

# Sixth Grade Math



Solve the problem below $4\frac{2}{3} \div 1\frac{5}{6}$ A piece of wood is $\frac{6}{6}$ feet long. It needs to be cut into pieces that are $\frac{1}{6}$ feet long. How many pieces will there be?  A piece of wood is $\frac{6}{6}$ feet long. It needs to be cut into pieces that are $\frac{1}{6}$ feet long. How many pieces will there be?  A piece of wood is $\frac{6}{6}$ feet long. How many pieces will there be?  A pitcher contains $\frac{2}{3}$ quart of lemonade if an equal amount of lemonade is poured into each of the 6 glasses, how much lemonade will each glass contain?  A gardener creates a flowerbed with an area of $8\frac{2}{5}$ feet. What is the length of the flowerbed?  I problems involving division of fractions by fractions by fractions.  A pitcher contains $\frac{2}{3}$ quart of lemonade if an equal amount of lemonade is poured into each of the 6 glasses, how much lemonade will each glass contain?  A picture framer has a thin board $10\frac{1}{2}$ feet long. The finamer notices that $2\frac{3}{8}$ feet of the board is scratched and cannot be used. The rest of the board will be used to make small picture frames. Each frame needs $1\frac{3}{2}$ feet of board. At most, how many complete picture frames can be made?  Answer: $\frac{1}{2}$ feet ong. The finame needs $10\frac{3}{2}$ feet of board. At most, how many complete picture frames can be made?  Answer: $\frac{1}{2}$ feet of board. At most, how many complete picture frames are solved the long of the flowerbed is $3\frac{3}{2}$ feet.  Answer: $\frac{1}{2}$ feet of board. At most, how many complete picture frames. The cannot be used to make small picture frames. The cannot be used to make small picture frames. The cannot be used to make small picture frames. The cannot be used to make small picture frames. The cannot be used. The rest of the board will be used to make small picture frames are frame of the flowerbed is $3\frac{3}{2}$ feet.	A	В	C	D	E	
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Answer: $2\frac{6}{11}$ Answer: $3$ pieces of $\frac{1}{4}$ Answer: $\frac{1}{9}$ quart Answer: The length of the flowerbed is $3\frac{3}{-}$ feet. Answer: $4$ picture frames. The		long. It needs to be cut into pieces that are ¼ feet long. How many pieces	lemonade if an equal amount of lemonade is poured into each of the 6 glasses, how much lemonade will each glass contain?	with an area of $8\frac{2}{5}$ feet squared. The width of the flowerbed is $2\frac{1}{3}$ feet. What is	board $10\frac{1}{2}$ feet long. The framer notices that $2\frac{3}{8}$ feet of the board is scratched and cannot be used. The rest of the board will be used to make small picture frames. Each frame needs $1\frac{2}{3}$ feet of board. At most, how many complete	
the flowerbed is 3 <sup>3</sup> -feet. 4 picture frames. The	6	A	Answer Key	, Tri 1 41 C	Angwar	
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### Sixth Grade Social Studies

#### 6th Grade Social Studies



#### Greek Influence on U.S. Democracy

\*There will be a short video lesson of a Knox County teacher to accompany this task available on the KCS YouTube Channel and KCS TV.

#### Read and annotate the following article on Greece democracy.

Article from National Geographic Website:

https://www.nationalgeographic.org/article/greek-influence-us-democracy/6th-grade/

Ancient Greece was the birthplace of democracy. Its democratic form of government served as a major inspiration for the United States government. The article below outlines some of the key ideas the nation's founders borrowed from the Greeks.

After declaring independence from England in 1776, the founders of the United States realized they had a special opportunity. They had a chance to create a government of their choosing. To guide their decisions, they looked to what they considered the best examples of government throughout world history. Ancient Greece's democratic form of government soon became their primary inspiration. It greatly influenced how the founders constructed the new U.S. government.

#### Governing at the Local Level

Prior to independence, the future United States was divided into 13 separate colonies. The founders of the United States decided to keep the country divided into states rather than dissolving the colonial boundaries. They did this so that each region could be governed at a local level, with a national government acting as an authority over all. These 13 colonies became the first states of the newly established country.

