHEETUNIT 2: RESOURCESCULMINATING ASSESSMENT: ELA & SOCIAL STUDIES

TASK 2: Write an opinion piece that explains your point of view as to how best to influence others' decisions about consumerism and natural resource use.

When you are finished writing, be sure to review your essay to see that you have written a wellorganized essay of at least four paragraphs, and have included:

- An introduction
- Statements about how positive and negative incentives can influence people's decisions on important social problems.
- At least three pieces of evidence from the media images to support your decision
- A conclusion
- Accurate spelling, punctuation and grammar to the best of your ability

Unit 3: Water

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LESSON PLAN



Why Protect our Water Resources?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will consider how people impact water supplies and what individuals and communities can do to protect water resources.
- Students will analyze web pages to discern messages and values related to water.
- Students will note similarities and differences in point of view within different texts.
- Students will draw on evidence from multiple information texts to write about why we must protect our water resources.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.RI.5.6	Worksheets & Step 8
	CCSS.ELA-LITERACY.RI.5.7	Worksheets & Steps 5-6
	CCSS.ELA-LITERACY.W.5.9	Worksheets
C3 Framework Social Studies	D1.2.3-5	Steps 2 & 8
	D2.Civ.10.3-5	Worksheets & Steps 5-6
Next Generation Science	5-ESS3-1	Worksheets & Steps 5-6

Vocabulary:

S

Domain Specific: environmental stewardship, watershed, wastewater reclamation, contamination, methyl mercury, pesticide, water market, utility manager, ocean desalination, greenhouse gas, irrigation, groundwater

Academic: innovation, disruption, commodity

Media Type(s): book cover, brochure cover, report cover, table of contents

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

- Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**
- Six-page Teacher's Guide: Why Protect Our Water Resources?
- Three-page Student Worksheet: Why Protect Our Water Resources?
- Five slide PowerPoint slideshow (Access online or via Unit 3 Lesson 1 digital media folder) Additional Support:
- From the website, view Media Decoding Examples demonstrating classroom media analysis.
- Download the <u>Key Questions for Analysis</u> for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 90 minutes

Lesson Procedures

- Ask "Why is it important to protect our water resources?" and "How do human activities impact our water resources?"
- Present the Lesson Introduction to the class.
- Lead a group media document decoding of three sets of covers and tables of contents for messages about threats to water resources and actions and beliefs to support water stewardship.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding lesson.

- Direct students to complete the worksheet, *Why Protect Our Water Resources?* requiring them to name evidence from the media documents in preparation for a final essay about why and how we must protect our water resources.
- Lead a summary discussion on how and why people work to protect water resources.
- Brainstorm action steps students can take related to water protection based on what they have learned.

TEACHER GUIDE

Why Protect Our Water Resources?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask two questions: "Why is it important to protect our water resources?" and "What are some of the ways in which human activities impact our water resources?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the need to protect the earth's water resources. These may be questions that many students have never considered. Take time to help students think beyond initial responses.
- Introduce some of the key vocabulary for this lesson: <u>Stewardship</u>: the job of protecting and being responsible for a resource <u>Contamination</u>: the act of making something impure or polluted by contact with something Unclean;
 Croundwater under the Farthle surface that scales into the ground from rain and malta.
 - <u>Groundwater</u>: water under the Earth's surface that soaks into the ground from rain and melted Snow;

<u>Wastewater:</u> water containing waste products that has been used in washing, flushing or manufacturing.

4. Introduce the lesson. Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Lesson Introduction

In this activity you are going to be researchers studying the ways that water resources are affected by human use and finding actions that people can take to help protect our water supplies. We're going to study the covers and table of contents of several books, reports and brochures to discover clues that will help us answer our research questions. Do you think all authors will name the same problems and solutions to our water challenges? Let's put on our research hats to find out.

PARTNER WORK

- 5. Distribute the *Student Worksheet: Why Protect Our Water Resources*, pages 1 and 2. Project PowerPoint slide, Media Document 1. Have students work in pairs to complete the left hand column of the worksheet. Lead a full class document decoding using the *Media Message Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this book cover and table of contents?" or "What questions do you have about this media example?" Encourage wide-ranging and creative responses. When probing for messages, *Possible Answers* are provided to model application of key knowledge through evidence-based analysis. Ask for evidence from the document even when the answer may seem readily apparent.
- 6. Repeat with PowerPoint Media Documents 2-3.

РРТ

Media Document 1 *Sacred Water: Water For Life* book 2008



Explain that this book was published by the North American Water Office, an organization whose mission is to educate people about solutions to environmental problems caused by society's wastes. The introduction states, "We are eternally grateful for the honor of presenting the voices of those Ojibwe (Native American) people who have blessed this project with their spiritual wisdom and knowledge.""

Media Sample Questions & Answers

What are the messages in the book cover and the table of contents about the threats to our water supplies? Give evidence from the document for your answer - where do you see the message in the media document.

What are the messages in

people can do to help

Where do you see the

message in the media

document?

the book cover and the table of contents about what

protect our water resources?

Possible Answer: Environmental pollution threatens everything.

- Evidence: Chapter B DisruptionEnvironmental Contamination
 - Methyl Mercury in Fish

Possible Answer: Water pollution causes human health concerns.

- **Evidence:** Pesticides Health Effects
 - Environmental Health & Health Behavior Problems

Possible Answer: Learn and follow traditional native wisdom.

Evidence: • Cover image surrounded by design familiar in some Native American pottery

- Chapter A Water and its Connection to People
- Chapter C Sacred Plants

Possible Answer: Water is part of the sacred natural order.

Evidence: •

- : Title Sacred Water: Water For Life
 - Cover image of land, water and sun
 - Chapter A Sacred Creation

What are the messages in the book cover and the table of contents about why we must protect our water resources? Where do you see the message in the media document? Media Document 2 *The Business of Water* report cover 2008

PPT



Explain that this book was published by the American Waterworks Association, a nonprofit agency associated with the water utility industry. The association website explains that the book is "a collection of articles from *Journal AWWA* "that explore from a business perspective the …important issues facing the water industry now and in the future. "

Media Sample Questions & Answers

What are the messages in the report cover and the	Possible Answer: Climate change can disrupt water supply.
table of contents about the threats to our water	Evidence: Chapter D – Population Growth and Climate Change Will Post Tough Challenges for Water Utilities
supplies? Give evidence from the document for	Possible Answer: We have a limited supply of freshwater.
your answer.	Evidence: Chapter C – Preserving Sustainable Water Supplies for Future Generations
What are the messages	Possible Answer: We should support the for-profit water market.
about what people can do to help protect our water	Evidence: Cover image & title
resources? Where do you see the message in the	Possible Answer: We can transform ocean and wastewater for drinking.
media document?	Evidence. • E – Wastewater is Water Too

What are the messages about why we must protect our water resources? Where do you see the message in the media document?

Possible Answer: Water is the source of profit.

- **Evidence:** Cover image of coins in water drop
 - Chapter A Water is cheap Ridiculously Cheap

PPT

Media Document 3 *Not a Drop to Drink* book cover 2008



Explain that this book was published National Geographic as part of its *National Geographic Investigates: Science* series which "introduces young people to the latest techniques of scientific investigation, the most recent discoveries, and how experts interpret their findings to shed new light on our world. *Not a Drop to Drink* conveys a clear message to young readers about this precious commodity and our urgent need to conserve it."

Media Sample Questions & Answers

What are the messages in the book cover and the table of contents about the threats to our water supplies? Give evidence from the document for	 Possible Answer: There may not be enough water for all. Evidence: Cover image of boy with slight faucet flow Chapter C – Disappearing Water: Short Supplies Chapter D – Supply and Demand: Irrigation Drains Groundwater & Water Wars
you see the message in the media document?	Possible Answer: Climate change threatens water suppliesEvidence: Chapter B – Warming Water: Greenhouse Gases and the Oceans
What are the messages	Possible Answer: Education and research can help.
about what people can do to help protect our water resources? Where do you see the message in the media document?	 Evidence: Chapter A: Studying Water Chapter B: Studying Decay Chapter F: More to Explore
What are the messages about why we must protect our water	Possible Answer: The next generation needs water and the food it grows to be shared.
resources? Where do you see the message in the media document?	 Evidence: Cover image of child looking at camera with mouth open at dribbling faucet Chapter D – Supply and Demand Chapter F - Preserving a Food Supply

WRAP UP:

- 7. Distribute the *Student Worksheet: Why Protect Our Water Resources*, page 3. You may provide the students with the PowerPoint, or explain how they can access the PowerPoint of the media documents in the *Student Materials* section on the Project Look Sharp website: www.projectlooksharp.org.
- **8.** Engage in a summary reflection activity. Ask students: What have we learned about our opening questions:

Why is it important to protect our water resources?

How do human activities impact our water resources?

How does the point of view of the media producer shape the messages in the media document?

Invite further inquiry by asking:

What don't you know that you want to know about this topic or these media documents? What sources might help you to find out what you want to know?

9. Brainstorm *Action Steps* students can take based on what they have learned. What can you do now that you know about the ways in which our water supplies need protection? You might want to list suggestions as a chart.

Ideas might include:

- Investigate where your drinking water come from.
- Educate yourself about and then publicize the possible threats to your water system.
- Interview those people working to protect your local water resources.
- Make a presentation to your school about why water resources are important.

FURTHER QUESTIONS

Which cover makes you want to read the contents? Why? Which is least appealing? Why?

Can you judge a book by its cover? Can you judge a book by its table of contents?

Which of these publications most closely reflects your own ideas about the value of water? Why?

Should people who choose to live in the desert southwest have the same right to drinking water as people who choose to live near the Great Lakes? Why or why not?

Should homeowners be allowed to use an unlimited amount of water to water their lawns and gardens? Should they pay for the water they use?

EXTENDED ACTIVITIES

Stage a mock debate between the authors of *Sacred Water: Water For Life* and The *Business of Water* on the question: Why is water protection important for our economy and our community? In preparation for the debate, have each 'team' make signs promoting their stance.

Some people consider themselves to be "waterkeepers" or stewards of the watersheds in their region. Interview a waterkeeper in your area about the values they bring to their stewardship. If several classmates interview community waterkeepers on camera, you can create a collective news piece or mini-documentary.

