

name _____

Activity 1

At the Henhouse

From Our Beak to Yours...Hen Tweets Can you use the clues in these tweets to learn about egg carton labels? Who lives under which type of housing-conventional, free-range, cage-free, enriched colony or organic? Read up on egg labels and housing types at www.eggnutritioncenter.org/downloads/toolkits/Egg-Labeling-Infographic-Printable-FINAL.pdf if you need help!

@beak2beak Roam here, forage there, we roam & forage everywhere #inandoutgal

Egg carton label: _____

@beak2beak Everything I need is right here: food and water, safe shelter, and protection #24/7hen

Egg carton label: _____

@beak2beak Hey gals, my diet's so special that USDA gives my eggs an extra special label #natural4u

Egg carton label: _____

@beak2beak I live in a barn, my BFH (BestFriendHen) is free-range, and we *still* get to chat every day #roamwhereuwant

Egg carton label: _____

@beak2beak To Do: peck, cluck, dust bath, scratch, perch, nest, repeat—#girlhasitall

Egg carton label: _____

beak2beak @beak2beak Always remember that no matter the label, the health and well-being of their hens is every egg farmer's top priority — because happy, healthy hens lay eggs — and all eggs are nutritious. That's no yolk!

The Cluckster



An eggsciting blog about life in the henhouse as told by our resident hens!

Do you speak “egg?” Some words and/or expressions have two meanings; one that we take literally and another called an idiom, which represents a common image or thought. Underline the idioms below in Henrietta's column.

Dear Henrietta...

Advice Columnist Eggstraordinaire

Dear Henrietta,

I'm laying my first egg any minute now! I'm nervous—what if it cracks? After all, I don't want egg on my face!

Eggspectantly Yours,
Ms. Fancy Feathers

Dear Ms. Fancy Feathers,

Cluck not! Your incredible egg already has a shell for protection. And that feed you've been eating? It contains extra calcium and limestone to make sure the shell is strong and well-formed. Once laid, your nest egg will gently roll down to meet the egg conveyor belt and continue its safe journey to the gathering house to be processed with other eggs. So go ahead, lay an egg!

Dear Henrietta,
I'm a young chick who just arrived at the henhouse, doing my

best to fit in. How about a few tips on how things work around here so I don't feel like I'm walking on eggshells?

Sincerely,
Fierce Chicklet

Dear Fierce Chicklet,

Welcome to the barn! We're a friendly flock. The farmer is always checking on us to be sure we're comfortable. There's good food, plenty of water and clean living conditions. Computers control air quality, temperature and ventilation so we don't get too hot or too cold. Do what comes naturally—scratch around, cluck with your friends, and you'll fit right in!

Guest Opinions...Your Turn to Cluck

Got something to say about eggs? Write your own blogpost on the other side of this sheet about an egg-related topic of interest. Some ideas include bio-security, nutrition, hen health, etc. For your format, you could create a “farmer and hen” Q&A, a top-10 list, new tweets to follow up on the ones above, a new **Dear Henrietta** post, “A Day in the Life” profile, etc.

Use the resources at the American Egg Board (incredibleegg.org) for the information you need. Then follow your teacher's directions to make your contribution to *The Cluckster*!



Grade 6-8

1

incredibleegg.org/classroom



AMERICAN EGG BOARD

name _____

Activity 2

A Major Production

Once eggs are laid and transported to the production room, they are ready for their close-ups—processing close-ups, that is. Every stage of processing is carefully controlled to make sure the eggs you buy are fresh and of the highest quality.

Visit www.incredibleegg.org/professionals/k-12-schools/eggs-in-the-classroom/eggs-101-videos watch "Overview" video from the **Eggs 101 video series** to learn about the stages. Then name each stage and briefly describe what happens.



STAGE _____

DESCRIPTION _____



STAGE _____

DESCRIPTION _____



STAGE _____

DESCRIPTION _____



STAGE _____

DESCRIPTION _____



STAGE _____

DESCRIPTION _____



STAGE _____

DESCRIPTION _____



STAGE _____

DESCRIPTION _____



And there's one final, important stage — enjoying fresh eggs at home!

name _____

Activity 3

Eggscellent Safety

Egg farmers follow strict grading and inspection guidelines established by the USDA to make certain shell eggs in your supermarket are wholesome and safe to eat. But you also play a role in reducing the risk by practicing egg safety at home. That means you must refrigerate, store and use eggs properly.

