Ann Street School

Summer Packet

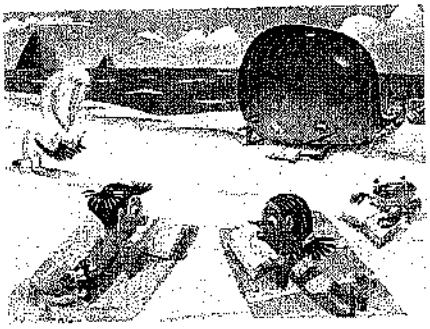
Students entering into 6th grade

September 2019

Note to Parents: In the next few pages we have included a copy of the supplies your child will need to excel in 6th grade. Please ensure that your child comes prepared to school the first day of school with all their materials and the entire summer packet complete and ready to be submitted.

Note to Students: Pay very close attention to this packet. Ensure that you read ALL the directions carefully and you do not miss any assignment or part. As you know these assignments will be due the first day you return back to school in September and will be your FIRST GRADE!

We are looking forward to a great year!
-6th grade teachers :)



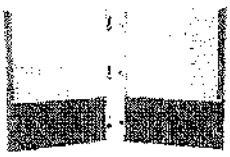
Ann Street School
6th Grade

Class Supplies for ALL Subjects

***Please be sure to have all school supplies with you on the First Day of School**

1. Large 3-Ring Binder with **zipper closure** and 12 subject tabs with plenty of notebook paper (NO TRAPPER KEEPERS)
2. Headphone set to use with chromebooks **(does NOT need to be a name brand)**
3. Black or blue pens – **Pick one color and stick to it!**
4. Red pens for checking work
5. Pencils and erasers
6. Mechanical Multi-color pen ~~~>

7. Page reinforcements
8. **3** Composition pads (Marble/Black) (2 for ELA, 1 for World Language)
9. **6** Two pocket folders with **bottom pockets – 6 of the SAME color. Look in your report card to see which homeroom you will be in and get 6 folders of the same color (based on which homeroom you are in):**
    - Homeroom **308**- 6 Solid **yellow** two-pocket folder
    - Homeroom **309**- 6 Solid **green** two-pocket folder
    - Homeroom **405**- 6 Solid **orange** two-pocket folder
    - Homeroom **406**- 6 Solid **red** two-pocket folder
    - Homeroom **407**- 6 Solid **blue** two-pocket folder
10. **1** two-pocket **BLUE** folder with **prongs** for Writing ~~~>



11. Ruler- metric on one side
12. Graph Paper (1 centimeter size)
13. Scissors and glue stick
14. Colored pencils
15. Calculator

16. **SMALL Pocket** Dictionary & Thesaurus

17. Highlighters – **4** different colors

18. 3-Hole Puncher with holes to keep in binder

19. **2** Boxes of Tissues – **2** (Boys & Girls)

20. **1** Rolls of paper towels – **1** (Boys only)

21. **1** pack of Multi-colored EXPO markers (Girls only)

22. **1** LARGE Clorox Wipes – **1** (Boys only)

23. **1** Tube of hand sanitizer–**1** (Girls only)

24. Sheet Protectors – 30-40 (Clear in Color)

25. Book Covers/ Socks - **3**

26. Pencil Sharpener

27. Zippered pouch for supplies (**No hard plastic boxes**)

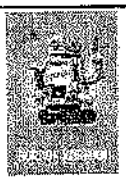
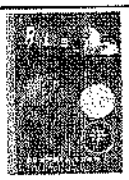
*** Absolutely no permanent markers or wite-out at any time!**

Thank you and have a wonderful summer!

The 6th Grade Team

ELA Summer Packet

Directions: After choosing a novel from the list below and completely reading it, complete ***ALL*** of the assignments below by following the specific directions. **Note that there are TWO assignments that go along with the book you decide to read!** Remember that this entire packet is due the day you return to school in September and it will ALL be graded as an ASSESSMENT grade.

Book title	Author	Genre	Book Cover	Lexile Level
Ungifted	Gordon Korman	Comedy and Humor		730
Zach's Lie	Roland Smith	Adventure, Mystery and Suspense		580
Swindle	Gordon Koman	Adventure Fiction		710
Percy Jackson: Sea of Monsters	Rick Riordan	Fantasy/ Adventure		740
Rules	Cynthia Lord	Humorous/ Fiction		780
Endangered	Eliot Schrefer	Adventure		900
Inside Out & Back Again	Thanhha Lai	Historical Fiction		800

THERE ARE <u>TWO</u> ASSIGNMENTS FOR ELA!

