

7Th Grade Summer Student Enrichment Packets

Reading
Math
Science
Civics



John I. Smith K-8 Center

Student name: _____

Parent's Signature: _____

7th Grade ELA Summer Enrichment Packet



John I. Smith K-8 Center's



2020 Summer Reading Challenge

"Reading is to the mind what exercise is to the body."
- Joseph Addison

Part 1:

Directions: As you read this summer, LOOK out for words that you've never seen before. Try to figure out the meaning of these words by paying attention to **word part clues**, **context clues**, or any other helpful **vocabulary strategy**. Finally, **check the dictionary** to see if your thinking on the right track.

Below, words you loved this summer

Word	Part of Speech	Denotation	Connotation	Synonym
Remember to spell the word correctly!	Noun, verb, adjective OR adverb	<p>Denotation = Dictionary Definition</p> <p>REMEMBER, write a definition that helps you UNDERSTAND the meaning of the word.</p> <p>Do more than just copy a definition from the dictionary! UNDERSTAND IT!</p>	<p>What's the feeling the word carries when it is used?</p> <p>+/-/neutral</p> <p>https://www.youtube.com/watch?v=FmqOld0Ye-4&feature=youtu.be</p>	<p>Write a synonym that helps you understand the meaning of the word.</p> <p></p>

Vocabulary Challenge

Join [vocabulary.com](https://www.vocabulary.com) to enhance your vocabulary by playing the challenge for at least **10 minutes**
EACH DAY!



How many points can you earn this summer??

More Points = Stronger Vocabulary

Stronger Vocabulary = More Effective Reader

Part 2:

Directions: Read **TWO** fiction and/or non-fiction books this summer and **ONE** news article. Check out **myON News** to keep up with the latest news and/or read some great books. Virtually visit your local library. **Wherever you go to find a great book, remember, just 20 MINUTES a day of reading can help boost your reading skills this summer!**

BE A READING SUPERHERO!

[Watch this video](#)

<https://www.youtube.com/watch?v=FeoiKiQRqv8>

First Book Assignment

What is the title of the book?
Who is the author?
What topic(s) did the article/book focus on?
What surprised you? Why did it surprise you?
Did anything confuse you ? How did you clear up the confusion?
Did the book change, challenge or confirm your thinking about the topic ?
Write a summary about what the book is about:

Second Activity: Book Assignment 2

What is the title of the book?

Who is the author?

What **topic(s)** did the book focus on?

What **surprised** you? Why did it **surprise** you?

Did anything **confuse** you? How did you clear up the confusion?

Did the book **change, challenge or confirm** your thinking about the topic?

Write a summary about what the book is about:

Third Activity: News article Assignment

What is the title of the article?

Who is the author?

What **topic(s)** did the article/book focus on?

What **surprised** you? **Why** did it **surprise** you?

Did anything **confuse** you? How did you clear up the confusion?

Did the article **change, challenge or confirm** your thinking about the topic?

Write a summary about what the article is about:

Appendix D

K-12 Summer Reading Guidelines District Summer Reading List - Middle

Web Version

Titles have been selected with age appropriate reading level and content in mind; however, parents are encouraged to help their child make a selection by previewing the titles for difficulty of the text, subject matter, and content of the book.