The structure of U.S. states was partly modeled after ancient Greek city-states. Their relationship to the federal government resembles the relationship of Greek city-states to Greece overall. For the most part, Greek city-states acted independently. However, they also sometimes banded together to defend Greece from foreign invaders. Major city-states included Athens, Sparta, Corinth, Thebes, and Syracuse.

The ancient Greeks pioneered the concept of the rule of law. This idea came from the philosopher Aristotle's belief in natural law. He claimed that certain essential rights were based in nature, and that these rights stood above the laws written by humans. Aristotle believed government should be guided by natural law.

In the United States today, the rule of law is an essential part of our democratic system. It ensures that all laws are equally enforced and independently judged. Laws must also meet international human rights standards. The rule of law is important because it allows all individuals and institutions to be held accountable for their actions. Even the government itself is held accountable.

#### **Pioneering the Constitution**

Ancient Greece also pioneered the written constitution. Aristotle recorded the Athenian constitution and gathered together the laws of many other Greek city-states. Having a written constitution creates a common standard. It establishes how people should behave and what rules they must follow. It also establishes clear processes by which people who break the law are judged, and by which those who are harmed can be given justice.

The U.S. Constitution is a key part of our political system. It lays out the government's structure and how its different parts relate to one another and balance each other's power. The U.S. Constitution acts as the supreme law of the land. It establishes individual citizens' rights, such as the right to free speech or the right to a trial by a jury of one's peers.

The original U.S. voting system had some similarities with that of Athens. In Athens, every citizen could speak his mind and vote at a large assembly that met to create laws. Citizens were elected to special councils to serve as organizers, decision-makers, and judges. However, the only people considered citizens were males over the age of 18. Women, slaves, and conquered peoples could not vote or serve on councils.

#### The United States' Representative Democracy

The founders of the United States also believed that only certain people should be allowed to vote and elect officials. They chose to structure the United States as a representative democracy. This means that citizens elect officials, such as senators and representatives, who represent them and vote on their behalf in Congress. It also means that individual citizens do not vote for the president directly. Instead, a body called the Electoral College officially casts the votes of each state for president. As in Athens, when the United States was founded not all people were allowed to vote. Only white, landowning men had that right. Over time, however, all U.S. citizens over the age of 18 have gained the right to vote.

The key elements of ancient Greek democracy are still in use today. The United States and many other countries around the world have adopted democratic government to give a voice to their people. Democracy provides citizens the opportunity to elect officials to represent them. It makes all citizens equals under the law.



Voters in Arlington, Virginia, cast ballots in a presidential election.

Photograph by Rob Crandal

#### **Comprehension Check:**

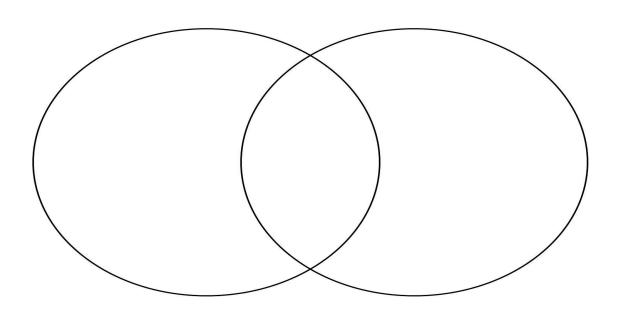
- 1. Why do you think that the founders of the United States chose a democracy over other forms of government?
- 2. Explain how our modern states were modeled after the Greek city-states.
- 3. Describe the concept of 'rule of law" by the Greeks. How is the concept used today in the United States?
- 4. How does a constitution benefit a society and its citizens?
- 5. In your own words, what influence did the Ancient Greeks have on the development of the U.S. Democracy?

#### Sort the following statements about Democracy into the Venn Diagram

- A. Only citizens are allowed to vote
- B. ALL citizens participate in making laws
- C. Citizens elect representatives to make laws
- D. Only a certain group of people are allowed to vote
- E. Gives voice to their people
- F. Makes all citizens equal under the law

Greek (Direct) Democracy

Representative Democracy



**Task:** Compose a letter to the founders of ancient Greek democracy explaining how a form of the democracy they developed is still being used in the United States today. In your letter, explain two ways our representative democracy is similar to their direct democracy AND two ways that it is different.

Date:	
Dear citizens of ancient Greece,	
, and the second	
Sincerely,	
Sincerery,	



# Sixth Grade ELA

#### Grade 6 English Week 3

#### Monday: Read the unit preview and answer the questions on separate paper or electronically as directed by your teacher.