MAKE SURE YOU COMPLETE <u>BOTH</u>!

Assignments	Specific Directions
1.Book Report *(<u>Must</u> be typed and printed-* *The cover page and subtitles (if you decide to include them) can be any font/size/color you wish, however your report must be: size 12-Times New Roman font- double spaced)* ****Remember to include your full name and date on the cover page—The date should be: **THE FIRST DAY OF SCHOOL**).*	Report should include the following: (you can include subtitles as stated below, if you wish.) Although the subtitles could be any size, color, and font you wish—the writing itself should be typed in <u>Times New Roman, size 12 black font, and double-spaced!</u> o <u>**Cover page:**</u> Should include the title of the book and author. Include a picture in the center of the page, and your full name and due date (September 6, 2016). o <u>**Summary**</u> (2-3 paragraphs) remember your writing techniques! [Strong opening, powerful closing]. o <u>**A connection**</u> (3-5 sentences) you had with the book [text to self, text to world, text to text]. ▪ <u>**Examples:**</u> **1.** *The main character, Joan, reminds me of my friend, Marie. They have the same personality and went through the same situation when they moved to a new school.* **2.** *This book reminds me of the novel, "Among the Hidden", because they have the same plot. Both main characters need to stay in hiding because their existence is illegal.* o <u>**Rate (5 stars max)**</u> (3-5 sentences) <u>**Example:**</u> I rate this book 5 out of 5 stars because it is the most interesting book I've ever read. The author had a great way with his words. I could not put this book down! o <u>**Book Review**</u> (2-4 reviews) (look it up on the internet, look on the back of the book/ or make up your own) <u>**Example:**</u> ▪ "So changed with pain and wonder that the novel becomes poetry." –New York Times, ▪ "Will leave fans hungry for the second book"—Star Reviews, ▪ "This book is 'adventuresome'!"—The Wall Street Journal o <u>**Final Statement**</u> (1 sentence) <u>**Example:**</u> *You will not be sorry that you read this book! You won't be able to put it down!*

2. Advertisement or Flyer *(Must be typed- The title can be any font/size/color you wish, however your report must be: size 12-times new roman font-double spaced)* ****Should also include your full name and due date somewhere on the page—The date should be: **THE FIRST DAY OF SCHOOL**).*	Write an advertisement or flyer to be read on the radio or posted around your school in order to advertise the book. The purpose of this advertisement/flyer is to create interest or "buzz" in the book you read. Use some notable quotes which will make your radio audience or students want to run out and buy the book. You must also describe a memorable moment (event) from the book in such vivid detail that the people listening or reading your flyer will be so moved (near to tears, laugh-out-loud, fear for their lives, etc...) that they will be able to visualize themselves in the middle of the action. Remember, this is an advertisement or flyer so you must also provide details about where the book can be purchased and the price of the book. You may also list some awards the book has received (that can be made up or real). You may add pictures (of your radio channel) and a border if wanted—BE CREATIVE! (You should write 2-3 well developed paragraphs, of course, using your persuasive writing techniques).
3. Reading Log	Of course, you should be reading EVERYDAY! Make it a goal this summer to read at least **30 minutes** a day and record it on the reading log attached. You can read any book you wish, perhaps you might want to pick another book that is on the list above. You should also, of course, record your reading of the book you chose to use for your book report. **ALSO log in your reading minutes on the scholastic reading challenge www.scholastic.com/summer

*If there is no way you can get to a computer and/or printer during the summer to complete these assignments, then you may complete them on notebook paper—NEATLY!

*You MUST bring this entire packet (including the rubrics attached at the end of the packet) and all your work to class on the first day of school.

*EVERYTHING is due the first day you return back to school in September. Remember that you must complete ALL parts in order to get full credit. This will be your first ELA grade!