Title	Author	Genre
Grades 6-8		
<i>All the Lovely Bad Ones</i>	Mary Downing Hahn	Fiction
<i>Almost Astronauts: 13 Women Who Dared to Dream</i>	Tonya Lee Stone	Biography
<i>Animals Anonymous</i>	Rich Michelson	Poetry
<i>Antes de Ser Libre</i>	Julia Alvarez	Historical Fiction
<i>Anything But Typical</i>	Nora Raleigh Baskins	Fiction
<i>Barack Obama: the politics of hope</i>	William Davis	Biography
<i>Baseball in April</i>	Gary Soto	Multicultural Fiction
<i>Béisbol en Abril y Otros Cuentos</i>	Gary Soto	Short Stories
<i>Blue Lipstick</i>	John Grandits	Poetry
<i>Breaking Through</i>	Francisco Jimenez	Multicultural Fiction
<i>Chew on This: Everything You Don't Want to Know About Fast Food</i>	Eric Schlosser	Nonfiction
<i>Children of the River</i>	Linda Crew	Multicultural Fiction
<i>Claudette Colvin: Twice Toward Justice</i>	Phillip Hoose	Multicultural Biography
<i>Code Orange</i>	Caroline Cooney	Fiction
<i>Code Talker</i>	Joseph Bruchac	Multicultural Fiction
<i>Countdown</i>	Ben Mikaelson	Fiction
<i>Cover-up: Mystery at the Super Bowl</i>	John Feinstein	Sports Fiction
<i>Dizzy In Your Eyes</i>	Pat Mora	Poetry
<i>Double Dutch</i>	Sharon Draper	Multicultural Fiction
<i>Drums, Girls, and Dangerous Pie</i>	Jordan Sonnenblick	Fiction
<i>Eat This Not That for Kids</i>	David Zinczenko	Nonfiction
<i>El Rey de Las Octavas</i>	Emma Romeu	Biography
<i>Fearless Fernie: Hanging Out with Fernie and Me</i>	Gary Soto	Poetry
<i>Flight to Freedom</i>	Ana Veciana Suarez	Multicultural Fiction
<i>Flipped</i>	Wendelin Van Draanen	Realistic Fiction
<i>Flush</i>	Carl Hiaasen	Fiction
<i>Found</i>	Margaret Haddix	Fiction
<i>Framed</i>	Rose Malcolm	Fiction
<i>Gossamer</i>	Lois Lowry	Fantasy
<i>Gross Universe</i>	Jeff Szpirglas	Nonfiction
<i>Homeless Bird</i>	Gloria Whelan	Multicultural Fiction
<i>Honeybee: Poems and Short Prose</i>	Naomi Shihab Nye	Poetry
<i>Hurt Go Happy</i>	Ginny Rorby	Fiction
<i>Hush</i>	Jacqueline Woodson	Multicultural Fiction
<i>Jackie's Wild Seattle</i>	Will Hobbs	Fiction
<i>Jake Ransom and the Skull King's Shadow</i>	James Rollins	Fiction
<i>Kidnapped in Key West</i>	Edwina Raffa	Historical Fiction
<i>Kingdom Keepers</i>	Ridley Pearson	Fiction
<i>Last Newspaper Boy</i>	Sue Corbett	Fiction
<i>Life As We Knew It</i>	Susan Beth Pfeffer	Science Fiction
<i>Money Hungry</i>	Sharon Flake	Multicultural Fiction
<i>Mysterious Benedict Society</i>	Trenton Lee Stewart	Fantasy

7th Grade Math Summer Enrichment Packet

Student Name: _____

Note to the Student

You've learned so much in Grade 6! It is important that you keep mathematical knowledge over the summer to be ready for Math 7 objectives. In this packet, you will find weekly activities for the



practicing your standards and learning summer break.

Directions:

- Create a personal and fun math journal by stapling several pieces of paper together or use a notebook or binder with paper. Be creative and decorate the cover to show math in your world.
- Each journal entry should:
 - ❖ Have the week number and the problem number.
 - ❖ Have a clear and complete answer that explains your thinking.
 - ❖ Be neat and organized.
- *Pay attention to the gray boxes that you see at the beginning of each week's activities. Those boxes indicate the Common Core domain and standard that the subsequent activities address. If you see a NON-CALCULATOR*

SYMBOL  next to a gray box, then do not use a calculator for the activities in that section!

Playing board and card games are a good way to reinforce basic computation skills and mathematical reasoning. Try to play board and card games at least once a week. Some suggested games to play are: Monopoly, Chess, War, Battleship, Mancala, Dominoes, Phase 10, Yahtzee, 24 Challenge, Sudoku, KenKen, Connect Four, and Risk.

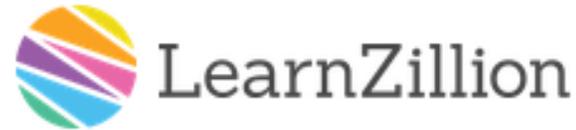
Where to Go to Get Help ... or Practice!

During the course of your math work this summer, you may need some assistance with deepening your understanding the skills and concepts. You also might want to get some more practice. Here are some sites you can visit online:



To get the exact definition of each standard, go to www.corestandards.org and search for the content standard (for example, *7.NS.1a*).

LearnZillion has video lessons on every Math standard. Go to www.LearnZillion.com and search for any math topic or standard.



Khan Academy has helpful videos and self-guided practice problems for every grade level. Go to www.khanacademy.org to watch videos about the different mathematical problems you need to learn about.