#### **Previewing the Unit**

#### **Learning Strategies**

Activating Prior Knowledge Skimming/Scanning Marking the Text

# VOCABULARY

#### **ACADEMIC**

A controversy is a public debate or dispute concerning a matter of opinion. A controversial issue is debatable, or an issue about which there can be disagreement.



#### INDEPENDENT READING LINK

#### **Reading Plan**

Think about a controversial topic in your school or community that interests you. It could be a topic that you already have an opinion about or you could be undecided about it. Find a collection of news articles, opinion pieces, editorials, letters to the editor, and other texts that discuss the controversy.

#### **Learning Targets**

- Gain specific understanding of the academic vocabulary word controversy and its relevance in the unit.
- Identify a writer's claim and explain the reasons presented for or against a topic.
- Write a debatable claim stating a position or opinion about a topic.
- Integrate ideas from multiple texts to build knowledge and vocabulary about the intended goals of homework.

#### **Making Connections**

In the past, you have read a novel and other texts about the changes that occur throughout people's lives. You can also think about change from different perspectives: changes in your own life, changes in your community, and changes in the broader world. In this unit, you will examine arguments and how writers try to persuade others to agree with their opinions on issues that cause **controversy**.

#### **Essential Questions**

Based on your current knowledge, how would you answer these questions?

- 1. Why do we have controversy in society?
- 2. How do we communicate in order to convince others?

#### **Reviewing Argument**

#### **ACADEMIC VOCABULARY**

In formal speech or writing, an argument is a set of reasons given to support an opinion, often with the aim of persuading others that an action or idea is right or wrong. Argumentation is the act of formally engaging in an argument about a debatable issue.

- **1. Quickwrite:** Have you ever tried to change the mind of someone in your family? Were you successful, and if so, how did you convince the person?
- 2. Brainstorm all the meanings you know for the word **argument**. The concept of **argumentation** will become important during this unit.
- **3.** What other words are associated with *argument?* Also, what other words have similar meanings to *argument*, and how are their connotations different?
- **4.** What comes to mind when you hear the word *controversy*?

#### **Introducing the Strategy: Paraphrasing**

**Paraphrasing** is putting a passage of text in your own words while maintaining its meaning. Often, paraphrased text is shorter than the original passage, but not always. When paraphrasing a text, remember to order its information logically. Use paraphrasing during reading to help you check your understanding of a text. Use it while taking notes on something a speaker is saying. Also, use it to support claims in your writing.

**5.** When you communicate your own argument about a controversy or an issue, it is essential to be able to paraphrase information. To practice paraphrasing, read and paraphrase the following quotes on controversy.

Original	My Paraphrasing
"A wise man has well reminded us, that 'in any controversy, the instant we feel angry, we have already ceased striving for Truth, and begun striving for Ourselves."  —Thomas Carlyle	

- 6. Quickwrite: Do you agree or disagree with Thomas Carlyle's statement? Explain on a separate piece of paper.
- 7. Read the following list of claims relating to controversies from society today and place a check

Anticipation Guide: Exploring Hot Topics	Agree	Disagree
Social networking should be banned at school.	1	
Cell phones and other electronic devices should be banned at school.	1	
Banning homework would hurt a student's education.	1	
Certain books should be banned from school.	1	1
Junk food should be banned from schools.	1	1
Schools should ban peanut butter.	1	
Kids should be banned from appearing on reality television.	1	1
Plastic bags should be banned.	1	
Plastic water bottles should be banned.		

#### Grade 6 Activity 3.3

#### Wednesday: Read the article and annotate as directed.

#### **Identifying Claims in an Argument**

In this activity, you will read an editorial about homework, paraphrase the claim made in the article, and explain why you agree or disagree with it.

#### **ACADEMIC**

In argumentation, a writer makes a claim stating a position or opinion about a topic. To claim is to assert or maintain as a fact. A claim is the overall thesis describing the author's position on an issue.

#### What Is a Claim?

In argumentative writing, the author's position is known as a **claim**. The claim functions like a thesis statement. Identifying the author's claim helps you understand the author's opinion or point of view on a topic.