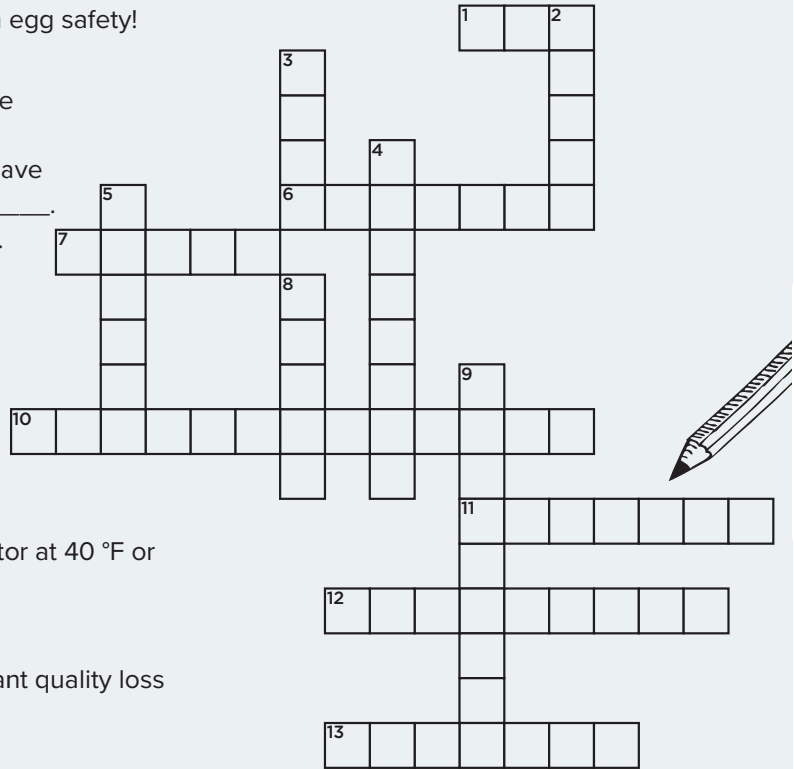
Part A: Complete this puzzle to become an eggspert on egg safety!

CLUES: Across

1. Thoroughly wash any bowls or utensils that have come in contact with ____ egg mixtures.
6. When a recipe calls for eggs at room temperature, leave them out of the refrigerator no longer than 20-30 _____.
7. Always wash your ____ before and after handling eggs.
10. Separate eggs from other foods in the grocery cart, grocery bags and in the refrigerator to prevent cross-_____.
11. Discard shell eggs that are _____, broken or leaking.
12. When cooking scrambled eggs in a _____, be sure to stir the eggs and rotate the dish once or twice during cooking to avoid uneven cooking.
13. Store shell eggs in the _____ part of the refrigerator at 40 °F or below, but do not freeze.

CLUES: Down

2. Refrigerated raw shell eggs will keep without significant quality loss for four or five _____.
3. Simple egg preparations like scrambled or fried eggs should be cooked until egg whites and yolks are _____.
4. Cook dishes containing eggs until they reach an _____ temperature of at least 160 °F.
5. Store raw shell eggs in the refrigerator in a _____.
8. When properly handled and stored, eggs rarely _____.
9. Eggs accidentally left at room temperature should be _____ after 2 hours, or one hour in warm weather.



Because the eggshell is porous, bacteria can enter and grow if eggs are not stored properly. Handled carefully and cooked thoroughly, eggs are just as safe as any other perishable food.

Part B: Now follow your teacher's directions and use what you've learned to make posters about safe egg handling practices.

Do you have a question about eggs and food safety? Visit these websites to get the answer.

Incredible Egg

• www.incredibleegg.org/professionals/foodservice/egg-safety-handling



Grade 6-8

3

incredibleegg.org/classroom



AMERICAN EGG BOARD

Dear Educator,

The egg's journey from the henhouse to kitchens across America is guided by quality control and protected by safety practices that ensure that freshness is not compromised along the way. But it all begins with the hen and, in this teaching kit, students will get a hen's-eye view of the production process and then follow the egg's journey into their homes for lessons on food safety.


Designed to help support agricultural and consumer education in the classroom, these lessons from the American Egg Board (AEB) and the award-winning curriculum specialists at Young Minds Inspired (YMI) supplement the valuable resources already available at the American Egg Board's site, incredibleegg.org. Be sure to check back periodically for updates. Although the materials are copyrighted, you may make as many copies as needed for educational purposes.