Organize a campaign to promote the sustainability of water in your home community. Who will you include in your organizing efforts and who might be left out? Make an effort to reach out to people and groups with whom you don't know well in order to expand your own circle of awareness. Write professional emails that you can send to relevant individuals explaining the purpose of your campaign and why you'd like their involvement.

Research how efficiently water is used and conserved in your school and post your findings in a public forum. Make sure to include all forms of water used in your school including water use in restrooms and showers, in building maintenance and heating and cooling and in the kitchen and landscaping.

Create infomercials that could go in your local newspaper or an environmental magazine based on a primary question about water such as "What is water for?" or "Who controls your water?"

Find the people in your community who are studying local impacts of climate change. Ask them about the impact of climate change on water usage in your area. Share this information with your peers by creating a flyer and take action in response to your findings.

Keep a 'water log' documenting your use of water each day over the course of one week. Make sure to include all forms of water use including water drank, showers, toilet use, dishes, washing clothes, etc. Create a collective class chart illustrating the most common uses of water amongst your peers.

Student Worksheet- Why Protect Our Water Resources?

NAME _

Media Document 1



CONTENTS – Selected excerpts

A – Sacred Creation

- 1. Creation, Sacred Water
- 2. Disruption, What We Can Do
- 3. Water and Its Connection to the People

B – Disruption

- 1. Environmental Contamination
- 2. Methyl Mercury in Fish
- 3. Pesticides Health Effects
- 4. Environmental Health & Health Behavior Problems

C – What We Can Do – Solution Strategies

- 1. Nutritional Value of Fish
- 2. Sacred Plants
- 3. Food and Medicine Security
- 4. Wild Plant Medicines

Media Document 2



CONTENTS – Selected excerpts

- A Water is cheap Ridiculously Cheap
- B The Value of Water: What it Means, Why it's Important and How Water Utility Managers Can Use It
- C Preserving Sustainable Water Supplies for Future Generations
- D Population Growth and Climate Change Will Post Tough Challenges for Water Utilities
- E Wastewater is Water Too
- F Supply from the Sea: Exploring Ocean Desalination
- G Sources of Financing for Your Water Technology Business
- H Water: Resource or Commodity?

DATE _____

Media Document 3



CONTENTS – Selected excerpts

A – Water Everywhere 1. Looking for Answers

2. Why Water Matters

B – Warming Water

- 1. Greenhouse Gases and the Oceans
- 2. Clues from the Past

C – Disappearing Water

- 1. Short Supplies
- 2. Drought or New Deserts?

D - Supply and Demand

- 1. Irrigation Drains Groundwater
- 2. Water Wars

E – A Continent's Backbone

- 1. Great Lakes, Huge Stakes
- 2. "Strangling" Water

NAME ______

DATE _____

Student Worksheet- Why Protect Our Water Resources?

Task: Study the covers and tables of contents for each media document on page 1 of this worksheet. Work with your partner to make notes about the messages in the media documents.

Media Document 1

Media Document 2

Media Document 3

Messages about how human actions threaten our water resources

Messages about what people can do to help protect our water resources

Messages about why we must protect our water resources

NAME ______

DATE _____

Student Worksheet- Why Protect our Water Resources?

Write a short essay of 3-4 paragraphs on the question below. You may use the information from the notes that you made on the previous table of contents worksheet activity.

"Why and how must we protect our water resources?"

E	ESSAY WRITING TIPS
Introductory paragraph	Clearly state the question you are addressing. State your own opinion on the question.
<u>Middle paragraph(s)</u>	Give reasons for your opinion that include at least three pieces of evidence from the media documents.
Concluding paragraph	Provide a concluding section about why you feel the way you do about this question.
<u>Consider including</u> <u>key vocabulary</u>	Stewardship, groundwater, wastewater, contamination, water market, irrigation

LESSON PLAN



Where Does Water Go?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will understand the role of the hydrologic cycle in creating watersheds.
- Students will analyze videos to discern target audience, techniques and purpose.
- Students will draw information from multiple sources to answer questions.
- Students will reflect on their own learning styles.

S	Standards		Activities
	Common Core ELA	CCSS.ELA-LITERACY.RI.5.7	Worksheet
		CCSS.ELA-LITERACY.SL.5.2	Worksheet
	Next Generation Science	5-ESS2.C	All

Vocabulary:

Domain-Specific: evaporation, gravity, hydrologic cycle, hydrologist, hydroclimatic station, infiltration, irrigation, partition, porous, precipitation, runoff, surface flow, transpiration, underground flow, uptake, watershed, weir

Academic: flux, laterally

Media Type(s): educational online videos

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the How to Use Materials section associated with this kit.

Materials for the Lesson:

- Five-page Teacher Guide: Where Does Water Go?
- Two-page Student Worksheet: Where Does Water Go?
- Three video clips (Access online or via Unit 3 Lesson 2 digital media folder) Additional Support:
- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 90 minutes

Lesson Procedures:

- Ask "Do you know where water goes when it rains?" and "Why is it important to know about the water cycle?"
- Present the Lesson Introduction to the class.
- After watching video 1 without sound students create diagrams of the hydrologic cycle.
- After watching video 2 with sound students analyze the role of music, narration and sound effects in video production.

NOTE: See *How to Use These Materials* for support in leading a constructivist media decoding.

- After watching video 3 students create diagrams of the purpose of the video and on the importance of watershed awareness.
- Lead a summary discussion on learning styles, water cycles and media literacy analysis.
- Brainstorm action steps students can take based on what they have learned about the importance of protecting our watershed.

TEACHER GUIDE

Where Does Water Go?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

2. Ask "Do you know where water goes when it rains?" and "Why is it important to know about the water cycle?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the hydrologic cycle and why watershed awareness matters. You may want to do a quick full-class review of water cycle concepts they will have learned earlier – precipitation, condensation and evaporation.

3. Introduce some of the key vocabulary for this lesson: <u>Hydrologic cycle:</u> the continuous process in which Earth's water moves through the environment; <u>Porous:</u> having tiny holes through which liquid or air may pass; <u>Watershed:</u> the area of land where all of the water that is under it or drains off of it goes into the same particular lake, river, or ocean;

<u>Target audience</u>: a particular group at which a media document or presentation is aimed.

4. Introduce the activity: Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Activity Introduction

Do you ever wonder where the water you use every day comes from and where it goes to when you're done using it? In this lesson you'll become hydrologists tracking the paths of water. You'll also become media literacy explorers investigating how videos are made to appeal to certain audiences. Put on your media literacy hydrologist suits and we'll dive into three videos that will provide the evidence needed for your study of water and media systems.

PARTNER WORK

- 5. Have students work in pairs. Distribute Student Worksheet: Where Does Water Go? Explain that students will now watch three videos related to the hydrologic or water cycle. These videos were made about similar themes and contain some of the same images but were constructed in unique ways for different purposes in order to communicate with particular audiences. Explain that they will have time after viewing each video to work with their partner to fill in the corresponding part on the worksheet. Play video clip 1: The Hydrologic Cycle Without Sound or Graphics. Explain that this video was made without sound or words so that it can be adapted for multi-lingual audiences, encouraging translation of this video into any language and any musical style.
- **6**. After students have completed the worksheet review their work using the *Media Sample Questions & Answers* that follow. *Possible Answers* are included to model application of key knowledge through evidence-based analysis. You might begin by asking what they noticed about the video. Discuss answers to question 1 as a class. Then have students share their diagrams noticing which details they share and which are different.



Video Clip 1 *The Hydrologic Cycle* Without Sound or Graphics 2:38 min. clip, 2011



Media Sample Questions & Answers

1. Draw a diagram of the hydrologic cycle based on what you learned from the video. Be as complete as possible.

Possible answers: Ask for volunteers to share their diagrams. If possible project the diagrams for the whole class to see.

7. Explain that you will now show a version of the video they have just seen but this time including soundtrack and graphics. Ask students to make particular note of new impressions that come across with these added elements. After the showing give the students time to respond to questions 3-5 on page two of their worksheets. Review questions 2-4 using the following possible answers to help guide the discussion. Play video 2: "The Hydrologic Cycle including Sound and Graphics."



Video Clip 2 *The Hydrologic Cycle* Including Sound and Graphics 2:38 min. clip, 2011



Media Sample Questions & Answers

2. After watching the video for a second time with audio and titles, add any new information you learned to your diagram on the first page. **Possible answers:** Ask students to share new information that they added to their diagrams after viewing the second video. Vocabulary from the video includes: *precipitation, runoff, surface flow, infiltration, underground flow, uptake, transpiration* and *evaporation*.

3. The soundtrack includes narration, music and sound effects. List specific phrases, instruments and sounds that you remember hearing.	 Possible answers: Phrases :"Son, time to join the hydrologic cycle." "See, son, that's the hydrologic cycle." Instruments: harp, timpani (drums), bassoon (wind instrument), strings Sounds: lightning strike, splash, shout, crashing wave, flowing water, sucking, sizzling
4. How did the soundtrack change the way you experienced the video?	 Possible answers: Answers will vary. Encourage students to think about the impact of sound in audio-visual recordings. Probe questions include: How do instrumentation, sound effects and narration impact your feelings?

- How do instrumentation, sound effects and narration impact how you understand the topic?
- **8.** Explain that the final video uses elements from the first video but was made for a different purpose and an older target audience. Ask students to consider why watershed awareness is important. After the showing give the students time to respond to questions 5-6 of their worksheets. Review questions 5-6 using the following possible answers to help guide the discussion. Project video 3: *Where Does Water Go When it Rains?*



Video Clip 3 Where Does Water Go When it Rains? 3:56 min. clip, 2010



Media Sample Questions & Answers

5. According to the video, why is watershed awareness important?
Possible Answer: "Everyone lives in a watershed." The narrator suggests that watershed awareness is important as a means to better understand:
the potential of flooding or landslides from tree harvest and land

- the potential of flooding or landslides from tree harvest and land development,
- whether different patterns of development can reduce environmental risk,
- how agriculture and construction might impact water quality.

Possible Answer: B

6. What do you think the purpose might have been for this video production? What is your evidence?

- A. It was made to encourage people to buy bottled water.
- B. It was made to explain the need for environmental observatories to the public.
- It was made to explain the need for environmental observatories to the public. **Evidence:** The video covers basic concepts such as the water cycle and water when a sublimiter to the public.

and watershed systems that help explain to the public why environmental observatories are necessary. The focus on measurement of water flow rates and the way these measurements help plan human activities suggests that weather stations provide information that is essential for communities to manage watershed resources.