Often, an author's claim appears in the opening paragraph. Sometimes the claim is in the middle of the text or even at the end. To identify a writer's claim, look for a statement of position or opinion that reflects what the author is trying to say about a controversial topic. A claim will be a statement that is not fact, so the author should provide reasons that support the claim.

#### **Setting a Purpose for Reading**

- Highlight the sentence in the first paragraph where the author states her claim.
- Underline facts and details that support the author's claim.
- Circle unknown words and phrases. Try to determine the meaning of the words by using context clues, word parts, or a dictionary.

#### **Opinion Piece**

### A Teacher's Defense of Homework

by Andrea Townsend, The Atlantic, Sept. 25, 2013

- 1 I am a parent, and I struggle daily with making sure my daughter does her homework. I can certainly identify with the anxiety Karl Taro Greenfeld describes in his essay "My Daughter's Homework Is Killing Me" (published in *The Atlantic's* October 2013 issue). Here, however, I'd like to speak as a teacher rather than a parent. I'd like to explain why, in my **professional** opinion, American kids need homework.
- 2 I teach biology at the Charles School, a five-year early-college high school in Columbus, Ohio. I believe that my job is to prepare my students for college. In order to do that, I teach a wide variety of topics including cells, genetics, evolution, and ecology, using the National Science Standards. I teach each topic in depth so that the students understand and appreciate the information.

I teach them about the scientific method, lab **procedures**, and scientific writing, all skills they will need in college. It's a lot to fit into one short year, and my class requires a lot of effort from my students.

- 3 I require my students to read one chapter out of their textbook each week, and to complete a short takehome quiz on the material. It helps to supplement the notes I give in class, so that I can spend more class time on labs and other hands-on activities. I learned in college that hands-on work is the best way for students to learn, and that's certainly true. However, it's definitely not the most *efficient* way. So, if I'm going to offer interactive activities in class, I need students to put in some time and effort studying outside of class as well.
- 4 A few times a year, I require students to write a scientific paper. We spend a significant amount of time on these assignments at school, but effort outside of class is required as well. And I think that's great. Schoolwork prepares students for work-related tasks, financial planning, and any project that ends with the feeling of a job well done. Long-term planning, projects, and deadlines are a key part of adulthood.

**professional:** expert procedures: lists of steps in an experiment

- 5 Nevertheless, some parents think their kids are getting too much work. One argument, which Greenfeld uses, is to compare American students with those in other countries. In his article, Greenfeld cites the fact that students
- in many overseas countries are scoring higher than American children, while being assigned less homework. He uses Japan as an example. In 2011, Japan was ranked fourth in science scores in the Trends in International Mathematics and Science Study. But according to a study cited in Greenfeld's article, Japanese students are actually assigned less homework by their teachers. Why, then, do they achieve more? The answer comes when you look at the differences in our cultures and our views on education. Japanese teachers may not be assigning much homework, but it turns out that Japanese kids are doing plenty of homework anyway.
- 6 I spoke with Chris Spackman, who is the English as a Second Language coordinator at my school. Chris taught for 13 years in Japan, and served on the Board of Education in the city of Kanazawa. I asked him why Japanese kids are scoring so high on achievement tests despite having relatively little homework. "Because Japanese kids go to juku," he answered. He went on to explain that juku is a common after-school program that prepares Japanese kids for achievement testing. In Japan, senior high school is not required or guaranteed. Instead, students compete for spots at prestigious high schools by scoring high on achievement tests. "Some schools are for art, or college prep," says Chris. "You have to study hard in junior high to get into the high school that you want." In high school, Japanese kids continue to go to juku so that they can get into the college they want as well. So, Japanese kids do academic work outside of school, just not necessarily work assigned by their classroom teacher.
- 7 There is room for compromise on the homework debate. In their book *Reforming Homework*, Richard Walker and Mike Horsley state that while homework isn't very beneficial for younger kids, it's still beneficial for older students. I agree. I've learned, while preparing my students to start college early, that study skills become much more important than they were in primary school. It's also important for teachers to assign work that's high in quality, instead of quantity. The vast majority of teachers I know are careful to only assign work that's important for student success. Remember, teachers have to grade all of these assignments—we wouldn't want to spend extra time grading papers that have no value.
- 8 In the comments on Greenfeld's article, some readers assume that teachers don't have our students' best interests at heart. But usually, teachers who aren't incredibly devoted to their students don't last in the profession. The teachers who do stay are committed to giving the best education to their students. We wouldn't be assigning that homework, giving that test, or reading that book if we didn't truly believe it was worthwhile. All we ask is that you trust us, just a little.

