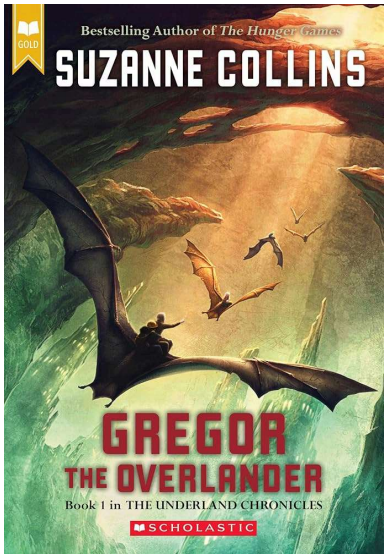
6th Grade Summer Project

You will read ONE book and complete the rising 6th grade math packet.

6th Grade Literature

Read: *Gregor the Overlander* by Suzanne Collins and complete the assignment.



When Gregor falls through a grate in the laundry room of his apartment building, he hurtles into the dark Underland, where spiders, rats, cockroaches coexist uneasily with humans. This world is on the brink of war, and Gregor's arrival is no accident. A prophecy foretells that Gregor has a role to play in the Underland's uncertain future. Gregor wants no part of it until he realizes it's the only way to solve the mystery of his father's disappearance. Reluctantly, Gregor embarks on a dangerous adventure that will change both him and the Underland forever.

Assignment for *Gregor the Overlander*, complete the two provided worksheets:

- Plot Structure - As you read, focus on identifying specific events that happen at the beginning, middle, and end of the novel. Be as specific as possible and cite each event with the page number(s) that it occurred in the novel.
- Making Inferences - As you read, practice making inferences by taking clues from the text and combining them with your own background knowledge to develop an inference of what can or will happen next. Cite your text clues with page numbers from the novel.

Bring your completed assignments to class on Wednesday, August 12.

6th Grade Math

Complete the math packet. It is suggested that you complete one page per week. Bring the completed packet with you to school on Wednesday, August 12.

Read & Respond

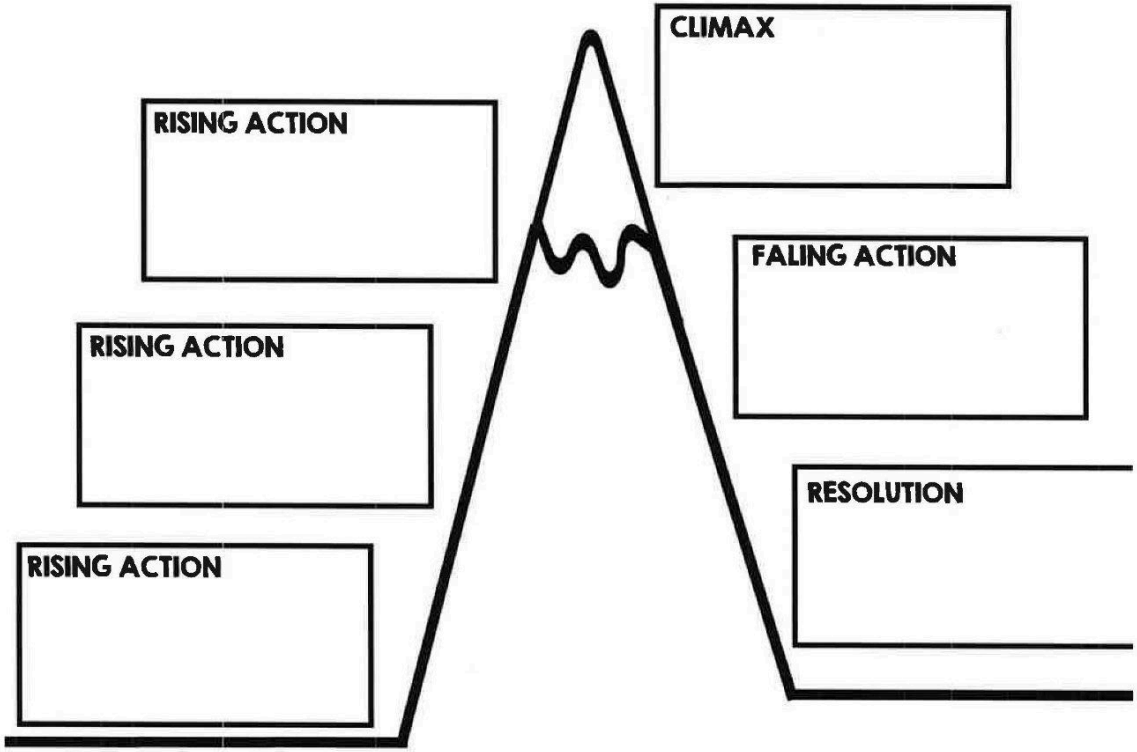
PLOT STRUCTURE

What has stuck with you?

.se the space below to jot down things you notice in he text that jump out at you. You can add sticky otes on top of the square if you need more space.

