

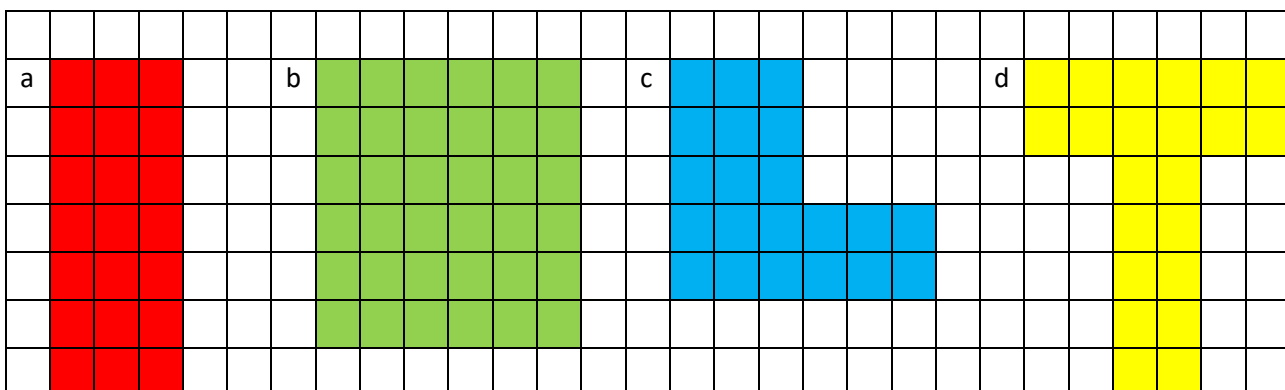
This week we will be exploring **PERIMETER VOLUME AND AREA** with the Grade 5 learners. Scroll through the images for the questions and images linked to the questions.

PERIMETER

- The shape shown below has an area of 64 square centimetres. What is the perimeter? (See Image)
- The length of a rectangular field is 65 m and its width is 35 m. Jane-Claire ran around the field 4 times. How far did she run?
- Which of the following formulas, or rules, cannot be used to calculate the perimeter of a rectangle?
 - $P = l + w + l + w$
 - $P = 2(l + w)$
 - $P = l + w$
 - $P = 2l + 2w$
- Bafo and Umr built pens for their dogs. Bafo made a pen 12m by 8m and Umr's pen is 15m by 6m. Who will need more fencing to build the pen?

AREA

- Area is the distance around a shape.
 - True
 - False
- Below is a 1cm square grid - Find the area of each shape (remember to write the formula for area as: $L \times B = \text{cm}^2$) (See image)

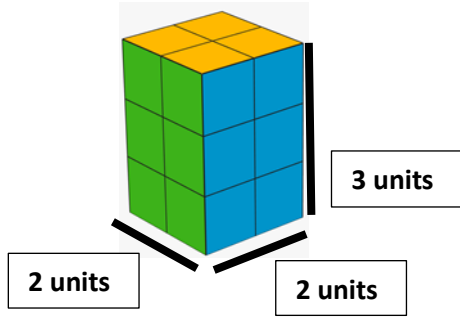


- Draw the following shapes
 - 4 squares by 4 squares
 - 6 squares by 5 squares
 - 5 squares by 3 squares plus 4 squares by 2 squares
 - 10 squares by 1 square

VOLUME

Count the unit cubes and find the volume of each rectangular prism (See image)

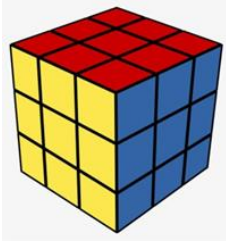
Example:



$$2 \times 2 \times 3 = 12$$

The volume is 12 cubic

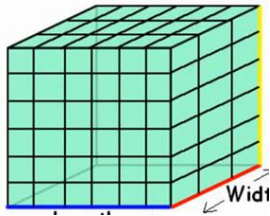
a)



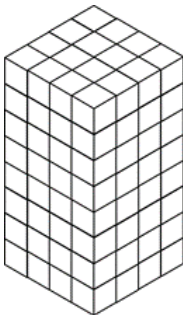
b)



c)



d)



MEMORANDUM

Perimeter

1. $8 \times 4 = 32$ cm OR $8 + 8 + 8 + 8 = 32$

2. $2 (65 + 35) \times 4$
 $= 2 (100) \times 4$
 $= 200 \times 4$
 $= \text{Jane-Claire ran } 800 \text{ m}$

OR $4 (65 + 65 + 35 + 35)$
 $= 4 \times 200$
 $= 800 \text{ m}$

3. c) $P = l + w$

| | | |
|-----------|---------------------|--------------------|
| 4. | $2(12 + 8)$ | $2(15 + 6)$ |
| | $= 2 \times 20$ | $= 2 \times 21$ |
| | $= 40\text{m Bafo}$ | $= 42\text{m Umr}$ |

Umr will need more fencing to build the pen.

Area

1. False

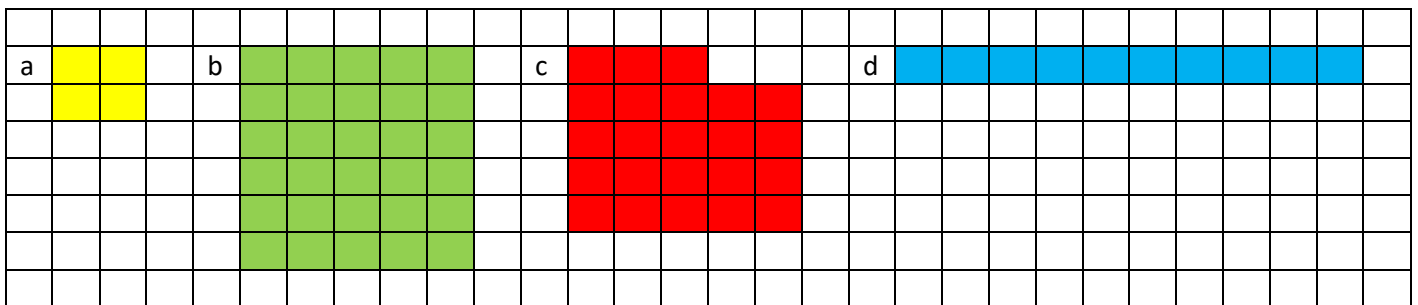
2. a) $7 \times 3 = 21$ squares

b) $6 \times 6 = 36$ squares

c) $(5 \times 3) + (3 \times 2)$
 $= 15 + 6 = 21$ squares

d) $(6 \times 2) + (5 \times 2)$
 $= 12 + 10 = 22$ squares

3.



Volume

a) $3 \times 3 \times 3 = 27$

b) $4 \times 3 \times 5 = 60$

c) $6 \times 3 \times 6 = 108$

d) $4 \times 4 \times 8 = 128$