Please comment online at ymiclassroom.com/feedback-egg-board to provide feedback. We look forward to hearing from you.

Sincerely,



Dr. Dominic Kinsley
Editor in Chief
Young Minds Inspired

 For questions, contact us toll-free at 1-800-859-8005 or by email at feedback@ymiclassroom.com.

Target Audience

Middle school students in FCS and Health classes.

Program Objectives

- Educate students on the agricultural production and processing systems of the U.S. egg farming industry.
- Raise awareness of egg safety and proper egg handling practices.
- Interest students in careers in agriculture.

Standards Alignment

This program aligns with Family and Consumer Science and Common Core State Standards for English Language Arts, as well as Common Core History/Social Studies and National Social Studies standards. For more details, visit ymiclassroom.com/egg-board.

How to Use This Program

Download and photocopy this teacher's guide and the three activity sheets. Review the materials to incorporate the lessons into your existing plans. Activity 1 will require extended sessions as needed for a class blog compilation.

Activity 1

At the Hen House

Hen Tweets: Have students review the information in the link shown to help them identify the various production systems. **Answers:** #inandoutgal-free-range; #24/7hen-conventional; #natural4u-organic; #roamwhereuwant-cage-free; #girlhasitall-enriched colony.

Dear Henrietta: Ask students to look for and underline egg idioms, words with both figurative and literal meanings (nest egg, lay an egg, walking on eggshells). Help students

"translate" these words into their common meanings, then ask them to suggest and translate other egg idioms and wordplay they can think of, such as bad egg, rotten egg, goose egg, egg on, put all your eggs in one basket, etc. Write the terms on the whiteboard so that all students can share their ideas.

Guest Opinions: Plan time for students to view one or more of the Virtual Field Trips featured at www.incredibleegg.org/professionals/k-12-schools/eggs-in-the-classroom/virtual-egg-farm-field-trips before they choose a topic and format for a news article for *The Cluckster*, using the ideas listed or others they suggest. Remind students to think creatively, incorporating graphics if possible, and compile and photocopy the articles for everyone to share.

Activity 2

A Major Production

Plan time for students to research the links shown, then have them name and describe the production stages.

Answers:

- **Laying** – Hens lay their eggs in an environment that helps ensure quality. Production systems include conventional, free-range, cage-free, organic and enriched colony.
- **Collecting** – Eggs are most often collected by automated gathering belts.
- **Washing** – Washing sanitizes the eggs by removing the "bloom," a coating applied by the hen's body.
- **Candling** – A light source automatically inspects the interior of the egg for quality. This process is sometimes also done by hand for quality assurance.

Answer Key cont.

- **Grading, Sorting and Packing** – Eggs are graded on both interior and exterior quality, then classified AA, A, or B, sorted according to size, and placed in cartons.
- **Shipping** – Eggs are shipped in refrigerated trucks and arrive at market within 48 to 72 hours of being laid.
- **Selling and Storing** – Eggs must be refrigerated both at market and at home.

Activity 3

Eggscellent Safety

Part A: Answers: Across 1. raw; 6. minutes; 7. hands; 10. contamination; 11. cracked; 12. microwave; 13. coldest.
Down 2. weeks; 3. firm; 4. internal; 5. carton; 8. spoil; 9. discarded.

Part B: Have students work in groups to make posters that creatively communicate egg safety information learned through completing the puzzle. You may wish to provide additional guidelines such as poster size, number of egg safety pointers, illustrations to be included, etc. Display students' completed posters in the classroom.

Resources

- American Egg Board: incredibleegg.org
- USDA: www.usda.gov/topics/food-and-nutrition
- Young Minds Inspired: ymiclassroom.com/egg-board



Learn about the different hen houses in the "Barns" video at www.incredibleegg.org/professionals/k-12-schools/eggs-in-the-classroom/eggs-101-videos



