Mathematics/ Matemáticas

Teacher Contact Information:
Información de contacto del profesor:

Family Learning Resources: Remote Learning Edition

Recursos de Aprendizaje Familiar: Edición de Aprendizaje Remoto

6th Grade/6° grado

Family Learning Resources: Remote Learning Edition

Roanoke City Public Schools

Winter 2026 - 5 Days of Resources

Content Areas Included

- English Language Arts
- Mathematics
- Science
- Social Studies

Objective

This document will provide families with remote learning resources in the four core content areas for the anticipated extended closure of schools due to inclement weather.

Recommendations for Usage

- These necessary materials focus on reinforcing previously learned concepts - no new materials are covered.
- Students should be able to complete with minimal adult assistance. However, discussing the purpose and understandings from resources can help establish a deeper connection to the materials.
- Students are encouraged to write down questions that they might have about the materials so that they may be discussed with teachers.
- In addition to the completion of these materials, RCPS recommends that students take time to read - either independently or with others.

Questions & Follow Up Notes

Please do not hesitate to reach out to your student's teachers with any questions. These resources are designed to support remote learning during school closures and help minimize disruptions to instruction. **Students should bring this booklet with them when they return to school.**

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Recursos de Aprendizaje Familiar: Aprendizaje Remoto

Roanoke City
PUBLIC SCHOOLS

Invierno 2026 – 5 días de recursos

Áreas de contenido

- Lenguaje (Inglés)
- Matemáticas
- Ciencias
- Estudios Sociales

Objetivo

Este documento ofrece a las familias recursos de aprendizaje remoto en las cuatro áreas académicas principales, pensados para apoyar la continuidad educativa durante cierres escolares prolongados debido a las inclemencias del tiempo.

Recomendaciones de Uso

- Estos materiales necesarios se centran en reforzar conceptos aprendidos previamente - no se cubre material nuevo.
- Los estudiantes deberían poder completar las actividades con una asistencia mínima de un adulto. Sin embargo, conversar sobre el propósito y los aprendizajes de los recursos puede ayudar a establecer una conexión más profunda con el material.
- Se anima a los estudiantes a escribir las preguntas que puedan tener sobre los materiales para que puedan ser comentadas con los maestros.
- Además de completar estos materiales, RCPS recomienda que los estudiantes dediquen tiempo a la lectura, ya sea de manera independiente o con otras personas.

Preguntas y notas de seguimiento

Por favor, no dude en comunicarse con los maestros de su estudiante si tiene alguna pregunta. Estos recursos están diseñados para apoyar el aprendizaje remoto durante los cierres escolares y ayudar a minimizar las interrupciones en la instrucción. **Los estudiantes deben traer este folleto cuando regresen a la escuela.**

Math 6 - SOL 6.NS.2 – Represent, Compare, and Order Integers

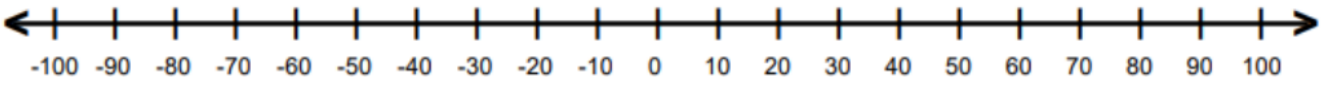
1. What integer does this situation represent? Create a model to explain your response.

   The deepest point of Luray Caverns is 260 feet below ground.

2. Put the following integers in descending order. You may use the number line to help you.

   - -45
   - 32
   - 0
   - -12
   - 14
   - -62

   _____, _____, _____, _____, _____, _____



3. Name an integer that can be found on a number line between -12 and 12. Explain your thinking.

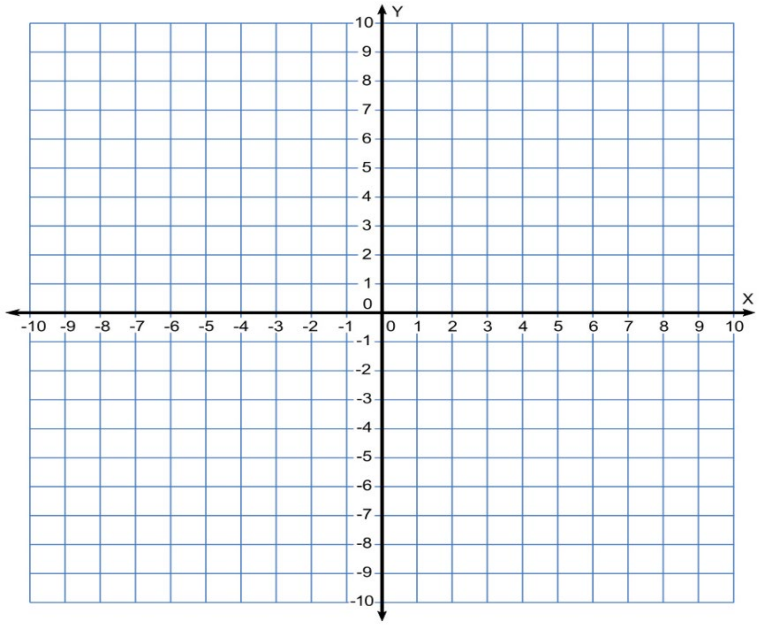
4. What is the value of $|-6|$? Explain using models, numbers, and words.