WEEK 1 || Ratios & Proportional Relationships Standards 6.RP.1-6.RP.3:

Understand ratio concepts and use ratio reasoning to solve problems.

Directions:

1. Find five examples of ratios in the real world. Write them down and describe the situation in which they are found.

*Remember, ratios are comparisons of two quantities which can be written in the following ways:

1) a to b

2) $\frac{a}{b}$

□ 3) a : b



Example: At the grocery store, Brandi noticed that there were three times as many carts as there were baskets for shoppers to use to carry their food.

The ratio of carts to baskets ($c : b$) is 3 to 1.

2. Create a problem using ratios for your parents/guardians or friends to solve. Write both your problem and solution in your journal.

WEEK 2 || Number System Standards 6.NS.1-6.NS.3: Apply and extend previous understandings of multiplication and division to divide fractions by fractions.



Directions: Complete the problems below.

1. Chef Emerald had a recipe that called for $\frac{3}{4}$ lb onions and $1\frac{1}{3}$ lbs of pork. He was preparing the recipe for a special event and needed to quadruple it to make enough for all of his guests. How many pounds of onions and pounds of pork would he need for the recipe? *Show all work.*



2. Create a problem about the estimated cost of ingredients for the recipe if onions cost \$2.99/lb. and pork costs \$5.49/lb. Include both an estimated solution and an exact solution to see that your estimation is reasonable.

WEEK 3 || Expressions & Equations Standard 6.EE.6: Use variables to represent numbers and write expressions when solving a real-world or mathematical problem.

Directions: Complete the problems below.

1. A town's total allocation for police officer's wages and benefits in a new budget is \$800,000. If wages are calculated at \$55,000 per officer and benefits at \$25,000 per officer, write an equation where the solution is the number of officers the town can employ, if they spend their whole budget. Solve the equation.



2. Deon was offered a job at the nearby recreation center. The owner offered him \$600 per week or \$50 the first day and agreed to double it for each following day.

- How could Deon make the most money?
- Which deal should he accept and why?

3. Create three real-world mathematical problems involving variables to represent unknown numbers. **Be sure to create an answer key with explanations of how to solve each of your problems.*

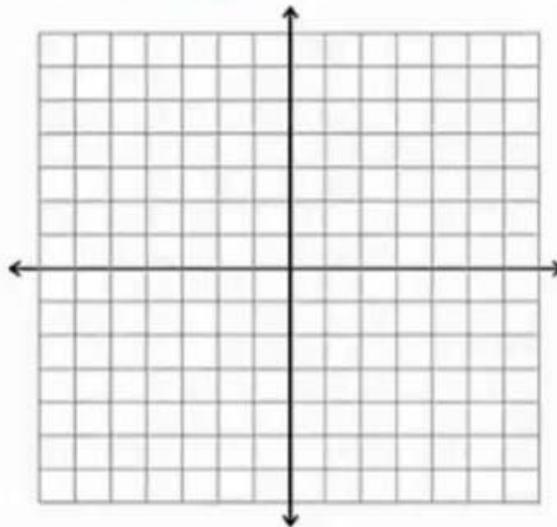
WEEK 4 || Geometry Standard 6.G.3: Draw polygons in the coordinate plane given coordinates for the vertices.

Directions: Complete Parts 1 and 2.

Part 1

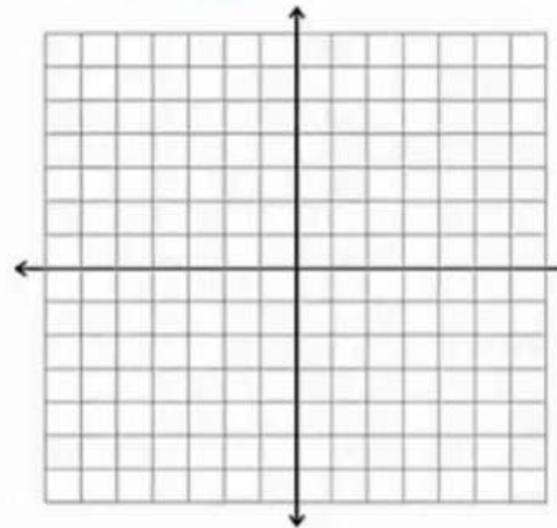
1. Use the following coordinates to draw polygons on the coordinate plane below.