ELA Summer Packet Rubrics

BOOK REPORT Requirements	Points Available	Points earned
Clearly demonstrates an understanding of the task. Completes all requirements of the question(s). Provides an insightful and detailed explanation/opinion that includes or extends ideas from the text. Open Ended 4-point response.	50	
Demonstrates an understanding of the task. Completes all requirements of the question(s). Provides some explanation/opinion that includes ideas from the text for support. Open Ended 3- point response.	39	
May address all of the requirements, but demonstrates only a partial understanding of the task. Uses text incorrectly or with limited success. Includes an inconsistent or confusing explanation. Open Ended 2-point response.	25	
Demonstrates minimal understanding of the task. Does not complete the requirements. Provides only an unclear reference or no use of the text for support. Open Ended 1- point response.	12.5	
A 0-point response is completely irrelevant, off-topic, or missing.	0	

Advertisement / Flyer Requirements	Points Available	Points earned
Clearly demonstrates an understanding of the task. Completes all requirements. Provides an insightful and detailed explanation/opinion of the book and is extremely creative.	50	
Demonstrates an understanding of the task. Completes all requirements. Provides some explanation/opinion of the book and is somewhat creative.	39	
May address most of the requirements, but demonstrates only a partial understanding of the task. Uses text incorrectly or with limited success. Includes an inconsistent or confusing explanation of the book. Minimal creativity.	25	
Demonstrates minimal understanding of the task. Does not complete the requirements. Provides only an unclear reference or no use of the text for support. No creativity.	12.5	
Completely irrelevant, off-topic, or missing.	0	

Summary	
Radio Advertisement	
Total:	_____/100

Name: _____

Ann Street School
Summer Reading Log

*Although you are filling this out for your teacher--make sure you are still recording your reading minutes on the scholastic reading challenge website.

Date	Title	Author	How long I read for	How many pages I read

***Use the back of this paper if needed.

I, _____ verify that my child has read these books this summer.

_____

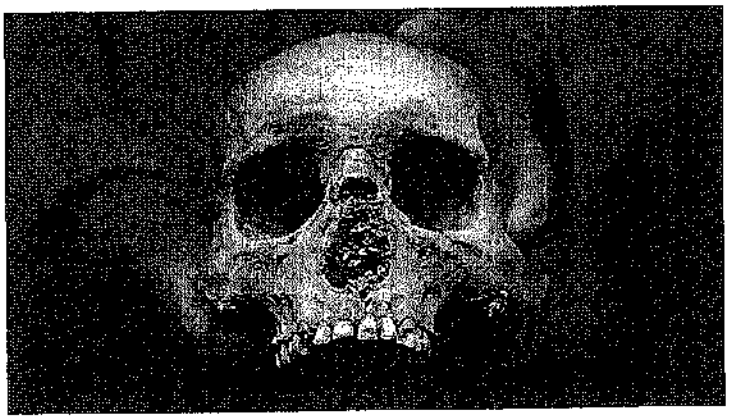
(Parent Signature)

Name: HR:

6th Grade Social Studies Summer Packet

Learning About The Past: Anthropologists Study People

By USHistory.org



How do we learn about the past? Scientists and other experts do different types of research to uncover what life was like hundreds and even thousands of years ago.

The study of history helps humans understand who we were and who we are today. Experts use ideas and imagination, shared knowledge and sheer hard work to put together the puzzle pieces of history.

Some of these experts are anthropologists. Anthropology is the study of human societies and culture. Anthropologists study societies old and new to learn about how humans have developed over time.

Finding them didn't come as much of a surprise. Not to David Roberts, anyway. Winding its way across a 117,000-year-old former sand dune was a trail of footprints made by human feet. They are the oldest human footprints ever found.

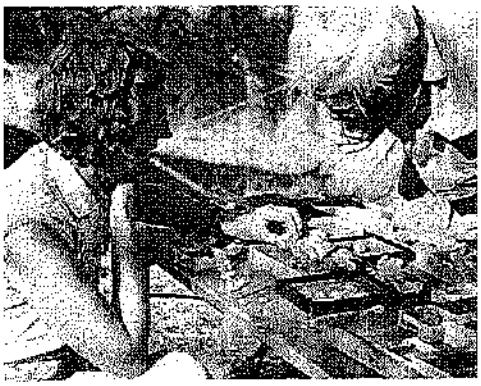
Roberts is a South African geologist. Previously, he had come across fossilized carnivore tracks in the rock fringing Langebaan Lagoon 60 miles north of Cape Town. And he had noticed rock fragments which showed signs of human use. So: "On a hunch, I began searching for hominid footprints — and found them!"