#### Thursday: Answer the below in complete sentences.

- What ideas about the need for homework stood out to you?
- What questions do you have about homework after reading this opinion piece?

financial: related to money prestigious: well-regarded vast: large

#### Friday: Answer the Knowledge Quest below in a complete paragraph. Write on separate paper or electronically as directed by your teacher.

#### **Knowledge Quest:**

What are some intended goals of homework, and how can homework policy be changed to better align with these goals? Across Activities 3.3 and

3.4, you will read three texts about the pros and cons of homework. While you read and build knowledge about the topic, think about your answer to the Knowledge Quest.



# Sixth Grade Science

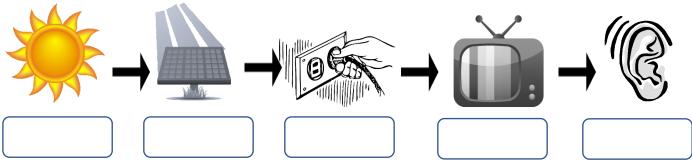
### 6<sup>th</sup> Grade Science: Week 3 April 20th Energy Transformations- Activity



Energy Transformations occur when one type of energy is changed to another type.

Potential energy					Kineti	c energy		
Chemical	Gravitational	Nuclear	Elastic	Mechanical	Electrical	Thermal	Radiant	Sound

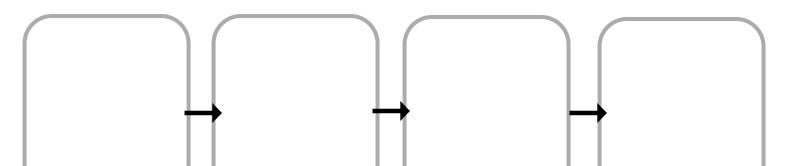
1. Label the energy types in the transformation illustrated:



Thinking about the energies used, write the energy transformations that occur for each:

2.	Cellphone:
	Car:
4.	Trampoline:
5.	Campfire:
6.	Windmill:
	nger Hunt: Find an example around you that fits the energy transformation.
7.	Electrical → Radiant & Sound:
8.	Nuclear→ Radiant→ Thermal:
9.	Chemical → Mechanical & Radiant & Sound:
10.	Gravitational ∰ ∰ ⊗ Mechanical:
11.	Elastic 1 1

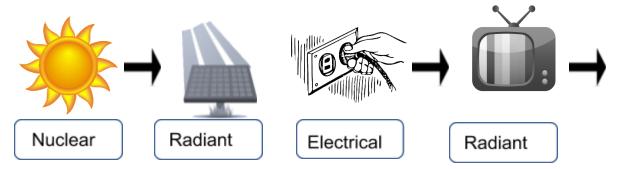
In the spaces below draw and label your own example of an energy transformation.



### 6<sup>th</sup> Grade Science: Week 3 April 20th Energy Transformations- Answer Key



Label the energy types in the transformation illustrated:



Thinking about the energies used, write the energy transformations that occur for each:

- 1. Cellphone: <u>chemical</u> → <u>electrical</u> → <u>light, motion, and sound</u>
- 2. Car: Chemical → electrical → thermal → mechanical, lights, and sound
- 3. Trampoline: Motion

→ EPE → GPE

4. Campfire: Chemical

→ Thermal → Radiant & Sound

5. Windmill: Mechanical (wind) → (moves the blades) mechanical & sound → electrical



**Scavenger Hunt**: Find an example around you that fits the energy transformation.

- 6. Electrical → Radiant & Sound: Television, gaming station, radio/cd player
- 7. Nuclear → Radiant → Thermal: Sun
- 8. Chemical → Mechanical & Radiant & Sound: Cellphone, Switch or handheld gaming device
- 9. Gravitational Mechanical: Bouncy Ball, yoyo, bicycle, Elliptical

10. Elastic : Mechanical: Mechanical Pencil, rubberband, slingshot, slimy hand, ponytail holder

In the spaces below draw and label your own example of an energy transformation.

#### Answers will vary and should have an energy label in each box.