- A. (6, 1)
- B. (2, 4)
- C. (-5, 4)
- D. (-1, 1)



Name the figure: _____

- A. (3, 3)
- B. (-1, 3)
- C. (-4, 0)
- D. (-1, -3)
- E. (3, -3)



Name the figure: _____

Part 2

2. On graph paper (on the next page), draw your own coordinate plane. Label the X and Y axes.
3. Choose a room in your house and study the arrangement of the furniture.
4. Measure the dimensions of at least four pieces of furniture in the room you chose.
5. Create a scale, and then graph the pieces of furniture on your coordinate plane.
6. Write directions using your coordinate plane and furniture model. Give them to a parent to see if they can complete a transformation of the furniture according to the directions and scale model you created.

WEEK 5 || Number System Standard 6.NS.4: Find the greatest common factor of two whole numbers less than or equal to 100, and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers, 1-100, with a common factor as a multiple of a sum of two whole numbers with no common factor.

Directions: Solve the following problems.



1. The florist can order roses in bunches of one dozen and lilies in bunches of 8. Last month she ordered the same number of roses as lilies. If she ordered no more than 100 roses, how many bunches of each could she have ordered?

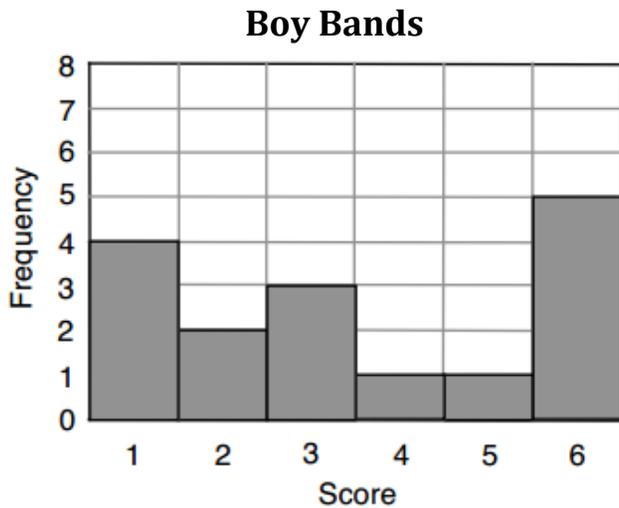
2. What is the smallest number of bunches of each could she have ordered? Explain your answer.

3. In your journal, create a table or draw a diagram to solve the problem. Explain your reasoning.

WEEK 6 || Statistics & Probability Standard 6.SP.2: Understand that a set of data collected to answer a statistical question has a distribution that can be described by its center, spread, and overall shape.

Directions: Solve the problems below.

1. The bar chart represents the scores from a quiz. Children were asked to name six boy bands in 30 seconds. Each score represents the number of correctly named bands.



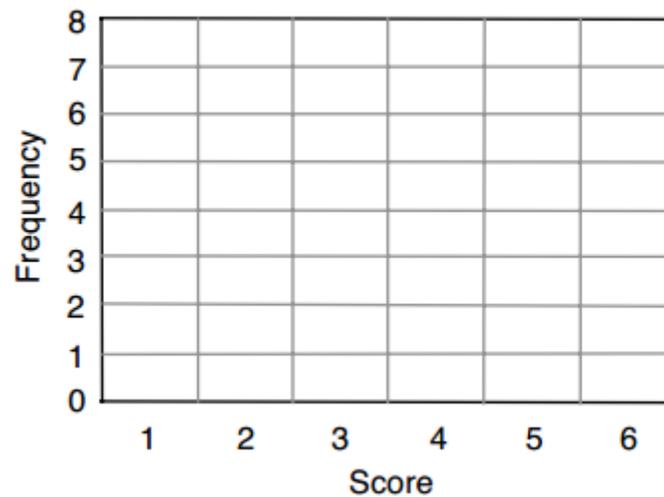
a. How many children were involved in the quiz? Show your work.

b. Complete the table with values for the Mean, Median, Mode, and Range of scores. Explain how you calculate each answer.