Organize your thoughts...

As you are reading, or once you are finished, use this space below to record your thinking about the text. Focus on identifying the important events that happened in the beginning, the middle, and the end. Be as specific as you can with the details of each event.

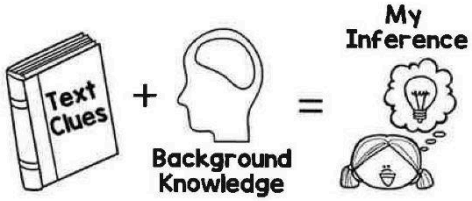


EXPOSITION

THEME

Read & Respond

MAKING INFERENCES



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Organize your thoughts...

As you are reading, or once you are f nished, use this space below to practice making inferences. When you make an inference, you'll find clues in the text and combine them with your background knowledge to think deeply about the text. Write down the text clues, your specific background knowledge, and the inference that you made when you combined the text clues and your background knowledge.

TEXT CLUES	BACKGROUND KNOWLEDGE	MY INFERENCE

You got this!

1. In the number 3,560, what is the value of the digit 5?

_____

What would the value of the 5 be if it moved one place to the left?

_____

2. Interpret the fraction $\frac{5}{6}$ as a division problem.

What is another way to write $\frac{5}{6}$?

3. Multiply:

$$\frac{5}{6} \times 10 = \square$$

4. In the number 62,914, what is the value of the 9?

_____

5. A rectangle is a type of parallelogram. List two attributes that all rectangles have, and explain why all parallelograms must also have these attributes.

_____

_____

_____

_____

_____

6. Write the ordered pair for a point that is 2 units to the right of the origin and 6 units up on a coordinate plane.

1. Write 10^3 as a whole number.

_____

2. If 12 apples are divided equally among 5 people, how much does each person get? Express your answer as a fraction or a mixed number

_____ apples

3. Multiply

$$\frac{2}{3} \times \frac{5}{6} = \square$$

4. If you move the digit 5 in 5,000 one place to the right, what is its new value?

_____

5. Draw a quadrilateral that is a parallelogram but not a rectangle:

Label two attributes that make it a parallelogram and explain why it is not a rectangle.

_____

_____

_____

6. Describe the location of the point (4,0) on a coordinate plane. Which axis does this point lie on?

Be proud of your hard work!

1. Sakir is making lemonade and needs 4 cups of water. If her measuring jug only shows fluid ounces, how many fluid ounces does she need? (1 cup = 8 fluid ounces)

_____ fluid ounces

2. If 6 sandwiches are divided among 8 people, how much sandwich does each person get? Express as a fraction.

_____ of the sandwich

3. If a bag contains 12 apples, and $\frac{3}{4}$ of them are red, how many apples are red?

_____ apples

4. Write $10 \times 10 \times 10$ using an exponent.

_____

5. Which properties do all parallelograms share? List at least two properties and give an example of a shape that is a parallelogram but not a rectangle.

_____

_____

_____

_____

_____

_____

6. If you start at the origin (0,0) and move 3 units to the right and 6 units up, what are the coordinates of your new position?

1. Divide 3,405 by 15 using any strategy you choose.

_____

2. Add:

$$\frac{1}{8} + \frac{1}{4} = \square$$

3. Without multiplying, explain if the product of 10 and $\frac{5}{8}$ will be greater than, less than, or equal to 10.

_____

_____

_____

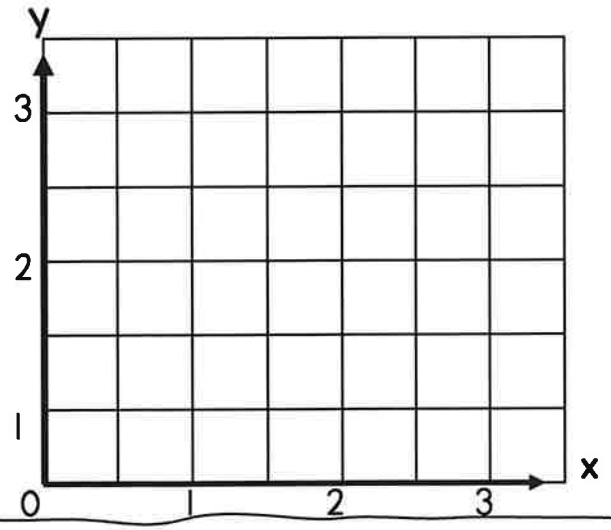
_____

_____

4. Write $0.59 \div 10$.

_____

5. Place a point at (0,2). Label the point A.



6. A rectangle has a length of $\frac{2}{5}$ unit and the width of $\frac{3}{4}$ unit. Find the area of the rectangle.

1. Evaluate:

$9 + (12 - 7)$

_____

2. Subtract:

$$\frac{5}{6} - \frac{1}{3} = \square$$

3. Explain why multiplying any number by a fraction less than 1 results in a product smaller than the original number.

_____

_____

_____

_____

_____

4. What is 10^4 equal to?

_____

5. A point is located at (4,2) on a coordinate plane. Which axis tells you how far to move right from the origin, and by how many units?