GRADE 6 STANDARDS ALIGNMENT

	Activity 1	Activity 2	Activity 3
Family and Consumer Sciences Standards			
2.4 Evaluate the effects of technology on individual and family resources.	x	x	x
3.5 Demonstrate skills needed for product development, testing and presentation.		x	
9.1 Analyze career paths within the food science, food technology, dietetics and nutrition industries.	x	x	x
9.2 Apply risk management procedures to food safety, food testing and sanitation.	x	x	x
14.4 Evaluate factors that affect food safety from production through consumption.	x	x	x
14.5 Evaluate the influence of science and technology on food composition, safety and other issues.	x	x	x
Common Core English Language Arts Standards			
Reading Informational Text			
<u>Key Ideas and Details</u>			
RI.6.1 Cite textual evidence and details to support analysis of what the text says explicitly as well as inferences drawn from the text.	x	x	
RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated and elaborated in a text.	x	x	
<u>Craft and Structure</u>			
RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative and technical meanings.	x	x	x
RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.	x	x	
RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	x		
<u>Integration of Knowledge and Ideas</u>			
RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	x	x	x
Writing			
<u>Text Types and Purposes</u>			
W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization and analysis of relevant content.		x	
W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details and well-structured event sequences.	x		
<u>Production and Distribution of Writing</u>			
W.6.4 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.	x	x	x
W.6.6 Use technology, including the internet, to produce and publish writing as well as to interact and collaborate with others.	x	x	x



Research to Build and Present Knowledge			
W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry where appropriate.	x	x	x
W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	x	x	x
W.6.9 Draw evidence from literary or informational texts to support analysis, reflection and research.	x	x	x
Speaking and Listening			
Comprehension and Collaboration			
SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups and teacher-led) with diverse partners on grade 6 topics, texts and issues, building on others' ideas and expressing their own clearly.	x	x	x
SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text or issue under study.	x	x	x
Presentation of Knowledge and Ideas			
SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume and clear pronunciation.	x	x	x
SL.6.5 Include multimedia components and visual displays in presentations to clarify information.	x	x	x
Language			
Vocabulary Acquisition and Use			
L.6.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.	x		
Common Core History/Social Studies			
Key Ideas and Details			
RH.6-8.1 Cite specific textual evidence to support analysis of primary and secondary sources.	x	x	
RH.6-8.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.	x	x	
Craft and Structure			
RH.6-8.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.	x	x	x
Integration of Knowledge and Ideas			
RH.6-8.7 Integrate visual information with other information in print and digital texts.	x	x	x
RH.6-8.9 Analyze the relationship between a primary and secondary source on the same topic	x	x	x





Hen to Home

National Social Studies Standards

Production, Distribution and Consumption

Give and explain examples of ways that economic systems structure choices about how goods and services are to be produced and distributed.

x

x

x

Science, Technology and Society

Show through specific examples how science and technology have changed people's perceptions of the social and natural world, such as in their relationship to the land, animal life, family life and economic needs, wants and security.

x

x





Hen to Home

GRADE 7 STANDARDS ALIGNMENT

	Activity 1	Activity 2	Activity 3
Family and Consumer Sciences Standards			
2.4 Evaluate the effects of technology on individual and family resources.	x	x	x
3.5 Demonstrate skills needed for product development, testing and presentation.		x	
9.1 Analyze career paths within the food science, food technology, dietetics and nutrition industries.	x	x	x
9.2 Apply risk management procedures to food safety, food testing and sanitation.	x	x	x
14.4 Evaluate factors that affect food safety from production through consumption.	x	x	x
14.5 Evaluate the influence of science and technology on food composition, safety and other issues.	x	x	x
Common Core English Language Arts Standards			
Reading Informational Text			
<u>Key Ideas and Details</u>			
RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	x	x	
RI.7.3 Analyze the interactions between individuals, events and ideas in a text.	x	x	
<u>Craft and Structure</u>			
RI.7.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative and technical meanings; analyze the impact of a specific word choice on meaning and tone.	x	x	x
RI.7.5 Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.	x	x	
Writing			
<u>Text Types and Purposes</u>			
W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization and analysis of relative content.		x	
W.7.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details and well-structured event sequences.	x		
<u>Production and Distribution of Writing</u>			
W.7.4 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.	x	x	x
W.7.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.	x	x	x
<u>Research to Build and Present Knowledge</u>			
W.7.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry where appropriate.	x	x	x
W.7.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing bibliographic information for sources.	x	x	x