Encourage students to speculate about why they selected the purpose they did.

- C. It was made to show how companies pollute our water supply.
- D. It was made to tell about how certain communities have access to clean drinking water and others do not.

WRAP UP:

9. Engage in a summary reflection activity. Ask students, "What have we learned about our opening questions? - "Do you know where water goes when it rains?" and "Why is it important to know about the water cycle?" Ask about media literacy understandings – "What have you learned about target audiences, about techniques in video making and about purpose in media production?" Invite further inquiry by asking, "What don't you know that you want to know about this topic or these media examples?" and "What sources might help you to find out what you want to know?"

Ask students to reflect on which of these videos speaks to their particular learning style and why:

- the animated first film without words or sounds,
- the second version of the video with words and sounds or
- the third video with animation, interviews and nature footage?
- **10.** Brainstorm *Action Steps* students can take at home or while eating out based on what they have learned. What can you do, now that you know about the importance of protecting our watershed? You might want to list suggestions as a chart. Ideas might include:
 - Map your watershed and sources of drinking water for all the kids in your school.
 - Invite local watershed stewards or protectors to talk to your school.
 - Research student groups like Riverkeepers that take action to monitor pollution.
 - Make a video about water quality concerns in your community.

FURTHER QUESTIONS

How close do you live to a body of water? What is your watershed?

What are the biggest threats to water quality in your watershed?

How often have you discussed watershed interests and responsibilities in your family? In your school? Among your peers?

How would you rank these issues in order of importance: open access to the Internet, food security for everyone in your community, watershed protection, recreation opportunities for young people?

Do you think people in your school take their access to clean and plentiful water for granted? Do you think everyone does? Why or why not?

Do you think access to clean drinking water is a human right that all people should have? What does the United Nations say about that?

What other forms of media can inform you about watersheds?

EXTENDED ACTIVITIES

Imagine that you are chief meteorologist for your local TV station. You want to educate your viewers about the importance of understanding the hydrologic cycle and where their local drinking water comes from. Work with a team to sketch a short video that will catch people's attention and educate them about this important issue. Make the video. Post it. Get feedback from viewers. Edit it to make it even better.

Imagine that you are a hydrologist for a local university. You want to get fifth graders interested in the field of hydrology. Plan a presentation for a school assembly that will encourage kids to consider hydrology as a career.

Imagine that you are a researcher who wants to better understand how precipitation amounts differ in a small area. Work with a group to organize a precipitation measurement team that will get all your classmates to record rainfall amounts for their yards for the period of one month. Gather the data and show your results on a map that includes all your fellow students. How could you do the same thing for your entire school or school district?

Have you ever wondered what goes into creating the daily weather report you see on the evening news? Dive into research to find out! Watch a weather report closely, look up information on the internet and interview a meteorologist if possible!

Student Worksheet – Where Does Water Go?

NAME _____ DATE _____

Video 1 – The Hydrologic Cycle Without Sound or Graphics

1. Draw a diagram of the hydrologic cycle based on what you learned from the video. Be as complete as possible.

Student Worksheet – Where Does Water Go?

NAME _____ DATE _____

Video 2 - The Hydrologic Cycle including sound and graphics

- 2. After watching the video for a second time with audio and titles, add any new information you learned to your diagram on the first page.
- 3. The soundtrack includes narration, music and sound effects. List specific phrases, instruments and sounds that you remember hearing.

Phrases:

Instruments:

Sounds:

4. How did the soundtrack change the way you experienced the video?

Video 3- Where Does Water Go When it Rains?

- 5. What do you think the purpose might have been for this video production?
 - A. It was made to teach about hydrology to college classes in earth science.
 - B. It was made to explain the need for environmental observatories to the public.
 - C. It was made as an ad for the water company sponsors of a TV science program.
 - D. It was made to teach about water cycles to middle school science classes.

What is your evidence?

6. According to the video why is watershed awareness important?

PPT PowerPoint

LESSON PLAN

How Much Water Did it Take to Grow That?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will compare messages about the impact of agriculture on freshwater availability in a variety of web pages and bar graphs.
- Students will solve and create math words problems that require dividing whole numbers into fractions or mixed numbers.
- Students will integrate information from multiple texts to reflect on differing accounts of the same topic.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.RI.5.6	Step 6 & 7 & Worksheet
	CCSS.ELA-LITERACY.RI.5.7	Step 5-11 & Worksheet
	CCSS.ELA-LITERACY.RI.5.9	Steps 12 & 13
Common Core Math	CCSS.MATH.3.MD.B.3	Worksheet 2-4, 6
	CCSS.MATH.5.NF.B.3	Worksheet 5, 7, 8
Next Generation Science	5-ESS3.C	Step 5-11 & Worksheet
	5-ESS2-2	Step 5

Vocabulary:

S

Domain Specific: water stress, water shortage, water scarcity, water withdrawal, groundwater, drought, water footprint, irrigation

Academic: agricultural sector, culprit, mandatory, export, bar graph chart

Media Type(s): web pages, bar graph charts, map, report cover

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

- Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**
- Eleven-page Teacher Guide: How much water did it take to grow that?
- Three-page Student Worksheet: How much water did it take to grow that?
- Twenty slide PowerPoint slideshow (Access online or via Unit 3 Lesson 3 digital media folder)

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: Multi-period lesson

Steps 1-5 on freshwater availability – 45 minutes Steps 6-9 on California almonds & beef – 45 minutes Steps 10-13 on graph reading word problems and summary – 90 minutes

Lesson Procedures

- Ask "What are some of the main human uses for fresh water resources?" and "What agricultural products require the most water to produce?"
- Present the Lesson Introduction to the class.
- Lead a decoding of six media documents related to national and global availability and uses for freshwater resources.

NOTE: See *How To Use These Materials* for support in leading a constructivist media decoding.

- Lead a second decoding of four media documents with conflicting perspectives on the agricultural causes for California water shortages.
- Direct students to work in pairs to complete the *Student Worksheet: How Much Water Did it Take to Grow That?* in which they will solve graph reading questions and create their own word problems using bar graphs from media documents.
- Review student work as a class.
- Lead a discussion on the impacts of agriculture on limited water resources.
- Brainstorm action steps students can take to help steward water resources.

TEACHER GUIDE

How Much Water Did it Take to Grow That?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask, "What are some of the main human uses for fresh water resources?" and "What agricultural products require the most water to produce?" Solicit a wide range of possible answers without critiquing or analyzing them. Guide students to make the connections between math and water usage by asking what sorts of skills they need to answer questions about "how much." The students will quickly understand that freshwater preservation involves calculation and measurement.
- 3. You may want to introduce some of the key vocabulary for this lesson:
 - <u>Groundwater</u>: water under the Earth's surface that soaks into the ground from rain and melted Snow;
 - Irrigation: moving water to dry areas to supply crops with water by means of pipes, sprinklers, ditches or streams;

<u>Water withdrawal:</u> water removed from a ground- or surface-water source for use either permanently or temporarily;

Water footprint: the total amount of freshwater used to produce the product.

4. Introduce the activity: Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Activity Introduction

In this lesson you'll become math detectives in search of the missing water. As every good water sleuth knows all people need freshwater to survive. But freshwater is a limited resource. Lots of people want to use water for lots of things from growing rice and beans to watering golf courses and filling swimming pools. The math part of our investigation will require comparing different bar graph charts from different media sources to look for evidence to find how California's water supplies are used in a time of deep drought. Not everyone agrees about the answer. You'll also come up with some of your own math words problems to help deepen our inquiry into the case of the missing water.

5. Project PowerPoint media documents 1-6 and lead a full class document decoding using the Media Message Sample Questions & Answers that follow. You might want to begin with a general question such as "What do you notice about this image?" or "What questions do you have about this media document?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages Possible Answers are included to model application of key knowledge through evidence-based analysis.

You might want to explicitly note the story line of the slides as you proceed through them, such as what is water scarcity, how it impacts different countries, how it impacts different states in the U.S. and finally the particular causes for water scarcity in the instance of California agriculture.

 Series Series
a Sample Questions & Answers
Possible Answer: There is a shortage of fresh water to meet people's needs around the world, especially in Africa.
 Evidence: The heading: "Toward a world of thirst? The map showing large parts of the world in orange an yellow, particularly on the continent of Africa.
Answer: UNEP & GRID-ARENDAL (United Nations Environmental Programme & its information office)
Evidence: Names appear on the top bar after the titleLogos appear at top right
Answer: 2008
Evidence: third line: "Second edition – 2008"

Vital Water Graphics highlight map



Media Sample Questions & Answers

1) According to this map, excerpted from the slide you just saw, about how many cubic metres per person were available to people in the U.S. in 2007? Give evidence from the media document to support your answer. Answer: Between 6,000-15,000 cubic metres per person.

Evidence: The. U.S. is shaded in the second lightest shade of blue which corresponds to this range on the key below the map.

PPT

2) According to this map what region of the world	Answer: North Africa & the Mide	dle East
deals with water scarcity? [Discuss the difference between scarcity, stress and vulnerability.]	Evidence: North Africa and the indicates scarcity on the map ke	Middle East is shaded in orange, whic y.
3) Why might the map designers have chosen the colors they did to represent the range of freshwater availability?	Possible Answer: Deep blue reblue sea"). Sand color represent represent caution or danger (yell	presents a surplus of water ("the deets desert or drought. Yellow and orang ow traffic light).
4) What is the source for the information on this	Answer: The FAO (Food and A the World Resources Institute	griculture Organization of the UN) ar
map? Where can you find this in the document?	Evidence: "Source:" in bottom l	eft hand corner
		VITAL SIGNS
Media Document 3 The Looming Threat	of Water Scarcity	The second secon
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6. Lead a second part document decoding. This time, introduce the storyline thread: "It seems like California needs lots of water to irrigate their farms. Why? Yes, most of the food for our country is grown there. O.K., let's zoom in on the agriculture industry of California, and see if we can pinpoint a specific problem in our next few slides." Project PowerPoint Media Documents 7-10 and lead a full class document decoding using the Media Sample Questions & Answers that follow.

