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DepED
DEPARTMENT OF EDUCATION

Learning Activity Sheet for Mathematics

Quarter 2
Lesson
1

Worksheet for Mathematics Grade 7
Quarter 2: Lesson 1 (Week 1)
SY 2024-2025

Development Team

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LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	1	**Date:**	
Lesson Title/Topic:	Square Root of Perfect Square and Cube Root of Perfect Cube		
Name:		**Grade & Section:**	

I. Pre-lesson Activity: Area of a square and volume of a cube

II. Objective(s):

1. The learners determine the area of the given square.
2. The learners determine the volume of the given cube.
3. The learners identify whether a number of unit squares can form a square or not.
4. The learners identify whether a number of unit cubes can form a cube or not.

III. Materials Needed:

- Pencil or ballpen
- Cutouts of unit squares and 3D models of unit cubes (optional)

IV. Instructions: Answer the following questions:

1. Can you form a square with the given unit squares?

a.

# of unit squares: _____

Can you form a square? _____

b.

# of unit squares: _____

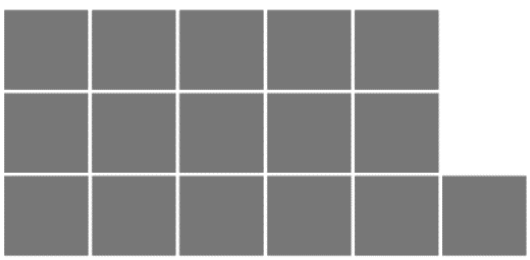
Can you form a square? _____

c.

# of unit squares: _____

Can you form a square? _____

d.

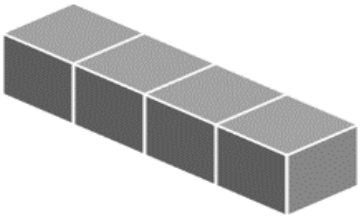


# of unit squares: _____

Can you form a square? _____

2. Can you form a cube with the given unit cubes?

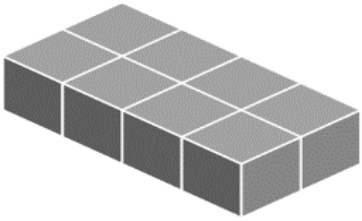
a.



# of unit cubes: _____

Can you form a cube? _____

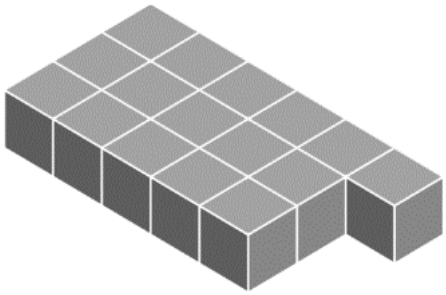
b.



# of unit cubes: _____

Can you form a cube? _____

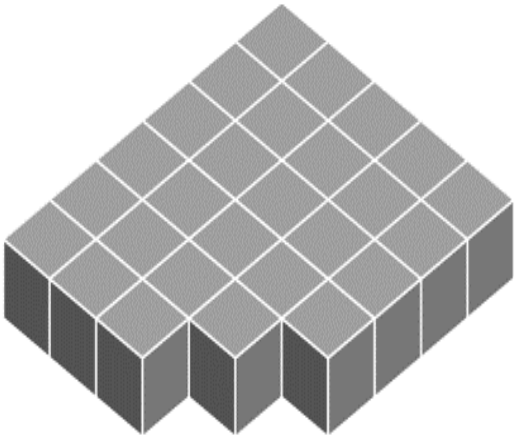
c.



# of unit cubes: _____

Can you form a cube? _____

d.



# of unit cubes: _____

Can you form a cube? _____

V. Synthesis:

1. In number 1, which of the four given figures formed a square?

   _____

2. Observe the # of unit squares in a, b, and d. What can you say about the numbers?

   _____

   _____

3. In number 2, which of the four given figures formed a cube?

   _____

4. Observe the # of unit cubes in b and d. What can you say about the numbers?

   _____

   _____

5. Can you apply the idea you learned in 1 and 2 to find the length of the side of a square or cube when the area of a square (the total number of unit squares) or volume of a cube (the total number of unit cubes)? If your answer is yes, then how?

   _____

   _____

   _____

   _____

   _____

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	1	**Date:**	
Lesson Title/Topic:	Square Root of Perfect Square and Cube Root of Perfect Cube		
Name:		**Grade & Section:**	

I. Activity No. 1: Perfect Square and Square Root

II. Objective(s):

1. The learners identify a perfect square.
2. The learners determine the square root of a perfect square.

III. Materials Needed: Pencil or ballpen

IV. Instructions:

1. Identify whether the given number is a perfect square or not. Place the number inside the appropriate box.
2. If the number is a perfect square, then determine or compute its square root. Write your answer inside the appropriate box.