W.7.9 Draw evidence from literary or informational texts to support analysis, reflection and research.	x	x	x
Speaking and Listening			
<u>Comprehension and Collaboration</u>			
SL.7.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups and teacher-led) with diverse partners on grade 7 topics, texts and issues, building on others' ideas and expressing their own clearly.	x	x	x
SL.7.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text or issue under study.	x	x	x
<u>Presentation of Knowledge and Ideas</u>			
SL.7.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume and clear pronunciation.	x	x	x
SL.7.5 Include multimedia components and visual displays in presentations to clarify information.	x	x	x
Language			
<u>Vocabulary Acquisition and Use</u>			
L.7.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.	x		
Common Core History/Social Studies			
<u>Key Ideas and Details</u>			
RH.6-8.1 Cite specific textual evidence to support analysis of primary and secondary sources.	x	x	
RH.6-8.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.	x	x	
<u>Craft and Structure</u>			
RH.6-8.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.	x	x	x
<u>Integration of Knowledge and Ideas</u>			
RH.6-8.7 Integrate visual information with other information in print and digital texts.	x	x	x
RH.6-8.9 Analyze the relationship between a primary and secondary source on the same topic.	x	x	x
National Social Studies Standards			
<u>Production, Distribution and Consumption</u>			
Give and explain examples of ways that economic systems structure choices about how goods and services are to be produced and distributed.	x	x	x
<u>Science, Technology and Society</u>			
Show through specific examples how science and technology have changed people's perceptions of the social and natural world, such as in their relationship to the land, animal life, family life and economic needs, wants and security.	x	x	

GRADE 8 STANDARDS ALIGNMENT

	Activity 1	Activity 2	Activity 3
Family and Consumer Sciences Standards			
2.4 Evaluate the effects of technology on individual and family resources.	x	x	x
3.5 Demonstrate skills needed for product development, testing and presentation.		x	
9.1 Analyze career paths within the food science, food technology, dietetics and nutrition industries.	x	x	x
9.2 Apply risk management procedures to food safety, food testing and sanitation.	x	x	x
14.4 Evaluate factors that affect food safety from production through consumption.	x	x	x
14.5 Evaluate the influence of science and technology on food composition, safety and other issues.	x	x	x
Common Core English Language Arts Standards			
Reading Informational Text			
<u>Key Ideas and Details</u>			
RI.8.1 Cite the textual evidence that most strongly supports analysis of what the text says explicitly as well as inferences drawn from the text.	x	x	
RI.8.3 Analyze how a text makes connections among and distinctions between individuals, ideas or events.	x	x	
<u>Craft and Structure</u>			
RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	x	x	x
<u>Integration of Knowledge and Ideas</u>			
RI.8.7 Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital, text, video, multimedia) to present a particular topic or idea.	x	x	x
Writing			
<u>Text Types and Purposes</u>			
W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization and analysis of relative content.		x	
W.8.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details and well-structured event sequences.	x		
<u>Production and Distribution of Writing</u>			
W.8.4 Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience.	x	x	x
W.8.6 Use technology, including the internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	x	x	x
<u>Research to Build and Present Knowledge</u>			
W.8.7 Conduct short research projects to answer a question, drawing on several sources and generating additional focused questions that allow for multiple avenues of exploration.	x	x	x



W.8.8 Gather relevant information from multiple print and digital sources; using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	x	x	x
W.8.9 Draw evidence from literary or informational texts to support analysis and research.	x	x	x
Speaking and Listening <u>Comprehension and Collaboration</u>			
SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups and teacher-led) with diverse partners on grade 8 topics, texts and issues, building on others' ideas and expressing their own clearly.	x	x	x
SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.	x	x	x
<u>Presentation of Knowledge and Ideas</u>			
SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning and well chosen details; use appropriate eye contact, adequate volume and clear pronunciation.	x	x	x
SL.8.5 Integrate multimedia and visuals into presentations to clarify information, strengthen claims and evidence, and add interest.	x	x	x
Language <u>Vocabulary Acquisition and Use</u>			
L.8.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.	x		
Common Core History/Social Studies <u>Key Ideas and Details</u>			
RH.6-8.1 Cite specific textual evidence to support analysis of primary and secondary sources.	x	x	
RH.6-8.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.	x	x	
<u>Craft and Structure</u>			
RH.6-8.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.	x	x	x
<u>Integration of Knowledge and Ideas</u>			
RH.6-8.7 Integrate visual information with other information in print and digital texts.	x	x	x
RH.6-8.9 Analyze the relationship between a primary and secondary source on the same topic.	x	x	x
National Social Studies Standards <u>Production, Distribution and Consumption</u>			
Give and explain examples of ways that economic systems structure choices about how goods and services are to be produced and distributed.	x	x	x
<u>Science, Technology and Society</u>			
Show through specific examples how science and technology have changed people's perceptions of the social and natural world, such as in their relationship to the land, animal life, family life and economic needs, wants and security.	x	x	