"Hundreds of people had walked over that area and not noticed the prints," adds Roberts's colleague, Lee Berger. "Whoever left these footprints has the potential of being the ancestor of all modern humans."

The prints measure eight and a half inches in length. This early person would have taken size 4 shoes.

The Beginning Of Time?

When did it all begin? If you had asked Dr. John Lightfoot in 1644, he would have given you a most precise answer. The world was created on October 23, 4004 B.C.E., promptly "at nine o'clock in the morning." Lightfoot, a Hebrew scholar, arrived at the date through exhaustive study of Scripture.



Husband and wife Louis and Mary Leakey were two famous anthropologists. In this picture, they are studying fossilized skull bits. These bits may belong to the "missing link" between ape and man. Photo: Bettman via Getty Images.

Today we know this underestimates our planet's true age a million-fold. The earth formed 4.6 billion years ago — an almost unimaginably long time. But what of our human past? How far back does it stretch? There are several answers — a series of "firsts":

2 million+ years: First Hominids

100,000+ years: First Humans

9,000 years: First Settlements

6,000 years: First Civilizations

All this and more is the province of anthropology. The word means literally "the study of man." We are a complicated species, and anthropologists poke into every aspect of our human nature.

The Caretakers Of Culture

Some anthropologists live for years at a time with aboriginal peoples, recording how they organize their lives with the overlay of civilization absent. Margaret Mead, the most celebrated anthropologist of her generation, pioneered this approach in the 1920s when she lived among the Samoan Islanders of the South Pacific. She returned to tell a scandalized world that they

practiced free love. Later experts have suggested her adolescent informants fooled the rather earnest young Mead. They were just leading her on.

Other researchers look to our nearest surviving relatives, the great apes, and seek clues to human behavior there. For 40 years Jane Goodall has lived alongside the chimpanzees of Gombe National Park in Tanzania. Chimps may look cuddly and cute but they are not above thievery, infanticide and murder.

Who owns the past? It may sound an odd question, but it is one anthropologists, especially in North America, are having to face. American museums are filled with the skeletons of Native Americans exhumed — looted, if you like — without the permission of their living descendants. In 1990, the Native American Graves Protection and Repatriation Act (NAGPRA) ordered that this material be returned to the tribes.

Kennewick Man is at the center of the bitterest dispute. A near-complete human skeleton, it was found along the banks of the Columbia River in Kennewick, Washington, in July 1996. James C. Chatters, the forensic anthropologist who first examined it, observed that its characteristics reflected European — not Native American — ancestry.

To Chatters' astonishment when the skeleton was dated, it turned out to be over 9,000 years old. The story made headlines around the world — and a coalition of Indian tribes immediately sued for possession. Ever since, the case has been mired in court.

Kennewick Man may reveal fundamentally new facts about the earliest inhabitants of the Americas. If the tribal leaders have their way, he will be reburied at a secret site and his story lost to us all forever. What's the solution? To begin, more trusting relationships between researchers and the people they study must be forged.

SOCIAL STUDIES PACKET QUESTIONS

- For each question, WRITE the letter answer on the line by the number.

_____ **1 Read the summary below. Choose the answer that BEST fits into the blank to complete the summary.**

Anthropologists study human societies from ancient times to today. They study signs left by humans from the past, such as footprints found in South Africa and a very old skeleton discovered in Kennewick, Washington._____.
This information helps anthropologists and others understand how people have changed over Time.

(A) They also study people today in places and cultures around the world.
(B) They choose to live in other countries to learn more about human history.
(C) David Roberts is a scientist who discovered a trail of fossilized footprints.
(D) Anthropologists have determined that the first humans appeared over 100,00 years ago.

_____2 Read the selection from the section "The Beginning Of Time?"

2 million+ years: First Hominids
100,000+ years: First Humans
9,000 years: First Settlements
6,000 years: First Civilizations

Complete the sentence. The author MOST likely includes the selection above in order to _____.

(A) provide a timeline of when scientists began to discover fossils.
(B) identify parts of human history that anthropologists study.
(C) prove that hominids were living before humans appeared.
(D) describe the difference between settlements and civilizations.

_____ 3 Read the section "The Beginning Of Time." Select the sentence that describes a scientist's conclusion that was later found to be wrong.

