GRADE 5 MATHEMATICS–Unit 5

Dear Parents,

Here is what your child is learning in Grade 5, Unit 5 along with some specific ways you can help. Look for additional newsletters for upcoming units.

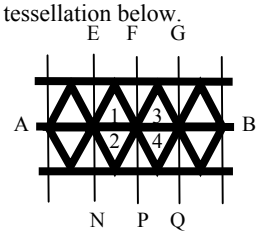
GEOMETRY

Students need to:

- **Identify transformations in tessellations.**

Example:

Look at the tessellation below.



Word Box
Translate
Rotate
Reflect

Describe two ways to move triangle 1 to triangle 3. Use pictures and/or words from the Word Box in your description.

Sample response:

Translate horizontally to the right.

Reflect across $\overline{FP}$.

MEASUREMENT

Students need to:

- **Select appropriate measurement attributes, tools, and units to solve problems.**
- **Estimate and determine the perimeter and area of a closed figure.**
- **Develop and use formulas to determine the volume of a rectangular prism.**

Examples:

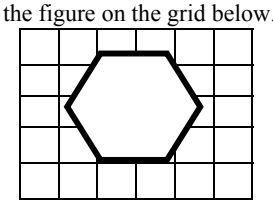
1. Sara wants to measure the amount of water needed to fill a fishbowl.

- What attribute of the fishbowl does she need to measure?
- What metric unit can she use to measure the amount of water needed to fill a fishbowl?

Sample responses:

- capacity
- liters or milliliters

2. Look at the figure on the grid below.

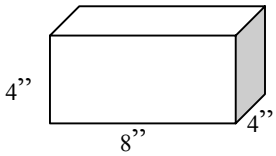


- The length of each side of a square on the grid is 1 unit. Estimate the perimeter of the figure in units.
- Use words and/or numbers to explain how you determined your answer. Use what you know about estimation to support your explanation.

Sample responses:

- about 12 units
- Each side of the figure seems to be about the same length. The length of the bottom side is about 2 units. $2 \times 6 = 12$

3. Look at the rectangular prism below.



- What is the volume of the prism?
- Use what you know about volume to explain how you determined your answer. Use words and/or numbers in your response.

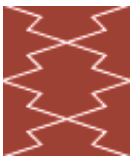
Sample responses:

- 128 cubic inches
- $V = 4 \times 8 \times 4$
  $V = 128$

WAYS PARENTS CAN HELP

Here are some activities you and your child can do together:

- A **tessellation** is the complete covering of a plane with a repeating pattern of figures so that no gaps or overlaps occur. Look for tessellations in wallpaper, clothing, or tiles.



- Practice measuring large and small items using both metric and customary measurement. For example, measure the dimensions of a room or the board from a board game. Weigh a full backpack and a single book.
- Estimate and measure the capacity in cups of the serving bowls in the kitchen (to the nearest quarter cup).
- Measure 2 rectangular prisms, like cracker or cereal boxes. Before measuring, predict which box has a greater volume. After measuring length, width, and height, find the volume of each box ($V = l \times w \times h$).

For additional activities, visit www.ed.gov/pubs/parents/Math