_____

_____

_____

_____

6. A rectangle has a length of $\frac{7}{8}$ unit and the width of $\frac{3}{5}$ unit. Find the area of the rectangle.

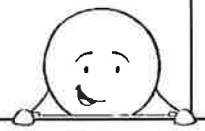
1. Write an expression for:

Multiply 7 by 4, then add 12.

_____

2. Subtract the mixed numbers:

$$2\frac{1}{3} - \frac{5}{6} = \square$$



3. Write a word problem for $\frac{2}{3} \times \frac{4}{5} = \frac{8}{15}$.

_____

_____

_____

_____

_____

_____

_____

4. What is the value of the digit 9 in the number 83.259?

_____

5. Rule A: Start at 0, add 2 each time.
Rule B: Start at 0, add 4 each time.

b) List the ordered pairs (A term, B term)

_____

_____

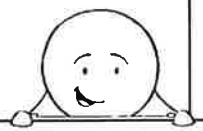
6. Mrs. Smith wants to fill a box that is 5 inches long, 2 inches wide, and 6 inches high with cubes that each have a volume of 1 cubic inch. How many cubes will fit inside the box?

_____ cubes

1. Divide 7,215 by 35 using a strategy based on place value. Show your steps.

2. Lila poured $\frac{7}{8}$ liter of juice into a pitcher. She then poured out $\frac{1}{2}$ liter into a glass. How much juice is left in the pitcher?

_____ juice



3. Anna has $3\frac{3}{4}$ pounds of apples. She wants to use $\frac{1}{5}$ of the apples to make a pie. How many pounds of apples does she use?

_____ yards

4. What digit is in the hundredths place in 63.417?

_____

5. Rule C: Start at 1, add 5 each time.
Rule D: Start at 1, add 10 each time.

a) Write the first five coordinates of both patterns.

Rule C:

_____

Rule D:

_____

6. Laura built a rectangular prism using 24 cubes. Each cube has a volume of 1 cubic foot. If the base of her prism measures 4 feet by 3 feet, how many layers of cubes are in her prism?

_____ layers

1. If you multiply 0.56 by 10, where does the decimal point move? What is the product?

2. A pie was cut into $\frac{2}{7}$ for Ronnie, $\frac{3}{7}$ for Fiona, and the rest for Luca. What fraction did Luca get?

_____ for Luca

3. Calculate $\frac{1}{9} \div 3$. Show how you can use multiplication to check your work.

4. Round:

3.276 to the nearest tenth:

_____

15.492 to the nearest hundredth:

_____

5. Rule C: Start at 1, add 5 each time.
Rule D: Start at 1, add 10 each time.

c) What do you notice about the relationship between Rule C and Rule D?

_____

_____

_____

6. A fish tank has a base area of 24 square centimeters and a height of 10 centimeters. What is the volume of the fish tank?
Use the formula $V = B \times h$.

_____ cubic centimeters

1. Multiply 2,643 by 7 using the standard algorithm.

2. The measurements (in cups) of water in different beakers are: 1, $1\frac{1}{2}$, $1\frac{1}{4}$, $1\frac{1}{2}$, 1, $1\frac{1}{2}$. Make a line plot to display the data.

3. If 6 children share $\frac{1}{3}$ of a gallon of ice cream equally, how much does each child get?

_____ of the gallon

4. A juice bottle holds 1.25 liters. If Sam pours 0.38 liters into a cup, how much juice is left in the bottle?

_____liters

5. A storage box is made by putting two right rectangular prisms together. The first prism is 4 inches long, 3 inches wide, and 2 inches high. The second prism is 2 inches long, 3 inches wide, and 2 inches high. What is the total volume of the storage box?

_____ cubic inches

6. Jake is walking from (1,1) to (1,6). How many units did he travel, and in which direction?

1. What is the value of the 7 in the number 6,742?

_____

What is the value of the 7 if it was in the tens place instead?

_____

2. The heights of plants are measured in feet: 3, $3\frac{1}{2}$, $3\frac{1}{2}$, $3\frac{1}{4}$, 3, $3\frac{3}{4}$. Create a line plot to determine how many plants are taller than 3 feet.

3. Write a story problem that matches $\frac{1}{10} \div 5$.

_____

_____

_____

_____

_____

_____

_____

4. A pizza costs 7.20 dollars. If you buy 3 pizzas, how much will you pay in total?

$_____

5. A swimming pool is shaped like two right rectangular prisms joined together. The first part is 6 meters long, 4 meters wide, and 2 meters deep. The second part is 2 meters long, 4 meters wide, and 1 meter deep. What is the total volume of the swimming pool?

_____ cubic meters

6. The point (2,7) marks the height of a plant after 2 weeks. What does the y-coordinate represent in this context?