5. Do $|-4|$ and $|4|$ have the same value? Explain using the number line below.

Math 6 - SOL 6.MG.3 – The Coordinate Plane

Polygon Family Park

Directions: Using the following information, graph the coordinates that have been noted as the coordinates for the family park. The doggy playground area is represented by a triangle with vertices at coordinates (2, 3), (6, 2), and (6, 5). The picnic area is represented by a rectangle with vertices at coordinates (-1, 0), (-1, 3), (-5, 3), and (-5, 0). The nature walking path is represented by an irregular polygon with vertices at coordinates (-9,0), (-3, -8), (6, -7), (9, 2), (8, 7), and (0, 9).



1. If Chaun walked from (6, -7) to (6, 5), what is the distance she walked?

2. Is the distance Chaun traveled horizontal or vertical on the coordinate plane? Please justify your answer.

3. Cathy wants to join Chaun at the (6, 5) location. If Cathy is entering the park at (-10, 5), what is the distance she will need to travel to get to Chaun's location?

4. Is the distance Cathy traveled horizontal or vertical on the coordinate plane? Please justify your answer.

5. What quadrant(s) are each of the three park sections located?

   Picnic Area: Doggy Park: Walking Trail:

6. What are the dimensions of the picnic area?

Math 6 - SOL 6.NS.3 – Perfect Squares

Step 1: On the grid below, draw FOUR squares of different sizes. Label each square A, B, C and D.

Step 2: After drawing your squares, complete the table below.

Square Root

Perfect Square

Square	Length of ONE side	Area of Square
A		
B		
C		
D		

Step 3: Write three additional perfect squares that are not drawn above.

Step 4: Complete the table.

Table of Perfect Squares

Side Length	Formula	Area		Side Length	Formula	Area
1	$1^2 = 1 \times 1$	1		11		
2	$2^2 = 2 \times 2$	4		12		
3	$3^2 = 3 \times 3$	9		13		
4				14		
5				15		
6				16		
7				17		
8				18		
9				19		
10				20		

Math 6 - SOL 6.NS.3 – Exponents, Perfect Squares, and Powers of 10

1. Based on the pattern below, what is the value of 4^6? Explain your thinking.

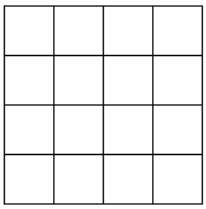
   $4^1 = 4$

   $4^2 = 16$

   $4^3 = 64$

   $4^4 = 256$

2. The image below represents a perfect square. Create a model of a different perfect square and explain how you know it is a perfect square.



   Perfect square: 16
   Side length: 4

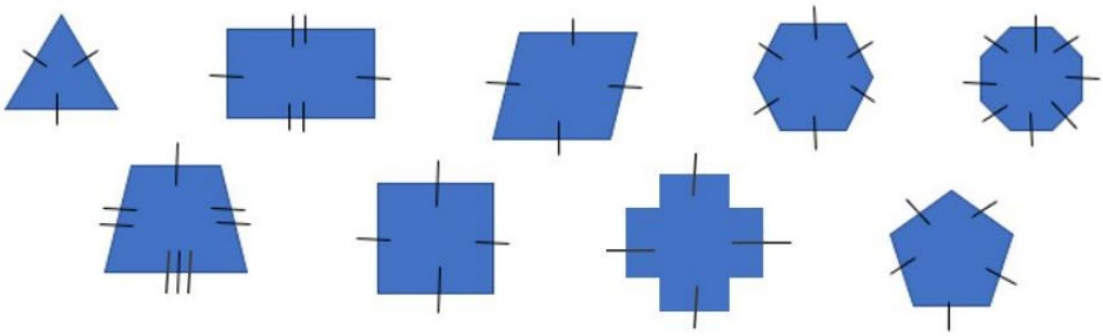
3. Complete the table below.

Power of Ten	Expanded Form	Value
10^7		
	$10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10$	
		100,000
10^4	$10 \cdot 10 \cdot 10 \cdot 10$	10,000
	$10 \cdot 10 \cdot 10$	
10^2		100
10^1	10	10
10^0	1	1

4. Determine if each number is a perfect square. Explain your thinking using pictures, numbers, and words.
   a. 25
   b. 125
   c. 169

Math 6 – SOL 6.MG.4 – Regular Polygons, Lines of Symmetry, and Congruency

1. Circle all the polygons that are regular polygons.



Explain how you determined which polygons to circle.

2. Draw all lines of symmetry for each polygon. Fill in the blank with the number of lines of symmetry you drew for each polygon.

_____ _____ _____

3. Are the two polygons congruent? Explain your reasoning.