Media Document 7 **Beneath California Crops**



Media Sample Questions & Answers

1) What are the messages Possible Answer: California doesn't have enough water to feed its crops. from this headline, photo and caption? What's the evidence in the document?

- Evidence: Headline words: crops, groundwater, crisis
 - Photo: Sun (drought), well drilling rig (water), shadow (trouble)

Possible Answer: Growing almonds creates the problem.

2) Who wrote this article, what company published it and when was it published?

Evidence: Caption: "Land devoted to water-thirsty almonds has doubled" Answer: Authors are Justin Gillis & Matt Richtel. It was published by the International New York Times. It was published on April 5, 2015.



Media Document 10 One chart sums up **Media Sample Questions & Answers** 3) What are the **Possible Answer:** Almonds aren't to blame for California's water messages from this problems. headline, photo and text? What's the Evidence: • Headline words: "It's not almonds" evidence in the 2nd sentence: "not almonds" highlighted document? Possible Answer: Growing beef cattle is the problem. Evidence: Last sentences: "I'm talking about meat. Red meat in particular. From raising the cows..." 4) Who wrote this Answer: Author is Erin Brodwin. It was published by the Business article, what company Insider. It was published on April 13, 2015. published it and when was it published?

PARTNER WORK

- 7. Distribute pages one and two of the *Student Worksheet: How Much Water Did it Take to Grow That?* Explain to students that they will now work with a partner to identify which charts should accompany the three articles just reviewed. Have students work in pairs to complete the worksheets. Provide the three PowerPoint slides 12-14, or explain how students can access them from the Project Look Sharp homepage, www.projectlooksharp.org.
- **8.** After students have completed their worksheets, project the PowerPoint slides 12-14 that have the the raw graphs without the answers. Ask for a show of hands as you move through each slide: How many of you thought Media Graph A was published with Media text 1? How about Media Text 2? Media Text 3? Etc.

Review student answers and evidence for all three. You can then project the *Answer slides* 15-17 showing the correct combinations using the *Student Worksheet Answers* that follow. Ask about what sources were used for each graph to model inquiry about sourcing and credibility.

Student Worksheet Answers – How Much Water Did it Take to Grow That?

1) Study the media texts above and the media graphs on page 1 of your worksheet. Circle the number to tell which texts go with which graphs and give evidence from the media documents to explain your answers.

Media graph A goes with media text: (Circle your pick) 1

Evidence: *Media graph A* highlights the large amount of water it takes to grow almonds by choosing to compare water required for almond production (the bottom two longest bars) with uses that require less water (San Francisco and LA residential and business use) and other nuts production (pistachios and walnuts). The headline in *Media Text 2* similarly focuses on the large amount of water required for almond production as compared to L.A. usage.

3

2 (3

Media graph B goes with media text: (Circle your pick) 1 2 3

Evidence: *Media graph B* highlights the large amount of water it takes to grow alfalfa by choosing to compare water required for beef production (the bottom longest bar) with food production uses that require less water. The last two sentences in *Media Text 1* similarly focuses on the large amount of water required for beef production as compared to "a handful of nuts."

Media graph C goes with media text: (Circle your pick) 1

Evidence: *Media graph C* highlights the large amount of water it takes to grow alfalfa by choosing to compare water required for alfalfa production (the yellow longest bar) with food production uses that require less water. The second sentence in *Media Text 3* similarly focuses on alfalfa "as the drought-stricken state's biggest water guzzler."

- **9.** Explain to students that they will now work with their partner to complete some graph reading multiple choice questions for each of the graphs on page 1. Explain that they should show their work on a separate page. Distribute page three of the *Student Worksheet: How Much Water Did it Take to Grow That?* Have students work in pairs to complete the worksheets. Provide the PowerPoint slides, or explain how students can access the PowerPoint slides of the web page documents in the *Student Materials* section on the Project Look Sharp homepage, www.projectlooksharp.org.
- **10.** After students have completed their worksheets, project the PowerPoint and review their work using the *Media Sample Questions & Answers* that follow. *Possible Answers* are included to model application of key knowledge through evidence-based analysis. For question 8 where students make up their own word problems consider having students solve one another's problems


7. According to media graph C about what fraction of water do California's almond and pistachio crops require compared to that required to grow forage and alfalfa for livestock? Answer: (1/5)

1/2 3/4 9/10

Evidence: Almond/pistachio requirement (2,100) over forages and alfalfa requirement (10,400) which is closest to 1/5 among the options listed.

8. Work with your partner to make up two word problems using information from any of the media graphs or text examples. Name which media document should be studied to answer each problem. Your goal is to create word problems that will be interesting and achievable – not too hard and not too easy – for your classmates.

Answers will vary. If time allows have students work on each other's word problems.

NOTE: You can project slide 18 to provide additional data related to personal water use

WRAP UP

11. Reflect on key media literacy concepts arising from reviewing these contrasting graphs. Ask:

- Having examined the charts and texts, do you have any concerns about the accuracy of any document? Why?
- What additional information might you need to decide which is most credible?
- How do you decide what sources are most credible when you interact with media?

Engage in a summary reflection activity on the impacts of agriculture on limited water resources. Ask students, "What are some of the main human uses for fresh water resources?" and "What can be done to keep fresh water supplies available to all?"

Invite further inquiry by asking, "What don't you know that you want to know about this topic or these media documents?" and "What sources might help you to find out what you want to know?"

12. Brainstorm *Action Steps* students can take to help steward water resources. "What can you do, now that you know about how our use of freshwater can impact the availability of our water resources?" You might want to list suggestions as a chart.

Ideas might include:

- Identify media messages about water availability. Brainstorm words to look for such as "drought, shortage, water stress, plentiful, abundant."
- Decide what choices you can make about water use at home and at school that might help preserve water supplies.
- Write a letter to an agricultural producer asking about water requirements for their products.
- Graph the availability and withdrawals of freshwater supplies in your region using data from your local or regional water provider.

FURTHER QUESTIONS

This lesson has focused on water used to grow protein sources – nuts and meat. What do the graphs show about the relative water requirement for other nutritional categories such as fruit, vegetables and grains? What fractions of total water withdrawals in the farming sector are required for each of these food groups? Is it possible to compare the amount of water required to produce a single tiny almond and a large beef cow in a way that allows for honest comparison?

Each graph uses different quantities to measure – cubic meters of water withdrawals, cubic meters of water per ton of production, acres feet of water use per year. Do the different quantities used to measure change the comparisons or do they remain the same?

Where could you go to get data on water usage in your city or state? Use the sources listed on graphs #14-16 to get some ideas about possible places to look.

Which are the most water stressed countries in the world? Why? Which countries have the most surpluses of fresh water? Why?

EXTENDED ACTIVITIES

Imagine that you are a member of a local water conservation group. You have been asked to survey your class about their personal water use in order to help people see where they might be able to conserve water resources. Explore the Water Footprint Network website to see how you might use their personal water footprint calculators to begin your survey.

Imagine you are a researcher with your state natural resources department. You've been asked to study the water usage for your county and all its immediately adjoining counties. What organizations – governmental agencies, utility companies or conservation groups – can help you get the data you need to complete your study? Decide on the best way to present the information to your co-workers. Will you use a map, a chart, a graph? Will you make a video, a website, a social network page?

This lesson looked at the water footprint of two different food products – nuts and beef. Pick three or four other food items that you eat regularly. Figure out how to calculate the water footprint for each of these foods. What sources will be helpful as you begin your research?

Imagine that you are working for the United Nations on issues of water security. What parts of the world most need your support in dealing with issues of securing safe and sufficient water resources for everyone? What is currently being done in those regions to help support water security? Make a presentation to your classmates on your findings. Brainstorm action steps that you might take to help strengthen water security in your chosen region.

Do you know where the water you drink/use comes from? Ask your parents where your household water supply comes from and check the labels of water bottles you drink. Then, if possible, make a map showing the origins of your water in relation to where you live.

NAME ____

DATE _____

Student Worksheet – How Much Water Did it Take to Grow That?

Media Graph A

Media Graph B





Student Worksheet – How Much Water Did it Take to Grow That?

Media Text 1	Media Text 2	Media Text 3
One chart sums up the real	California's Almonds Suck as	A Big Culprit In California's
problem in the California	Much Water Annually as Los	Drought Starts With 'A' And
drought — and it isn't	Angeles Uses in Three Years	It's Not Almonds
almonds	and other amazing facts	California's water-intensive
You might've heard that if	from the Golden State's epic	almond industry has faced
there's one food you shouldn't	nut boom	mounting criticism during the
be buying in the middle of	California's worst drought on	drought, especially after Gov.
California's drought, it's	record isn't stopping the state	Jerry Brown announced that the
almonds. Compared with many	from growing massive amounts	state's first mandatory water
other nuts and veggies, almonds	of nuts: The state produces over	cutbacks wouldn't apply to
seem particularly wasteful,	80 percent of the world's	farmers. But several deep looks
requiring a whole gallon of	almonds and 43 and 28 percent	into where the agriculture
water per nut. But what about	of the world's pistachios and	industry's water goes point to
the foods we eat that aren't nuts	walnuts, respectively. As	alfalfa, not almonds, as the
or vegetables ?I'm talking about	Mother Jones' Tom Philpott	drought-stricken state's biggest
meat. Red meat, in particular.	details in this longread, the	water guzzler, according to the
From raising the cows to	state's almond market in	latest data from the state
washing and processing the	particular has taken off: What	Department of Water Resources,
meat, burgers and steaks require	was a \$1.2 billion market in	which groups almonds and
far more water per ounce than a	2002 became \$4.8 billion	pistachios together in its
handful of nuts do.	market by 2012.	evaluations.

1. Study the media texts above and the media graphs on page 1 of your worksheet. Circle the number to tell which texts go with which graphs and give evidence from the media documents to explain your answers.

Media Graph A goes with media text: (Circle your pick) 1 2 3 Evidence:

Media Graph B goes with media text: 1 2 3 Evidence:

Media Graph C goes with media text: 1 2 3 Evidence:

Student Worksheet – How Much Water Did it Take to Grow That?

GRAPH READING MULTIPLE CHOICE– Solve these problems using the graphs on page 1. Show your work on a separate page.