GIVEN NUMBERS	**PERFECT SQUARE NUMBER**
0, 40, 625, $\frac{18}{2}$, $\frac{1}{4}$, 25, 121, 49, 8, 27	
NOT PERFECT SQUARE	**SQUARE ROOT OF PERFECT SQUARE NUMBER**

V. Synthesis:

1. How did you decide which box the given number should be placed in?

_____

_____

_____

_____

_____

2. Were all your answers correct? If not, why do you think some of your answers were not correct? What will you do to avoid this error next time?

_____

_____

_____

_____

_____

3. How did you compute the square roots of the perfect square numbers?

_____

_____

_____

_____

_____

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	1	**Date:**	
Lesson Title/Topic:	Square Root of Perfect Square and Cube Root of Perfect Cube		
Name:		**Grade & Section:**	

I. Activity No. 2: Perfect Cube and Cube Root

II. Objective(s):

1. The learners identify a perfect cube.
2. The learners determine the cube root of a perfect cube.

III. Materials Needed: Pencil or ballpen

IV. Instructions:

1. Identify whether the given number is a perfect cube or not. Place the number inside the appropriate box.
2. If the number is a perfect cube, then determine or compute its cube root. Write your answer inside the appropriate box.

GIVEN NUMBERS	**PERFECT CUBE NUMBER**
-27 0 512 8 81 9 729 $-\frac{1}{27}$ $\frac{4}{64}$ 64	
NOT PERFECT CUBE	**CUBE ROOT OF PERFECT CUBE NUMBER**

V. Synthesis:

1. How did you decide which box the given number should be placed in?

_____

_____

_____

_____

_____

2. Were all your answers correct? If not, why do you think some of your answers were not correct? What will you do to avoid this error next time?

_____

_____

_____

_____

_____

3. How did you compute the cube roots of the perfect cube numbers?

_____

_____

_____

_____

_____

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	1	**Date:**	
Lesson Title/Topic:	Irrational Numbers Involving Square Root and Cube Root		
Name:		**Grade & Section:**	

I. Activity No. 3: Irrational Numbers

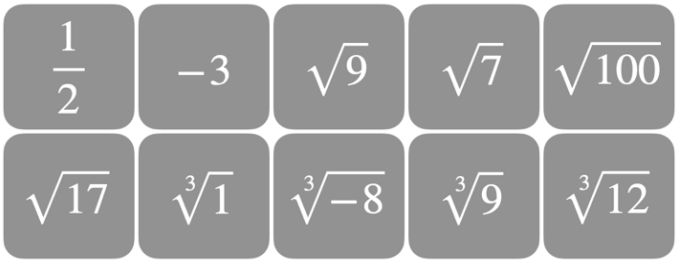
II. Objective(s):

1. The learners distinguish irrational numbers from rational numbers.
2. The learners plot irrational numbers involving square root and cube root on the number line.

III. Materials Needed: Pencil or ballpen

IV. Instructions:

1. Place the following numbers in the appropriate column.



Rational Number	Irrational Number

a. Observe the numbers in the first column. What do you observe about the rational numbers?

_____

_____

_____

b. Observe the numbers in the second column. What do you observe about the irrational numbers?

_____

_____

_____

2. Locate and plot the following square roots and cube roots on a number line.

a. $\sqrt{90}$

b. $\sqrt{27}$

c. $\sqrt[3]{20}$

d. $\sqrt[3]{75}$

3. Estimate the given square root or cube root and find the letter that corresponds to it on the number line.

a. $\sqrt{15}$ Answer: _____

b. $\sqrt{38}$ Answer: _____

c. $\sqrt{99}$ Answer: _____

d. $\sqrt[3]{20}$ Answer: _____

e. $\sqrt[3]{388}$ Answer: _____

4. Plot the points on the number line.

a. Point A: $\sqrt{26}$

b. Point B: $\sqrt{68}$

c. Point C: $\sqrt{32}$

d. Point D: $\sqrt[3]{40}$

e. Point E: $\sqrt[3]{-199}$

V. Synthesis:

1. How do you identify a square root or cube root that is rational or irrational?

_____

_____

_____

_____

_____

2. How do you estimate and plot irrational numbers involving square root and cube root?

_____

_____

_____

_____

_____

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	1	**Date:**	
Lesson Title/Topic:	Irrational Numbers Involving Square Root and Cube Root		
Name:		**Grade & Section:**	

I. **Post-lesson Activity:** Summary of the Lesson

II. **Objective(s):** The learners demonstrate their understanding of (a) perfect square, (b) perfect cube, (c) square root, (c) cube root, and (d) irrational numbers involving square root and cube root.

III. **Materials Needed:** Pencil or ballpen

IV. **Instructions:**

1. Define and give an example for each term:

Perfect square	Perfect cube
Square root	Cube root
Irrational numbers (involving square root and cube root)	

2. Answer the following questions:

a. How do you compute the square root of a perfect square?	
b. How do you compute the cube root of a perfect cube?	
c. How do you plot irrational numbers involving square root and cube root?	

V. Synthesis:

In which situation or instances in your everyday life can you apply the concept of perfect square, perfect cube, square root, cube root, and irrational numbers involving square root and cube root?