Mean Score	_____	
Median Score	_____	
Mode Score	_____	
Range of Scores	_____	

2. The results of another quiz question are shown in the table below. Draw a possible bar chart of the scores.

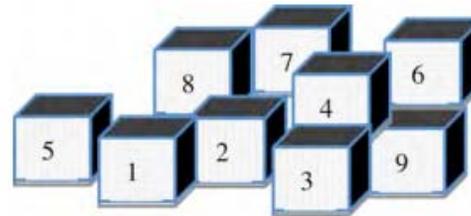
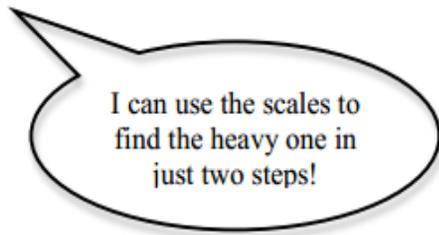
Mean score	3.5
Median score	3
Mode score	6
Range of scores	5



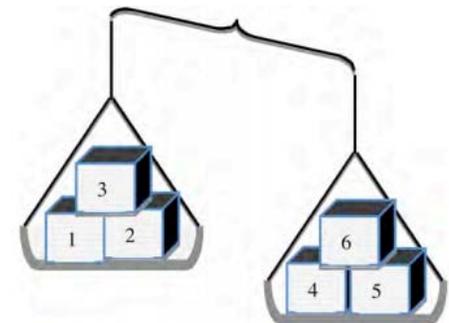
WEEK 7 || Expressions & Equations Standards 6.EE.4-6.EE.5: Apply and extend previous understandings of arithmetic to algebraic expressions. Reason about and solve one-variable equations and inequalities.

There are nine small boxes in a room. They all look exactly the same, but one is a bit heavier than the others.

William says:



First, William arranges the boxes like this:

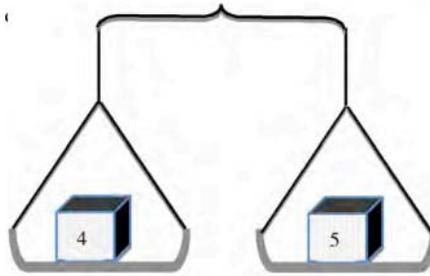


1. Explain what William now knows about the heavy



box.

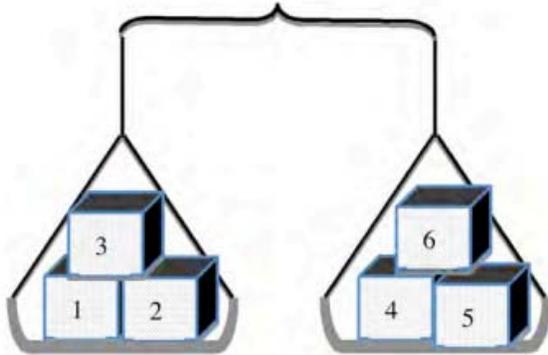
Then William separates the boxes like this.



2. Which is the heavy box? Explain how you

know.

3. Suppose the scales showed this the first time instead.



What should William do now to find the heavy box?

WEEK 8 || MATH 7 UNIT 1 PREVIEW – Ratios & Proportional Reasoning Standard 7.RP.1:
Understand ratio concepts and use ratio reasoning to solve problems. **Number System Standard**
7.NS.3: Solve real world problems involving the four operations with rational numbers.



Directions: Complete each task below.

Task 1:

Here is a recipe for making 8 doughnuts:

4 cups of flour
$\frac{1}{2}$ cup of milk
$\frac{3}{4}$ cup of sugar
2 eggs
2 sticks of butter
One tablespoon of yeast



You want to make 28 doughnuts.

a. How much flour do you need? Show your work.

b. How much milk do you need? Show your work.

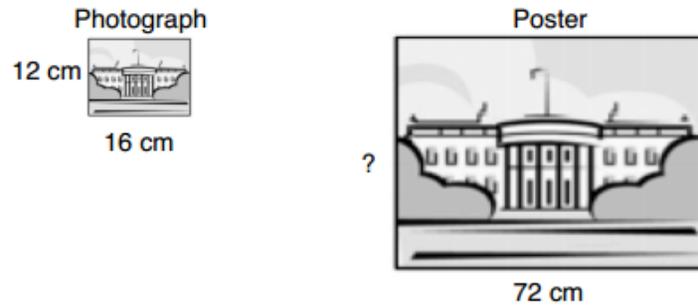
Task 2:

Calculate the prices of the paint cans.

The prices are proportional to the amount of paint in the can.



Task 3:



a. The poster is 72cm wide. How high is the poster?

b. The building on the poster is 36cm tall. Is it possible to figure out how tall the building is on the photograph? If you think it is possible, show how. If you think it is not, explain why.