(A) Some anthropologists live for years at a time with aboriginal peoples, recording how they organize their lives with the overlay of civilization absent.
(B) Chimps may look cuddly and cute but they are not above thievery, infanticide and murder.
(C) James C. Chatters, the forensic anthropologist who first examined it, observed that its characteristics reflected European — not Native American — ancestry.
(D) Kennewick Man may reveal fundamentally new facts about the earliest inhabitants of the Americas.

_____ 4 Which piece of evidence BEST explains why some groups of people may NOT trust researchers?

(A) "Hundreds of people had walked over that area and not noticed the prints," adds Roberts's colleague, Lee Berger.
(B) Other researchers look to our nearest surviving relatives, the great apes, and seek clues to human behavior there.
(C) It may sound an odd question, but it is one anthropologists, especially in North America, are having to face.
(D) American museums are filled with the skeletons of Native Americans exhumed — looted, if you like — without the permission of their living descendants.

SOCIAL STUDIES VOCABULARY

- DEFINE EACH WORD. USE A DICTIONARY.

KEY TERM	DEFINITION
archaeology	
fossil	
artifact	
hominid	
ancestor	
hunters and gatherers	
migrate	
agriculture	
prehistory	

Ann Street School 2018 Summer Packet Math 6th Grade

Name: _____

Note to the Student

You learned so much in Grade 5! It is important that you keep practicing your math skills over the summer to be ready for your 6th grade math class. In this packet, you will find weekly activities for the summer break. ***Show all your work*** and use separate sheets of paper where indicated. **Start a new sheet/page for each separate week of work and be sure to put the underlined title in the gray box at the top of your paper/page. Points will be taken off for any directions not followed, incomplete, and/or missing work for each and every problem.**

Directions:

- Each separate sheet of paper 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: Chess, War, Battleship, Mancala, Dominoes, Phase 10, Yahtzee, 24 Challenge, Sudoku, KenKen, Connect Four, and Risk.

This packet is due on the first day of school in September.

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 of the skills and concepts. You also might want to get some more practice. Here are some sites you can visit online:

LearnZillion has video lessons on every Math standard. Go to www.LearnZillion.com and click the link for *Math Video Lesson Library*. You can also search by standard or by LZ Code.

Khan Academy has helpful videos and self-guided practice problems for every grade level. Go to www.khanacademy.org to get started.

WEEK 1 || Number & Operations in Base Ten - Standard 5.NBT.1

1) Compare the values of the digits in the number below.

Then choose **True** or **False** for each statement.

a.) 0.02 is 10 times 0.2. True False

b.) 2 is 10 times 0.02. True False

c.) 0.2 is 10 times 0.02. True False

d.) 0.2 is $\frac{1}{10}$ of 2. True False

e.) 0.02 is $\frac{1}{10}$ of 0.2. True False

f.) 2 is $\frac{1}{10}$ of 0.2. True False

2) Fill in the number that correctly completes each statement.

a.) 500 is 10 times larger than _____.

b.) 500 is 10 times smaller than _____.

c.) 62 is $\frac{1}{10}$ of _____.

d.) 62 is 10 times larger than _____.

e.) 8.9 is $\frac{1}{10}$ of _____.

f.) 8.9 is 10 times larger than _____.

WEEK 2 || Number & Operations in Base Ten - Standard 5.NBT.3

Using fractions, the expanded form of the number is:

$$7 \times 100 + 4 \times 10 + 3 \times 1 + 8 \times \frac{1}{10} + 6 \times \frac{1}{100}$$

Choose the correct expanded form of the number given:

3) 80.03

a. $8 \times 10 + 3 \times \frac{1}{10}$

b. $8 \times \frac{1}{10} + 3 \times \frac{1}{100}$

c. $8 \times 10 + 0 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$

d. $8 \times 1 + 3 \times \frac{1}{100}$

4) 2.728

a. $2 \times 1 + 7 \times \frac{1}{10} + 2 \times \frac{1}{100} + 8 \times \frac{1}{1000}$

b. $2 \times \frac{1}{10} + 7 \times \frac{1}{10} + 2 \times \frac{1}{100} + 8 \times \frac{1}{1000}$

c. $2 \times 1 + 7 \times \frac{1}{10} + 8 \times \frac{1}{1000}$

d. $2 \times 1 + 7 \times \frac{1}{10} + 2 \times \frac{1}{1000} + 8 \times \frac{1}{10000}$

It's your job to use the <, >, or = symbol to compare each pair of numbers. *Add placeholder zeros to help you compare!*

5) 8.01 ___ 8.1

6) 2.025 ___ 2.205

7) 10.12 ___ 10.012

8) 9.75 ___ 9.755

9) Compare each number to **635.49**. *Add placeholder zeros to help you compare!*
Then, write each number in the correct column.