2. According to **Media Graph A** about how many billions of cubic meters of water does it take to produce the almonds that are grown in California and sold in the U.S.? Circle your answer: 1.1 2.3 3.4 5.7

3. According to **Media Graph A** the amount of water it takes to provide water for all San Francisco and Los Angeles homes and businesses each year is about equal to the amount of water to produce which of these crops grown in California and exported overseas? Circle your answer: pistachios walnuts almonds

4. According to **Media Graph B** about how many cubic meters per ton (m³/ton) does it take to produce the meat and animal products shown on the graph? Circle your answer: 11,000 25,000 34,000 45,000

5. According to **Media Graph B** about what fraction of water does California's nut crop require compared to that required to produce all meat and animal products? Circle your answer: 1/5 1/2 3/4 9/10

6. According to **Media Graph C** about how many thousand acre-feet per year (AF/year X 1,000) are given to forages and alfalfa — crops raised almost exclusively for feeding farm animals – in California? Circle your answer: 3,300 5,200 8,500 10,400

7. According to **Media Graph C** about what fraction of water do California's almond and pistachio crops require compared to that required to grow forage and alfalfa for livestock? Circle your answer: 1/5 1/2 3/4 9/10

8. Work with your partner to make up two word problems using information from any of the media graphs or text examples. Name which media document should be studied to answer each problem.

Your goal is to create word problems that will be interesting and achievable – not too hard and not too easy – for your classmates.

	WORD PROBLEM DESIGN TIPS
FIND	the numbers information within your media examples
MAKE UP	an interesting story that uses the numbers information from the media examples
ASK	a math question from your story about the media examples that uses the required operation
SOLVE	your own word problem

LESSON PLAN

What About Bottled Water?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will analyze videos and TV commercials to discern messages, impacts and responses to media messages.
- Students will pose and respond to questions related to media messages about bottled water.
- Students will reflect on factors that influence their decisions to purchase or not purchase bottled water.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.SL.5.1	Steps 2, 6, 7, 8, 10, 12, 13
	CCSS.ELA-LITERACY.SL.5.2	Steps 6, 7, 8, 10
	CCSS.ELA-LITERACY.W.5.1	Step 11, Worksheet p. 2
C3 Framework Social Studies	D2.ECO.1.3-5	Step 6, 7,11 &12,
		Worksheet p. 2
	D2.ECO.2.3-5	Step 6, 7,11 &12,
		Worksheet p. 2

Vocabulary:

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Domain-Specific: hydrated, recyclable, filtered tap water, extraction, disposal, landfill, manufactured demand, product life cycle

Academic: innovative, seduce, relegated, pristine, diabetes, obesity

Media Type(s): television commercials, documentary and Internet film

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

- Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**
- Six-page Teacher Guide: What about bottled water?
- Two-page Student Worksheet: What about bottled water?
- Three video clips (Access online or via Unit 3 Lesson 4 digital media folder)

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 75 minutes

Lesson Procedures:

- Ask "Does drinking bottled water help to protect the environment?" and ""What advertising messages do bottled water companies use to sell their product?"
- Present the Lesson Introduction to the class.
- Lead a media document decoding of the video clips, *The Story of Bottled Water* and *Bottled Water*: *Show Your Support*. Ask about messages, impacts and responses to media messages.

NOTE: See *How To Use These Materials* for support in leading a constructivist media decoding.

- Direct students to work in pairs to complete the *Student Worksheet: What about bottled water*? in which they analyze TV commercials for bottled water for messages media literacy questions.
- Have students write a letter to the editor stating an opinion about bottled water as a consumer choice.
- Review student work and lead a summary discussion on bottled water as a consumer choice and advertising as a means of consumer persuasion.
- Brainstorm action steps students can take based on what they have learned.

TEACHER GUIDE

What About Bottled Water?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

2. Ask two questions: "Does drinking bottled water help to protect the environment?" and ""What advertising messages do bottled water companies use to sell their product?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about the impacts of bottled water on the environment and on advertisers' tools of persuasion.

3. Introduce some of the key vocabulary for this lesson:

<u>Filtered tap water</u> - water that has already been treated by a water treatment plant that is then purified for a second time;

Manufactured demand - the activity of making the public want a product;

<u>Product life cycle</u> - all the stages of a product's life span from design and manufacture to delivery and disposal.

4. Introduce the lesson. Suggest a context such as the one provided below for the clue search in the media documents. Name the desired outcome.

Lesson Introduction

In this activity you are going to be media detectives looking for clues about how buying and selling bottled water fits with being good stewards of the environment. You'll be studying two videos with very different views on this question and then working together to analyze some TV commercials for bottled water. You'll be asking questions like, "Who does this hurt and who does it help?" and "What can I do now, now that I know what I know?" Like all good detectives you'll be looking for answers buried in the evidence. Get out your magnifying glass and let's start the search.

- 5. Explain that you will now show two videos back to back, each one presenting a strong perspective about buying and drinking bottled water. The first video entitled "The Story of Bottled Water" was produced by the woman you'll see in the video, Annie Leonard. She began the Story of Stuff Project to help support efforts to "build a more sustainable and just world." Some of the questions we'll ask about this video are, "What are the messages about bottled water?" "Who might this video help and who might it hurt?" and "What kinds of actions might people take after viewing this video?"
- 6. Project video 1, "The Story of Bottled Water" and lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What do you notice about this video?" or "What questions do you have about this media example?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner before beginning the full class brainstorm or whip around/pass. When probing for messages, *Possible Answers* are provided to model application of key knowledge through evidence-based analysis.



Who might this video help and who might it hurt and why?	 Possible Answers: it might help the bottled water industry it might help those who support corporate advertising and sales strategies it might hurt those who oppose bottled water like Annie Leonard it might hurt the environment by adding to landfill waste,
What kinds of actions might people take after viewing this video?	 Possible Answers: buy and drink bottled water lobby state and national legislators not to limit bottled water sales visit the bottledwatermatters.com site and follow their suggestions for action start an anti-obesity campaign encouraging people to drink bottled water rather than soft drinks.
8. Lead a discussion about the sale of bottled water bottled water in one wa	how words and images can change the way we understand an issue like Ask students why might the Story of Stuff Project have chosen to portray and the International Bottled Water Association have chosen such a

PARTNER WORK:

different view.

- **9.** Distribute the first page of the *Student Worksheet: What About Bottled Water?* Say that students now get to become teachers and ask questions. Explain that you will show five bottled water commercials. All of them will try to sell you bottled water. Your job is to identify the specific message of the commercial. Students will work in pairs to come up with one message and one good media literacy question about each commercial.
- **10.** Introduce and show each commercial in turn. Pause after each clip to allow student pairs to confer on the messages and questions. After showing all five commercials review student questions as a class. Ask students why they chose the questions they did. Invite the class to respond to some of the student-posed questions using the criteria below for evaluation. Afterward ask students to reflect on what makes a good media question and why.

	Media Sampl	e Question and Answers
1		Possible messages about bottled water
	Nestle Pure Life :15	• It keeps your body healthy.
Born Better	Poland Spring :30	• It's natural, from the earth.
	Crystal Geyser :30	• Celebrities drink it. It's sexy.
	Aquafina 1:00	• Everybody drinks it. It's a party drink.

WRAP UP:

11. Distribute the second page of the Student Worksheet: What About Bottled Water?

Task: Imagine that you are writing a letter to the editor of your local newspaper to state your opinion about bottled water as a consumer choice. The newspaper limits letters to 150 words. Yours should be between 125-150 words in length. Use the tips ideas to help you craft your letter.

Tips: State your opinion clearly.

Focus on one or two important reasons you feel the way you do.
Don't use any words that are not essential. For example, don't say, "I think..."
Tell how readers of the newspaper will be affected by the issue you address.
Ask readers to take action.
Don't overstate or exaggerate your points.
Don't insult people who hold different opinions.

NOTE: You might consider saving this for a two-day **essay** activity in which students can draw from other sources besides the videos they watched on this day in order to underscore the importance of citing multiple sources in an essay.

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12. Engage in a summary reflection activity. Ask students:

What have we learned about whether drinking bottled water helps to protect the environment? What have we learned about the advertising messages that bottled water companies use to sell their product?

What don't you know that you want to know about this topic or these media examples? What sources might help you to find out what you want to know?

- **13.** Brainstorm *Action Steps* students can take based on what they have learned. You might want to list suggestions as a chart. Ideas might include:
 - Take a poll of students in your school to find out how many drink bottled water and why.
 - Interview the people at your school who are responsible for making choices about what beverages are available in vending machines about how they choose what products to offer.
 - Find out where you can have water tested for contaminants then take samples of tap water and bottled waters to be tested.
 - Pick a different product that is marketed to kids and analyze several commercials for messages as you did with the TV commercials in this lesson.

FURTHER QUESTIONS

Should people have the right to sell water? Why or why not?

Should people have the right to free clean water? Why or why not?

Should advertisers have the right to direct advertising to preschool-aged children? Why or why not?

What consumer products other than bottled water do you like to consume every day? How could you find out about the product life cycle of that product?

List a number of favorite beverages of people in your family. Rank them according to how healthy and how environmentally-friendly you think they are? Why did you rank them the way you did?

EXTENDED ACTIVITIES

Imagine that you are a member of your school's "Media Literacy Detective" team. Make a slideshow of the labels of the water sold in the school's vending machines. Hold a class forum helping your fellow students to analyze the messages on these labels. Lead a discussion about what beverages should be sold in vending machines at your school.

Imagine you are part of a "Waste Trackers" team. Research where empty bottled water containers end up. Are they thrown in the trash or recycled in your community? You'll probably need to communicate with people involved in the waste disposal services in your area. Make sure to track the containers to their final stop, even if this is overseas as is sometimes the case.

Imagine you are a consumer news reporter for your local TV station. Investigate bottled water where your family shops. Count the different brands and note where each comes from and the unit price. Is there much difference in price, and can you decide why from looking at the labels? Ask the manager about sales in her/his store. Prepare a short TV news report on your findings.

Imagine that you are researcher for a water stewardship group. Investigate your local water system. This could be rain from an individual well in the country or a municipal system in a large city. How is water quality monitored? How much does water cost your family per month? How is the total system paid for? Is it a private or public system?

Imagine you are a food blog writer who is putting together a post on restaurants drinking water options. Interview local restaurant managers or waiters/waitresses to see whether they offer bottled or tap water. You may also want to ask what most customers prefer. Do these options and preferences impact their business? After conducting the interviews, write up a summative blog post with pictures of the local restaurants and staff.