Task 4:

A local food company produces yogurt in $\frac{3}{4}$ cup tubs.

$$2 \text{ cups} = 1 \text{ pint}$$

$$2 \text{ pints} = 1 \text{ quart}$$

$$4 \text{ quarts} = 1 \text{ gallon}$$

$$16 \text{ fl. oz.} = 1 \text{ pint}$$



Show all your work as you answer the questions below:

1. The tubs of yogurt are sold for \$0.75 each. Twenty percent of this is profit for the food company. How much profit does the company make on each tub?

2. The machine that fills the $\frac{3}{4}$ cup tubs with yogurt runs 10 hours a day for 5 days a week. It fills 1,600 tubs an hour. How many gallons of yogurt are needed to fill 1,600 tubs?

3. How many gallons of yogurt are produced each week?

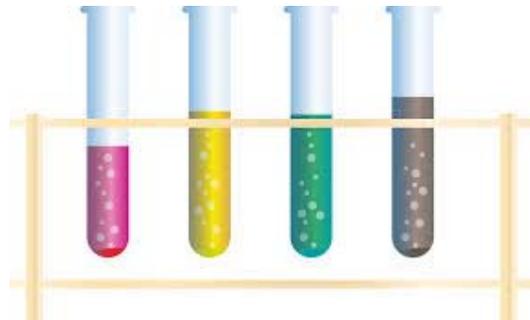
4. Each tub of yogurt contains 1.85g of fat. The company would like to reduce this amount by 15%, but instead of changing the yogurt composition, the company would like to alter the serving size. How many fluid ounces will the new container be?

7th Grade Science Summer Enrichment Packet

Student Name: _____

John I. Smith K-8 Center
Summer Science Enrichment Packet

Incoming 7th Graders



Note to The Students and Parents/Guardians

This calendar consists of daily activities to extend the learning beyond the school year. Be sure to keep track of your experiences in a science journal. (Suggested Journal: Wide-Ruled or College-Ruled Composition Book)

Some practices that Rising 7th Grade students should understand include:

1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information



July Activities

20 Days: Monday - Friday

Activities start the first Monday of the month.



This month you will focus on the work of scientists and the impact of humans Earth's waters.

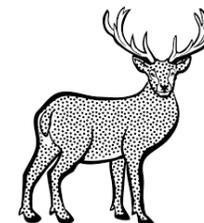
Day One Write a scientific explanation describing why it is important for scientists to monitor the water in our oceans.	Day Two Journal Entry: Explain the states of matter of water and describe where each state of matter may be found.	Day Three Draw a model of the water cycle. In the model, be sure to include the following terms: Evaporation Transpiration Precipitation Runoff Groundwater Condensation	Day Four Journal Entry: Explain how thermal energy powers the water cycle.	Day Five Visit the USGS Water Science School to read about the data that scientists collect on Earth's water. https://water.usgs.gov/edu/qa-measure-data.html In your journal, explain how this data is helpful to the public.
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<p>Day Six Complete the water use assessment for your home. https://water.usgs.gov/edu/activity-percapita.html Use the results to brainstorm ways that you can cut down on your water usage.</p>	<p>Day Seven, Day Eight, and Day Nine Interview 5 family members or close friends using the following questions: 1. Do you leave the water running when you brush your teeth? 2. Have you ever timed how long you were in the shower? Did it make you think about taking a shorter shower? 3. In what ways have you tried to limit your water use?</p>	<p>Day Ten After reflecting on the interview results, explain what you might do to help others conserve water.</p>
<p>Day Eleven through Fifteen Review the water cycle model from Day Three. Think about where surface water evaporates from. Design an investigation in your home to compare how the width of the surface of the body of water affects the rate of evaporation. Keep in mind the independent and dependent variables. When designing the investigation, determine how the water level will be monitored. (Tip: Compare how water evaporates from a bowl (wide surface area) and drinking glass (smaller surface area). Be sure to design a tool for collecting the data. This investigation should be observed over several days. <i>Things to think about:</i> <i>What things need to be kept the same on the water sources that are being compared (the constants)?</i> <i>What materials are needed?</i> <i>Where should the investigation be kept so that it is undisturbed by others?</i></p>		
<p>Day Sixteen and Day Seventeen Research the use of reservoirs for water storage. Describe how they are used. In Los Angeles, California, officials have come up with a way to slow the evaporation of water from California Reservoirs. Research this idea and explain how it works. <i>*Check the water levels of your evaporation investigation.</i></p>	<p>Day Eighteen Answer the following question: Why is water so important to living things? In your response consider: how animals get food, how plants use it, how humans use it in every day life. <i>*Check the water levels of your evaporation investigation.</i></p>	<p>Day Nineteen and Day Twenty Every day Americans drink many bottles of water. Read the information at the site below and write an explanation to discuss why other water containers should be used. Be sure to support the explanation with evidence. https://www.banthebottle.net/bottled-water-facts/ <i>*Check the water levels of your evaporation investigation.</i></p>



August Activities

10 Days: Monday - Friday
Activities start the first Monday of the month.



This month you will focus on living things.