636.0	635.4955	635.409
635.4	635.04	635.490

Less Than 635.49	Equal to 635.49	Greater Than 635.49

WEEK 3 || Number & Operations in Base Ten - Standard 5.NBT.4

10) **13.2607**

Round the above number to the:

Nearest whole number _____ Nearest tenth _____

Nearest hundredth _____ Nearest thousandth _____

WEEK 4 || Number & Operations in Base Ten - Standard 5.NBT.7

Directions: Perform the operation indicated. Show your process. Use estimation to check the reasonableness of your answer. NO CALCULATOR should be used.

The answer for each problem corresponds to a letter. Each letter should be placed in a blank that corresponds to a problem number to answer this riddle:

What blew the flags at the beach?

(Show work on separate sheet of paper!)

11) 64.32 + 18.94 12) 48.3 + 37.91 13) 25 + 60.62

14) 79.6 – 45.9 15) 23 – 7.55 16) 51.68 – 30.29

17) 72.6 – 28.49 18) 8.3 x 4.9 19) 6.08 x 3.45

20) 0.5 x 17.64 21) 58.8 x 19.3 22) 87 x 0.28

20.976 →U	40.67 →O	15.45 →G	24.36 →N
85.62 →S	1134.84 → T	33.7 →D	21.39 →A
44.11 →I	83.26 → F	8.82 → U	86.21 →

23)

___	___	___	___	___	___	___	___	___	___	___	___
6	10	5	9	3	11	8	1	2	7	12	4

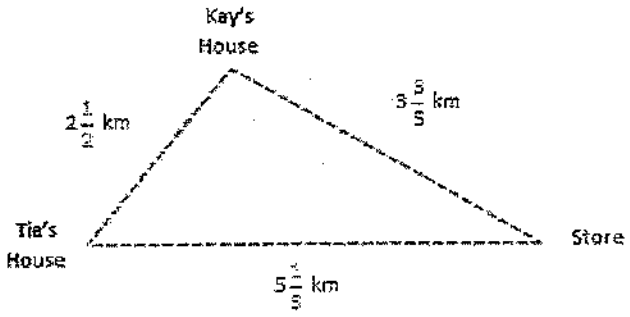
WEEK 5 || Number & Operations – Fractions

24) Krissy swam $\frac{2}{3}$ of a mile on Monday and $\frac{3}{4}$ of a mile on Wednesday.

- How many miles did she swim over the two days?
- If she wants to swim a total of 3 miles before Friday, how much farther does she need to swim?

25) Carla is training for a marathon. On Wednesday, she ran $5\frac{3}{8}$ miles for her workout. On Thursday, she ran $9\frac{4}{5}$ miles. How much farther did she run on Thursday than Wednesday?

26) From her house, Tia biked to the store and then to her friend Kay's house before returning home, as shown in the diagram to the right. How many total kilometers did Tia bike?



WEEK 6 || Number & Operations – Fractions - Standards 5.NF.4a and 5.NF.4b

Time to Make an Art Project!

27) Aretha's trip to an art supply store took $1\frac{1}{6}$ hours. Her return trip took only $\frac{5}{7}$ of the time of her trip to the store. How long was Aretha's return trip? What was Aretha's total driving time?

28) Marcus has 36 markers in his case. Of those, $\frac{4}{9}$ are fabric markers.
How many of his markers are <u>not</u> fabric markers? <u>Explain how you determined your answer</u>.

<u>You Are Doing Home Projects</u>!!

29) You use $\frac{7}{8}$ of a gallon of paint for one room. How much paint do you need to paint four rooms?

30) One paving stone weighs $21\frac{5}{12}$ pounds. You want to put six paving stones in front of your house. How many total pounds of stones do you have to buy?

31) A landscaper charges $16 per hour for his services. How much money do you have to pay him if he works $7\frac{3}{4}$ hours fixing up your yard?

32) You bought a 70-pound bag of grass seed and used $\frac{2}{5}$ of it to seed your lawn.
How many pounds of grass seed did you use?

