MATHEMATICS 5
FOURTH QUARTER

MODULE 2: VOLUME OF A CUBE AND A RECTANGULAR PRISM

What's New

Volume is the amount of space occupied by an object. You will understand this concept as you go along with this module.

In finding the volume of a cube and rectangular prism, you have to consider its dimensions: length, width and height. Always remember that volume is the amount of space a solid figure occupies.

A **cube** is a solid figure whose length, width and height are equal while a **rectangular prism** whose length, width and height may or may not be equal. Volume is expressed in cubic units. We write the cubic units: unit^3.

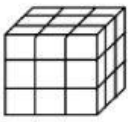
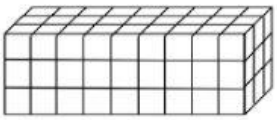
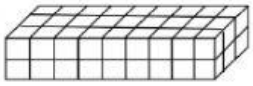
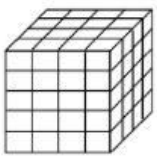
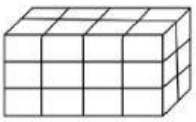
Formula for getting the volume of a **cube**:

$V = s^3$ or s x s x s

Formula for getting the volume of a **rectangular prism**:

V= l x w x h

Directions: Look at the figures carefully. Count the cubic units to find the volume of each figure.

1.  V = _____
2.  V = _____
3.  V = _____
4.  V = _____
5.  V = _____

LIVEWORKSHEETS

Directions: Match each given volume with its corresponding dimensions found in the KEY by writing the letter on the box assigned to it.

512 cm^3	240 m^3	216 cm^3	30 mm^3	525 cm^3	8 cm^3

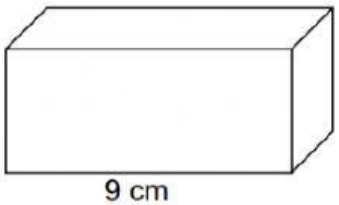
KEY:

M **= L – 15 cm, W – 7 cm, H – 5 cm**	***C*** **= S is 3 cm**
A **= 8 mm by 2 mm by 2 mm**	***O*** **= L – 10 m, W – 6 m, H – 4 m**
L **= 6 cm x 6 cm x 6 cm**	***V*** **= *length of each* side is 8 cm**
B **= L – 5 cm, W – 2 cm, H – 4 cm**	***U*** **= 2 mm by 5 mm by 3 mm**
E **= S is 2 cm**	***R*** **= L – 8 cm, W – 3 cm, H – 1 cm**

Assessment

DIRECTIONS: Look at the figures very carefully. Find the volume of each.

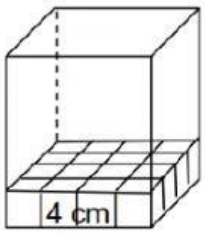
(1) 4 cm



9 cm

9 cm

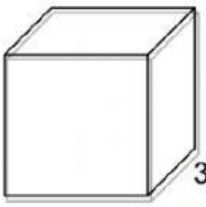
(2) 6 cm



4 cm

4 cm

(3)



3 cm

3 cm

3 cm

(4) Length = 10 units,
width = 6 units,
height = 4 units
V=_____

(5) 9 x 9 x 9
V=_____

LIVEWORKSHEETS