Student Worksheet: What About Bottled Water?

NAME _____

DATE _____

Task: Work with a partner to name one message about bottled water and evidence from the commercial to support your answer. In the second column ask one good media literacy question for each commercial. Some examples of media literacy questions are listed below. You may adapt the media literacy questions or make up your own.

WHO? WHAT?	Who made this? What does it mean?
WHY?	Why did they make it?
HOW?	How did they make it interesting?
THANKS!	Who might it help?
OUCH!	Who might it hurt?
MONEY?	Who paid for it?
TRUE?	Does it tell the truth?
MISSING?	What's left out that's important to



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Student Worksheet: What About Bottled Water?

Task: Imagine that you are writing a letter to the editor of your local newspaper to state your opinion about bottled water as a consumer choice. The newspaper limits letters to 150 words. Yours should be between 125-150 words in length. Use the tips ideas below to help you craft your letter.

LETTER TO THE EDITOR WRITING TIPS

DO: State your opinion clearly.

Focus on one or two important reasons you feel the way you do.

Tell how readers of the newspaper will be affected by the issue you address.

Ask readers to take action.

DON'T: Don't overstate or exaggerate your points.

Don't insult people who hold different opinions.

Don't use any words that are not essential. For example, don't say, "I think..."

MEDIA CONSTRUCTIONS OF SUSTAINABILITY: UPPER ELEMENTARY TEACHER GUIDE UNIT 3: WATER CULMINATING ASSESSMENT: ELA, SCIENCE & SOCIAL STUDIES

ASSESSMENT OVERVIEW

Protecting Our Water Resources

Assessment Objectives:

- Students will demonstrate the ability to write a clear and informative report on the protection of water resources.
- Students will demonstrate the awareness that human activities have had major effects on freshwater systems.
- Students will demonstrate an ability to explain different approaches to address water protection and conservation.
- Students will demonstrate the ability to think critically about messages and persuasion techniques in public service advertisements.

Materials Needed:

- Two-page Student Worksheet: Protecting Our Water Resources?
- Three public service advertisement videos (Access online or via Unit 3 of the assessment digital media folder. Project these videos for the whole class or provide the videos digitally for the students to watch independently.)

Possible Answers: Student Worksheet Chart

Video 1 U.S. EPA	Why Protect? agriculture, wildlife, recreation	Human Impacts sewage, toxic chemicals	<u>Protection Actions</u> Clean Water Act regulations
Video 2 G.E.	agriculture, industry energy	overuse	rely on experts, corporate ingenuity
Video 3 CFHI	drinking water	farm runoff	public awareness campaigns

Essay Evaluation Criteria

<u>ELA skill:</u> Write in a clear and coherent manner. Use accurate spelling, punctuation and grammar.

<u>Critical Thinking Skill:</u> Weigh and analyze persuasion techniques in advertisements. Reflect on different strategies to address water protection.

<u>Science Skill:</u> Obtain and combine information about ways people use science ideas to protect the earth's resources.

<u>Following Directions</u>: Include introduction and conclusion. Include at least six paragraphs.



NAME

DATE _____

Student Worksheet- Protecting Our Water Resources

Introduction: Your class has decided to start a group called **POW: Protect Our Water.** You've been asked to write a report stating why we must protect our water resources, how human activities threaten water quality and what actions we might take to best protect our water resources. To conclude your report you've been given three short public service ads (PSAs) to review in order to suggest the best approach to educating the public about this critical issue.

Members of your group do not agree on the best approach for the PSAs. Some people feel that the government PSA, made by the Environmental Protection Agency, will be the most effective. Others argue for the PSA made by a big corporation, General Electric, and others like the one made by a citizen's action group, Citizens for a Healthy Iowa. What do you think? Will you suggest picking one of these as the model for effective public education or will you recommend using elements from several?

Task 1: Analyze Videos

Watch the 3 PSA videos. Use the chart on the next page to compare and contrast how the makers of these ads use their videos to educate and persuade the public. Use your notes to help write your report.

Task 2: Writing Assignment

Write a 1-2 page report in which you

- Explain why it is important to protect our water resources;
- Give examples of some human activities that impact water quality;
- Describe what actions should be taken to best protect our water resources;
- Identify which PSA should be used to educate the public and explain why that is the right choice;
- Accurate spelling, punctuation and grammar to the best of your ability.

MEDIA CONSTRUCTIONS OF SUSTAINABILITY: UPPER ELEMENTARYTEACHER GUIDEUNIT 3: WATERCULMINATING ASSESSMENT: ELA, SCIENCE, SOCIAL STUDIES



Clean Water and Agriculture U.S. Environmental Protection Agency



Water Facts General Electric



Drinking Water Roulette Citizens for a Healthy Iowa

What are the messages about why we must protect our water resources?

What are the messages about how human activities threaten water quality?

What are the messages about what actions we might take to best protect our water resources?

What methods did the video makers use try to educate and persuade the public?

Unit 4: Production

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LESSON PLAN

Lesson 1: How Do We Identify Good Sustainability Stories?

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will consider how videos can tell stories to inform and engage the public about sustainability issues and initiatives.
- Students will identify purpose and story elements in videos.
- Students will identify local sustainability stories they can document.

NOTE: This lesson can standalone or be used as an introduction to Lesson 2: *Making Videos about Sustainability Efforts*. You should review Lesson 2 before delivering Lesson 1.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.RL.5.2	Step 5, Worksheet 1
	CCSS.ELA-LITERACY.W.5.9	Steep 5, Worksheet 2
C3 Social Studies	D2.Civ.2.3-5	Worksheets
	D4.7.3-5	Worksheets

Vocabulary:

S

Domain Specific: sustainability, endangered, conservation

Media Type(s): video

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

- Download and review the *How to Use Materials* section associated with this kit. **Materials for the Lesson:**
- Five-page Teacher's Guide: How Do We Identify Good Sustainability Stories?
- One video clip (Access online or via digital media folder in Unit 4, Lesson 1)
- One-page Student Worksheet: Finding the Story Told
- One-page Student Worksheet: Finding a Story to Tell

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 50 minutes

Lesson Procedures

- Ask, "What does sustainability mean?" and "How is it related to our lives?"
- Present the *Lesson Introduction* to the class.
- Lead a media document decoding of the youth-produced video focusing on purpose, character and messages.

NOTE: See "How To Use These Materials" for support in leading a constructivist media decoding.

- Direct students to work in pairs to complete the first worksheet, *Finding the Story* asking students to analyze elements of setting, character, problem, solution and significance.
- Review student responses as a class.
- Ask, "How can we tell inspiring stories about sustainability initiatives?" and brainstorm local initiatives addressing sustainability issues.
- Direct students to finish the second worksheet, *Finding a Story to Tell* in which students sketch their own ideas for storylines using the same elements as worksheet 1.
- Facilitate a class sharing where students pitch their proposed stories.
- Lead a class reflection on what students learned.

NOTE: If you're interested in having students produce short videos documenting sustainability initiatives refer to Lesson 2 in Unit 4: *Making Videos about Sustainability Efforts*.

TEACHER GUIDE

Lesson 1: How Do We Identify Good Sustainability Stories?

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Review sustainability topics covered prior to this lesson (if applicable). Ask, "What does sustainability mean?" and "How is it related to our lives?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about sustainability and it's applications to their lived experiences.
- **3.** You may want to introduce some of the key vocabulary for this lesson:

<u>Sustainability</u>: meeting the needs of people who live now without limiting the ability of people in the future to meet their own needs; <u>Conservation</u>: the act of protecting something from harm or destruction; <u>Endangered species</u>: a species of living things that is in danger of dying out.

4. Introduce the activity: Suggest a context such as the one provided below for the clue search in the media examples. Name the desired outcome.

Activity Introduction

We are going to be sustainability movie directors with the goal to promote environmental causes through personal stories! We'll get inspiration from a video made by another 5th grader that was submitted to the Nickelodeon Get Dirty Challenge. Taking the role of contest judges, we'll look for the story within the video and consider it's overall purpose. Then we'll come up with our own sustainability story ideas and pitch them to the class just like a scriptwriter might pitch their story to a producer who could finance the right film project.

5. Play the video, "Running to Save the Wolves" and lead a full class document decoding using the *Media Sample Questions & Answers* that follow. You might want to begin with a general question such as "What feelings do you have when you view this video?" or "What questions do you have about this video?" Encourage wide-ranging and creative responses. Give students a few minutes to jot down notes or to talk with a partner about the video's purpose or the story being told before beginning the full class decoding. When probing for messages *Possible Answers* are included to model application of key knowledge through evidence-based analysis.



Video Clip 1 *Running to Save the Wolves* 1:00 min. clip, 2015



Media Sample Questions and Answers

1) Why do you think this video was made? What does it want us to do? Give evidence from the video to support your answer. **Possible Answer:** The video asks the audience to help save the wolves by supporting the boy in the video and the Wolf Conservation Center.

Evidence:

- <u>Narration</u>: "I'm running to help save the wolves and I need your help to keep the pack alive" implies fundraising
- <u>Visuals</u>: grey wolf drawing and boy running
- <u>End text</u>: "Help Peyton Save the Wolves!" and "Support the Wolf Conservation Center"

2) What do we learn about the boy in the video? Give evidence from the video to support your answer.

Possible Answers:

- His name is Peyton Saltmarsh (<u>Evidence</u>: narration, text box in the left corner, name on running jersey)
- He is 11 years old (<u>Evidence</u>: text box in the left corner)
- His friends call him the wolf man (Evidence: narration)
- He's training to run 13.1 miles to help save the wolves (<u>Evidence</u>: narration and visual of running).
- When Peyton is running in the woods he feels like a wolf he feels happy and free (Evidence: narration and visual of running).
- He wants wolves to feel happy and free (Evidence: narration)

3) What do we learn about wolves from watching the video? Why is it important for us to know these facts?