Finding the Least Common Multiple

For example: Find the LCM of 4 and 9.

Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32, ***36***

Multiples of 9: 9, 18, 27, ***36***

The LCM of 4 and 9 is 36.

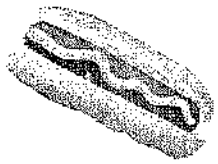
You can find the LCM of three numbers using the same method.

33) What is the LCM of 6 and 9?

34) What is the LCM of 5 and 8?

35) What is the LCM of 4, 6, and 9?

36) What is the LCM of 4, 5, and 6?



37) Hot dogs come in packages of 10 and hot dog buns come in packages of 8. What is the least amount of each product that you need to buy if you want exactly one hot dog for each hot dog bun?

38) A pro baseball team is having a promotion in which every 10th fan that enters the stadium gets a free hat and every 12th person gets a free T-shirt. How many fans will come into the stadium before a fan receives both a hat and a T-shirt?

Greatest Common Factor

Find the greatest common factor of 12 and 30.

Strategy: List the factors of each number.
Identify the greatest factor that both numbers have.

12: 1, 2, 3, 4, ***6***, 12
30: 1, 2, 3, 5, ***6***, 10, 15, 30

So, the greatest common factor of 12 and 30 is 6.

39) Barbara is having a party and wants to pre-make plates of snacks for her guests. She has 90 pretzels and 63 cookies. What is the greatest number of plates she can make with the same amount of pretzels and cookies on each plate and no snacks left over? How many of each item would there be?

40) A farmer is putting apples and oranges into boxes to sell at a market. He has 64 apples and 24 oranges. What is the greatest number of boxes he can make using all of the apples and oranges if each box has identical contents?

41) Melody is making cups of fruit salad. She has 25 grapes, 15 strawberries, and 50 blueberries. How many cups of fruit salad can Melody make if each cup has to have the same amount of each type of fruit and there is nothing left over?

42) Toni is making party bags for her daughter's birthday party. Toni bought 36 party favors, 27 cookies, and 18 lollipops. How many party bags can Toni make if she wants to use all of the materials that she bought and every bag contains the same items?

The ***greatest common factor*** can be used to re-write an expression.

For example:

Re-write the expression 44 + 28 as a product using the greatest common factor as a factor multiplying a quantity in parentheses.

- Think: what is the greatest common factor of 44 and 28?
  - Factors of 44: 1, 2, ***4***, 11, 22, 44
  - Factors of 28: 1, 2, ***4***, 7, 14, 28

→ The greatest common factor of the two numbers is 4.

- Divide both numbers by the GCF.
  - $44 \div 4 = 11$ and $28 \div 4 = 7$
- Use the GCF as a factor multiplying a quantity in parentheses:
  - $4(11 + 7)$

Check:

- $44 + 28 = 72$
- Apply the Distributive Property to check:
  $4(11 + 7) \rightarrow 4(18) = 72$

Write the following sums as products using the greatest common factor as a factor multiplying a quantity in parentheses, as in the example above. ***Show work on separate sheet of paper!***

43) $14 + 18$ _____ 44) $6 + 42$ _____

45) $39 + 18$ _____ 46) $24 + 40$ _____

47) $27 + 15$ _____ 48) $35 + 49$ _____

Congratulations!

You have completed your 6th grade summer math packet!

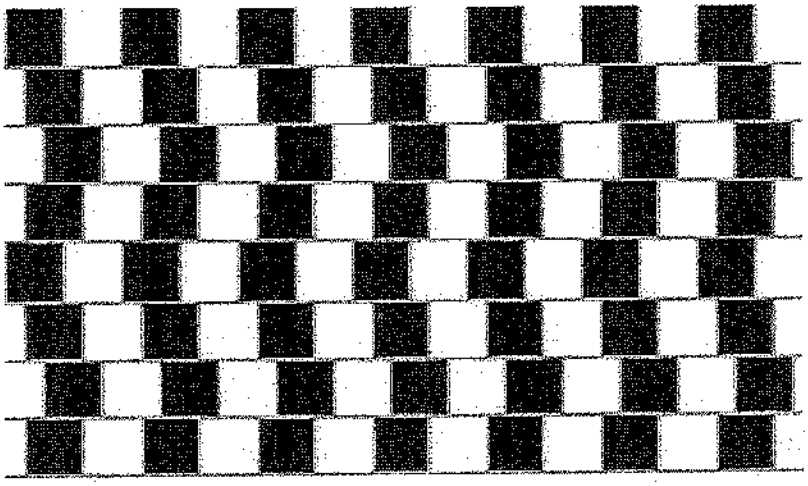
Parent Initial
_____

Name:	6th grade: Homeroom _____
Ann Street School	September 3, 2019

6th Grade: Science Summer Packet

Figure this out!