Day One Analyze the results of the evaporation investigation. Write a conclusion supported by the data from the investigation.	Day Two Observe (without touching) three animals in their natural habitat. Make a three-column chart showing a list of characteristics of each animal.	Day Three Choose one characteristic of each animal and describe how it may help him or her survive. Remember that survival is about more than battling other animals.	Day Four Observe (without touching) three plants in their natural habitat. Make a three-column chart showing a list of characteristics of each plant.	Day Five Choose one characteristic of each plant and describe how that characteristic helps it to survive.
Day Six Describe two ways that plants and animals are alike and two ways that they are different. Write the response in paragraph form.	Day Seven Reflect on the evaporation investigation. Describe how the plants and animals in a particular habitat would be affected if the water evaporated at a high rate.	Day Eight Bacteria are organisms that have an important role. Research beneficial bacteria and develop a bulleted list of at least 10 ways that bacteria help an ecosystem and organisms within an ecosystem.	Day Nine and Day Ten Write a 1-minute public service announcement explaining how it is important to maintain healthy waterways for healthy humans, plants, and animals.	

7th Grade Civics Summer Enrichment Packet

U.S. Civics Research Please find the answers to the following questions and provide the link where you found the answer. Even if you know the answer, you need to find proof from a website. Do not list Google or Wikipedia (unless it links to the article) as your answer.

1. What do we call the first ten amendments to the Constitution? Answer: Link:
2. What did the Declaration of Independence do? Answer: Link:
3. What are two rights in the Declaration of Independence? Answer: Link:
4. What are the three branches of the government? Answer: Link:
5. We elect a U.S. Senator for how many years? Answer: Link:
6. How many senators are there? Answer: Link:
7. Who are the current senators from your state? Answer: Link:
8. We elect members of congress for how many years? Answer: Link:
9. Name your U.S. Representative. Answer: Link:
10. We elect a President for how many years? Answer: Link:
11. Who was the first President? Answer: Link:
12. Who is the current President? Answer: Link:
13. Who is the current Vice President? Answer: Link:
14. In what month do we vote for President? Answer: Link:
15. If the President can no longer serve, who becomes President? Answer: Link:
16. If both the President and the Vice President can no longer serve, who becomes President? Answer: Link:
17. Who is the Commander in Chief of the military? Answer: Link:
18. What is the name of the Speaker of the House of Representatives now? Answer: Link:
19. What is the highest court in the United States? Answer: Link:
20. How many justices are on the Supreme Court? Answer: Link:
21. Who are the current supreme court justices? Answer: Link:
22. Who is the Chief Justice of the United States now? Answer: Link:
23. Who is the Governor of your state now? Answer: Link:

24. What is the capital of your state? Answer: [Link](#):
25. What are the two major political parties in the United States? Answer: [Link](#):
26. What is one responsibility that is only for United States citizens? Answer: [Link](#):
27. How old do citizens have to be to vote for President? Answer: [Link](#):
28. What is one reason colonists came to America? Answer: [Link](#):
29. Who lived in America before the Europeans arrived? Answer: [Link](#):
30. Who wrote the Declaration of Independence? Answer: [Link](#):
31. What ocean is on the West Coast of the United States? Answer: [Link](#):
32. What ocean is on the East Coast of the United States? Answer: [Link](#):
33. Name one U.S. territory. Answer: [Link](#):
34. Name one state that borders Canada Answer: [Link](#):
35. Name one state that borders Mexico. Answer: [Link](#):
36. What is the capital of the United States? Answer: [Link](#):
37. Where is the Statue of Liberty? Answer: [Link](#):
38. Why does the flag have 13 stripes? Answer: [Link](#):
39. Why does the flag have 50 stars? Answer: [Link](#):
40. What is the name of the national anthem? Answer: [Link](#):