Possible Answers:

Wolf facts-

- "The grey wolf used to thrive in the Northeastern United States, but there hasn't been a single wolf citing in the past 22 years"
- "Wolves can reach speeds up to 40 mph during a chase and they have been know to cover 60 miles in a single night"

Significance-

- So we know that grey wolves are endangered and need saving
- We see the connection between Peyton's running and wolves running

PARTNER WORK

7. Distribute the *Student Worksheet: Finding the Story*. Review the worksheet questions, then give students access to watch the video on their own or play it once more as a class. Have students work together in pairs to complete the worksheet. After students are finished, review their work using the *Student Response Questions & Answers* that follow. *Possible Answers* are included to model application of key knowledge through evidence-based analysis. Discuss answers as a class.

Student Worksheet Possible Answers – Finding the Story

Story Elements	"Running to Save the Wolves" Youth Video	
Setting	WHERE did the video take place? What clues indicated this?	
	 Possible Answer: Rural, northeastern United States Evidence: <u>Visuals</u> – woods, fields, snow <u>Narration</u> – "The grey wolf used to thrive in the <i>Northeastern United States</i>, but there hasn't been a single wolf citing in the past 22 years" 	
Characters	WHO did you see in the video? Name a character trait that you believe helped to tell the story.	
	 Possible Answer: Peyton, an 11 year-old boy. He's funny because he howls like a wolf. The video maker might have had him do this to help kids relate to the video more. 	
Problem	WHAT environmental problem is the character addressing in the video? What clues indicated this?	
	 Possible Answer: Endangered wolf population Evidence: <u>Narration</u> – "The grey wolf used to thrive in the <i>Northeastern United States</i>, but there hasn't been a single wolf citing in the past 22 years" 	
Solution	HOW does the character plan to address the problem? What actions is he taking?	
	 Possible Answer: He is training to run 13.1 miles to raise awareness and money for the Wolf Conservation Center. 	
Significance	Did the video teach you anything new or make you want to take action? If so, how?	
	 Possible Answers: The video taught me new facts about wolfs. It made me want to donate to Peyton's cause. It made me want to learn more about wolves. It made me want to make my own video. 	

- 8. Come together as a class and ask, "What are we doing to support sustainability?" Brainstorm different actions students or their close family and friends are taking to address local environmental issues.
- **NOTE**: This lesson can be a standalone or be used as an introduction to Lesson 2: *Making Videos about Sustainability Efforts*. If you are going to have students make videos you should carefully consider the make up of the student pairs given the video production tasks ahead.
- **9.** Pair students up and have them complete the *Student Worksheet: Finding a Story to Tell*. Student answers will vary due to the personal focus. However, responses should address key story elements outlined and resemble answers put forth in the *Student Worksheet: Finding the Story*. Once students are finished with the *Student Worksheet: Finding a Story to Tell*, encourage them to share their story ideas with the class.

WRAP UP

- 10. Engage in a summary reflection activity. Ask students, "What have we learned about videos and the ways they tell stories to inform and activate an audience?" Invite further inquiry by asking, "What else do we need to know to tell our stories of sustainable actions effectively?" and "What sources might help us find out what we want to know?"
- **NOTE:** If you're interested in having students produce short videos documenting sustainability initiatives refer to Lesson 2 in Unit 4: *How Do We Make Videos about Sustainability Efforts?*

FURTHER QUESTIONS

Why is it important to document sustainability efforts?

What additional questions do you have about Peyton's initiative or wolves after watching the video?

Where can we go to determine the accuracy of the wolf facts Peyton shared and learn more about wolves?

What woud it take for you to enter the Nickelodeon Get Dirty Challenge?

What species lived in your area one hundred years ago but are not there now?

What is threatening sustainability in your community right now?

EXTENDED ACTIVITIES

In this lesson we looked at how video can be used to document an initiative and tell a story. Now that you have ideas for stories, what other ways may you be able to tell them besides video?

Video can be merely one part of a larger campaign to spread awareness about an environmental issue and get people involved. Find an online environmental campaign and analyze all of its parts to understand how they work together to provide information and ask for help.

Imagine you are interested in donating to Peyton's campaign, but you want to be informed before spending your money. Where do you go to donate? How much of the money is going to the Wolf Conservation Center? And what does the Wolf Conservation Center do with the money?

In his video, Peyton explain how he is "running to save the wolves." He is not the only one who has taken part in a race to raise money. Imagine you are an athlete interested putting your skills towards a good cause. What benefit races are in your area or align with your passions? How much of the money raised through the races goes to the causes they promote?

Peyton and his family visited the Wolf Conservation Center to learn more about the gray wolf and what they could do to help. (Read the blog here: <u>http://saltmarshrunning.com/2015/04/30/the-call-of-the-wild-inspires-a-young-runner/</u>) Look to see if there are any information centers or helpful resources near you that could help you learn more about your cause of interest and plan a visit!

NAME _____

DATE _____

Student Worksheet- Finding the Story

Task: You are a film contest judge who is looking to find the video that tells the best story. Use the chart below to identify the story elements within the video "Running to Save the Wolves."

Story Elements	"Running to Save the Wolves" Video
Setting	WHERE did the video take place? What clues indicated this?
Characters	WHO did you see in the video? Name a character trait that you believe helped to tell the story.
Problem	WHAT environmental problem is the characters addressing in the video? What clues indicated this?
Solution	HOW does the character plan to address the problem? What actions is he taking?
Significance	Did the video teach you anything new or make you want to take action? If so, how?

NAME _____

DATE _____

Student Worksheet- Finding a Story to Tell

Task: It's your turn to tell a sustainability story of your own! Make sure you consider all the important parts to make a compelling video about an environmental action you or someone close to you is taking.

Story Elements	Your sustainability video idea
Setting	WHERE does your story take place: in the classroom, at home, or somewhere else nearby?
Characters	WHO is addressing a sustainability issue? It could be you, your friends, fellow students, or family. Try picking on person to focus on!
Problem	WHAT environmental problem are you addressing? What facts do you know about this problem?
Solution	HOW are they addressing this issue? What actions are they taking to solve their problem?
Significance	HOW is the story you want to tell unique and important? Why should others know about it?

LESSON PLAN



Lesson 2: Making Videos about Sustainability Efforts

NOTE: Prior to using this lesson, it is strongly recommended that you read *the How to Use These Materials* section for this lesson. See *Preparation and Materials* below.

Lesson Objectives:

- Students will analyze a student-produced video to identify message construction and technique.
- Students will discuss and collaboratively design a one minute, six shot video message about a sustainability effort.
- Students will go through the process of creating a short video including: scripting, making a shot sheet, planning, videotaping, editing and presenting their video.

Standards		Activities
Common Core ELA	CCSS.ELA-LITERACY.W.5.3	Worksheet 1
	CCSS.ELA-LITERACY.W.5.10	Worksheets 1-3
	CCSS.ELA-LITERACY.SL.5.5	All
C3 Social Studies	D2.Civ.9.3-5	All

Vocabulary:

S

Domain Specific: script, storyboard, frame, shot, close up shot, medium shot, long shot, transition, editing, audio, narration, video, advocacy

Media Type(s): video

Preparation and Materials:

*All materials can be downloaded from the PLS website (<u>http://www.projectlooksharp.org</u>) and are electronically linked below. URL details can be found in the *How to Use Materials* section.

Preparation:

• Download and review the How to Use Materials section associated with this kit.

Materials for the Lesson:

- Five-page Teacher's Guide: How Do We Make Videos about Sustainability Efforts?
- One video (Access online or via digital media folder in Unit 4, Lesson 2)
- One-page Student Worksheet: Our Video Script
- One-page Student Handout: Storyboard Example
- Two-page Student Worksheet: Our Storyboard
- One-page Student Handout: Production Tips
- One-page Student Worksheet: Video Planning
- Video Cameras for each pair or group of students
- Devices (e.g., computers) for video editing & headsets for narration

Additional Support:

- From the website, view <u>Media Decoding Examples</u> demonstrating classroom media analysis.
- Download the Key Questions for Analysis for supporting questions.
- <u>The Teacher's Guide to Media Literacy</u> and the <u>Do-It-Yourself</u> online guide are both available from the homepage.

Time: 150 minutes

Lesson Procedures

- Present the *Lesson Introduction* to the class.
- Lead a media document decoding of the youth-produced video, "Running to Save the Wolves," focusing on filming technique and message construction.
- Direct students to work in pairs to complete the first worksheet, *Our Video Script,* in which they write out their video narration.
- Facilitate a class read-through where students share their video scripts.
- Introduce storyboards using the student handout: *Storyboard Example*. Have pairs complete the second worksheet, *Our Storyboard*, in which they sketch the 7 shots they will need.
- Direct student pairs to complete the third worksheet, *Video Planning* focusing on roles, timing and goals for production.
- Allow students time to film in class.
- Support students in editing their video clips.
- Lead a class video sharing and feedback around what makes good storytelling about sustainability.
TEACHER GUIDE

Lesson 2: Making Videos about Sustainability Efforts

* Prior to this lesson you should teach Unit 4 Lesson 1: *How Do We Identify Good Sustainability Stories* in which students begin to plan their video stories.

* Gather video and editing equipment. You can use many different devices for shooting video with sound including many computers, tablets, still cameras, and cell phones as well as video cameras. Consider how you will transfer the video to your video editing devices. You should also consider which editing program you will be using, such as iMovie (Mac), Moviemaker (PC) or an online editing program (e.g. YouTube Editor, WeVideo, or Animoto).

* If you do not have experience with video production you should seek external technical support with filming and editing and consider making your own video first.

1. Organize and make copies for the class activities.

CLASS DISCUSSION

- 2. Ask, "What are we doing or what can we do to help the environment?" and "Are our family and friends involved in sustainability efforts? If so, what are they doing? If not, how can we get them involved?" Solicit a wide range of possible answers without critiquing or analyzing them. This is intended to be a brief opening exercise designed to get students thinking about how they can be active environmental agents for change both through their actions and through their efforts to get others involved. This will also give them ideas for their short video productions.
- **3.** Introduce the activity: Suggest a context such as the one provided below for the clue search in the media examples. Name the desired outcome.

Activity Introduction

As Peyton does with his video *Running to Save the Wolves* (shown in Lesson 1), we are going to make short 1-minute videos about environmental issues we are working on (outlined in Lesson 1). We will first look at how Peyton put his video together to inform how we construct our messages, and then we will plan, film and edit our own advocacy videos.