Here is an interesting image. Look at the lines separating the rows of black and white squares.



1.) a.) Are the horizontal lines at angles (smaller/larger at the ends) or are the horizontal lines parallel and your brain is being fooled? Restate the question in your answer. (2 point)

1.) b.) Explain how you can prove your claim from question 1 using data. **HINT**: use a ruler to help you. Restate the question in your answer. (3 points)

Article Directions: Read the article about ecologists and ANNOTATE. By annotating you are underlining or highlighting important parts and making comments in the margins of the paper and anything else you have learned in ELA class **(3 points)**. Answer the questions that follow **(2 points each)**.

Ecologists

1 An ecologist studies how living things interact with each other and with their environment. An ecologist doesn't just study fish, for instance. They study the fish, water, sunlight, its food supply, things that eat the fish, and every possible thing that might affect the fish in its lifetime. Ecologists study specific areas called ecosystems.

2 The word ecosystem is short for ecological system. An ecosystem is a system of living things interacting with their environment. An ecosystem includes all of the living organisms in a specific area. But an ecosystem also is the way the plants and animals interact with nonliving things in the system such as weather, soil, sun, and the atmosphere. The way an ecosystem develops is completely dependent upon the energy that moves in and out of the system. You could have an entire ecosystem underneath a boulder. On the other hand, you could be talking about the overall ecosystem of the planet Earth.

3 An ecosystem can be as small as a puddle or as large as the Atlantic Ocean. An ecosystem is a whole community of different living organisms and their surroundings. Trying to understand an ecosystem is no easy task. Since humans, animals, and plants are in steady interaction with each other, they are all constantly changing aspects of the environment.

4 Interactions among all species could have a number of positive and negative effects. Humans, for instance, impact the environment by cutting trees, burning fossil fuels, and getting rid of trash. This obviously affects populations of wild animals who lose their habitats to new home developments and landfills.

5 Ecologists might do experiments to find out what kinds of conditions a type of plant needs to survive. These conditions include temperature, amount of water, and amount of light. Ecologists might also study how an animal gets food and how it protects itself from predators. Another area of study is how the types of organisms that live in an area change over time.

6 Some ecologists study how populations of organisms increase or decrease. By observing a population, they can calculate its birth rate and its death rate. The birth rate of a population is the number of organisms that are born in a given amount of time. The death rate of a population is the number of organisms that die in a given amount of time. A population is likely growing if its birth rate is larger than its death rate.

7 Ecologists are interested in the relationships between living things and have a real interest in nature. They are constantly searching for answers to complex questions, have the ability to learn new concepts quickly and think logically. As scientists, they must maintain the ability to remain objective in all of their research and studies.

8 Most ecologists are scientists with backgrounds in chemistry, environmental science, geology, biology, climatology, statistics and, in many cases, economics. It is also necessary for ecologists to know how to use computers. Ecologists may work for universities, governments, environmental groups, or private companies.

Article Questions: Choose the best answer for each question. **(2 points each)**

2.) What is an ecologist?

a. A person who studies the interaction of living things in an environment
b. A person who studies only the nonliving things in an environment
c. A person who studies plants but not animals
d. A person who studies animals but not plants

3.) Which of the following would ecologists not study?

a. How beavers get food.
b. How plastic expands when it is heated.
c. How rabbits escape from predators.
d. How much water is needed for a corn crop

4.) Which of these things would be considered part of an ecosystem?

a. Food supply
b. Water
c. Sunlight
d. All of the above

Directions: Answer the questions related to **chemistry**. Restate the question in your answer. You must do some research in order to answer these questions! (3 points each)

5.) What is the scientific definition of **mass**?

_____

_____

_____

_____

6.) What tool do scientists use to measure the mass of an object?

_____

_____

_____

7.) What is the scientific definition of **weight**?

8) Why do scientists measure the *mass* of an object and *not the weight* of an object?