- 4. Before viewing the video, introduce some key vocabulary for this lesson: <u>Frame</u> – the visuals captured when filming, what the audience sees when watching a video; <u>Shot</u> – video captured within a single camera recording, often has consistency in framing; <u>Wide shot</u> – used to establish location, can see a whole person and surrounding setting; <u>Medium shot</u> – often used to capture someone speaking, focuses on the waist up; <u>Close-up shot</u> – often used to show detail or emotion, only see part of a subject such as the face; <u>Transition</u> – the change from one shot to the next.
- **5.** Play the video, "Running to Save the Wolves" and have students clap every time there is a transition between shots. There are five transitions- four are marked by a brief black screen while one is a little bit sneakier! Inform students that their videos will have no more than 7 shots.

6. Lead a full class document decoding of the video using the *Media Sample Questions & Answers* that follow. When probing for messages *Possible Answers* are included to model application of key knowledge through evidence-based analysis.

Media Sample Questions & Answers

In comparison to the full class decoding of "Running to Save the Wolves" as outlined in Lesson One, this decoding will focus on filming technique and message construction to prepare students for filming their own stories.



Video Clip *Running to Save the Wolves* 1:00 min. clip, 2015



We counted the visual shots in the video, now can you identify the different audio pieces and how they were created?	Possible answers: <u>Narration</u> – The narration is broken into 3 parts. The beginning and end are recorded on camera while the middle is recorded separately. We can tell by a difference in sound and changing visuals. <u>Music</u> – The music goes throughout video. It sounds professional so Peyton probably used a song that was already made by musicians.
Describe the visuals and types of shots Peyton uses and why he may have chosen them.	Possible answers: <u>Wide Shots</u> - It shows Peyton running down a road, through the woods, and through a field. These shots were wide to show the action of Peyton running and the natural setting where he was running, which can also be wolves' habitats.
	<u>Medium Shots</u> - In the beginning of the video and at the end of the video Peyton runs up and stops in front of the camera so we can see from his waist up. Medium shots were used here because Peyton is talking on camera.
	<u>Photo</u> – There is a photo of a grey wolf so the audience can see what the animal Peyton is talking about looks like.
How is text used in the video? How else could it be used?	Possible answer : There is text in the lower left corner at the beginning of the video giving Peyton's name and age. There is also text at the end of the video asking us to help Peyton and support the Wolf Conservation Center. As part of this end text there is a url to a web page with more information. The video could be enhanced with a title and credits, which are missing at this point.



PAIRED/GROUP WORK

- NOTE: At this point the teacher should decide the pairs (or small groups) that will script, storyboard, plan, shoot and edit the short films. They may be the same pairs that completed the *Student Worksheet: Finding a Story to Tell* in Unit 4 Lesson 1.
 - **7. DECIDING**: Have each pair decide on a specific sustainability effort they want to promote through a video that they will produce. This could be something they are involved in personally, a class or school-wide initiative they know about, or a broader community, national or global initiative. Efforts closer to the classroom will be easier to videotape.
 - 8. SCRIPTING: Each pair will write a script for their video using the *Student Worksheet: Our Video Script*. Students should choose a sustainability action that they can describe in approximately one minute. This will intentionally limit the complexity of the films. Let them know that their films will be limited to five shots plus the title shot and credits. They should plan on shooting their video in school and using images from the Internet.

NOTE: You may decide to expand beyond these limitations to allow for longer videos including remote shots (e.g. from home or community) depending upon the experience and capacity of the students and teacher. If in doubt, keep the videos short and simple (formatted).

- **9.** Have students present their scripts to the class for feedback. When giving feedback, classmates should be encouraged to frame their critiques in a positive way, addressing elements they liked and bringing up suggested revisions through questions such as "I like the problem you are focusing on, but what will you be doing to fix it? I didn't hear a solution in your script."
- **10. STORYBOARDING**: Help students plan what visuals they will use to support their scripts by using storyboards. Provide the *Student Handout Storyboard Example* as a demonstration template to show how Peyton used visuals to support different parts of his script.

Next have students complete *The Student Worksheet: Storyboard* where they will define what visuals they will need to film or find for each point they want to make. If you want to follow the same format Peyton did, encourage students to plan their first shot with them on camera and then simply have them find supporting photos or video clips to support the rest of their narration. Review student storyboards to make sure they are feasible.

11. PLANNING: Once students have finished their storyboards pass out the *Student Handout – Production Tips* and review them as a class (or in pairs).

Have pairs fill in the *Student Worksheet: Video Planning* so each student knows their roles and what needs to be done in the time you give them.

12. PRODUCTION: Give students approximately 30 minutes to record their narrated script, which should be around one minute. During this time they are also encouraged to start finding photos or recording short video clips that align with their seven planned shots they sketched on their storyboards As students work, walk around and provide structural and technical support where needed. Narrations can be recorded on the camera or right through a video-editing program.

NOTE: If you have questions about image copyright and Fair Use refer to The Code of Best Practices in Fair Use for Media Literacy Education (a free, external resource).

13. EDITING: Help students import video footage they record and photos they collect into a videoediting software program. After students have a finished video in the editing software, make sure to export their final piece and save it.

NOTE: Video editing programs have become very user friendly. Many upper elementary students may already have experience with video editing and can help their peers (and you). The editing software *Tutorial* or *Help* will explain how to import video images or video from the Internet and how to sync the narration with the images. You may need help in importing video from different devices into the editing computer but this too has become much easier. Make sure students save their final work correctly.

14. SCREENING: Come together and hold a class screening where students can show their videos and provide feedback on their finished products. Before each video is shown, have students present their work by giving a brief overview of what their film is about. After each piece, facilitate a 'producer's Q&A' by asking classmates to comment on specific elements they enjoy or asking questions about the video. These questions can be about the construction of the film or the sustainability initiative it focuses on. Some guiding questions you may want to post to students are included in the *Further Questions* section below.

FURTHER QUESTIONS

Based on feedback our classmates gave us, what could we do to improve our videos?

How could we share our videos outside the classroom to get others involved?

What was the most rewarding part of producing a video?

What was the most challenging part of producing a video?

EXTENDED ACTIVITIES

Taking the feedback you received from your peers and teacher, make revisions to your video so it can send an even stronger message!

Plan and hold a public screening of your videos to inform your community about the environmental issues you have been learning about.

To promote your public screening create additional media messages such as posters, flyers or social media posts encouraging family and friends to attend.

Besides making a video about the importance of saving the grey wolf, Peyton also created a crowdfunding campaign asking others to donate to the Wolf Conservation Center. You can also create a crowdfunding campaign for an organization that works to address your environmental topic of focus.

Youth Environmental Media Contests:

The "Running to Save the Wolves" video used in this unit was an official entry to The Nickelodeon Get Dirty Challenge hosted by The National Environmental Education Foundation. As an educator, you can encourage students to share their work with a broader audience by helping them submit to aligned contests, festivals and forums.

Additional ongoing youth environmental media contests include Green Living Project's Student Film Project and The National Wildlife Federation's Young Reporters for the Environment Competition.

When considering a contest make sure to read through all the stated parameters and get parental/guardian consent.

Student Handout- Storyboard Example

Explanation: A storyboard helps you visually plan what you want to film. Below you will see an example of a filled in storyboard for the *Running to Save the Wolves* video we watched. Notice how each of the five sketches on the right below fits with the script ideas and narration or audio on the left.



Student Handout- Production Tips

Filming Tips

- ✓ Know what you are going to film before you press record.
- ✓ Look to see if any stray objects are in the frame before recording.
- ✓ Listen for extra noises that may interfere with your video.
- ✓ Use a tripod or sturdy surface if you want a steady shot.
- ✓ Say "quiet on set" or "ready, set, action!" to make sure everyone is ready for recording.
- ✓ Start to record 5 seconds before and after the shot you want to ultimately use in order to give yourself ample room for editing later.
- ✓ Avoid fast zooming or drastic camera movement.
- ✓ When on camera speak loud and clear.
- ✓ After a take watch and listen to each shot to make sure the visuals and audio are what you want.

Editing Tips

- ✓ Import all video clips and photos into the editing program at once if possible.
- ✓ SAVE your editing project often!
- ✓ Before editing in timeline, eliminate clips that you will not use.
- ✓ Arrange clips in timeline in the order you want before fine tune cutting.
- Once your visuals are in place, you can record your audio narration right in the videoediting program so it fits perfectly with all your pieces!
- ✓ Add transitions, effects and additional audio after video clips are in place.

DATE _____

Student Worksheet- Our Video Script

Task: In order to put your ideas into action, it helps to write your story down. A script is a written plan detailing what will be said on camera. Actors in movies read scripts. Outline what the star(s) or narrator(s) of your video will say below. You can look back at what you already write in the *Finding a Story to Tell* worksheet. You should plan on your video being about one minute long. Time yourself reading your script and edit it to be shorter or longer if needed.

1. Introduce yourself or the person your video is about (characters)

2. State what environmental issue is being addressed (problem)

3. Explain the importance of this issue and provide supporting facts (significance)

4. Describe what actions are being taken to address the environmental issue (solution)

5. Offer ways others can get involved (donating time, money, or items or learning more)

NAME _____

DATE _____

Student Worksheet- Our Storyboard

Task: A storyboard helps you visually plan what you want to film. For each script segment you have written, draw a sketch illustrating who/what will be in your frame and what photo or video shot you plan on using [remember: wide shot (ws), medium shot (ms), and close up (cu)]. You can use images from the Internet. Unless your teacher tells you otherwise, plan to shoot all your video at school.

<u>Script</u> (already written on Worksheet 1)

Sketches/Shots

1. Write the title of your video



2. Introduce yourself or the person your video is about (characters)



3. State what environmental issue is being addressed (problem)



4. Explain the importance of this issue and provide supporting facts (significance)



5. Describe what actions are being taken to address the environmental issue (solution)



6. Offer ways others can get involved (donating time, money, or items or learning more)



7. List what credits you will include (who was involved in making your video, what citations or resources do you want to share?)



NAME ______

DATE _____

Student Worksheet- Video Planning

Task: One last step of planning to complete before picking up the camera is to write down your plan of action. Fill in the following information and once it is complete you will be set begin recording!

Roles – Who will be recording? Who will be on camera? Who will be finding photos or music?

Time – How much time do you have to film? Who will be keeping track of time?

Goals – What do you plan to finish filming in the time you are given? What order do you plan on filming your shots in?

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