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DepED
DEPARTMENT OF EDUCATION

Learning Activity Sheet for Mathematics

Quarter 2
Lesson
4

Worksheet for Mathematics Grade 7
Quarter 2: Lesson 4 (Week 4)
SY 2024-2025

Development Team

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LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	4	**Date:**	
Lesson Title/ Topic:	Volume of Cylinder		
Name:		**Grade & Section:**	

I. **Activity No. 1:** Review on Area of Circles and Volume of Prisms/Cube (20 minutes)

II. **Objective(s):** By the end of this activity, the learners are able to solve problems involving circles.

III. **Materials Needed:** pencil or ballpen; calculator; and worksheets

IV. **Instructions:** Do letters A and B. Use the blank spaces provided for solutions. Complete the table below by solving measurements of circles and filling in the missing values. Use $\pi = 3.14$. (2 points each)

Radius	Diameter	Area
12 m	3)	5)
1)	16 in	6)
2)	4)	153.86 cm^2

Solutions:

A. Find the volume of the following solids. Draw the sketch of the solid. Write your complete solution and sketch inside the box provided below. (5 points each.)

1) A rectangular prism whose length measures 5 inches, width is 7 inches, and height is 9 inches.

Solution:	**Sketch:**

2) A square prism with height measures 8 meters and the side of the square base is 6 meters.

Solution:	**Sketch of the figure:**

3) A cube with an edge measuring 7 feet.

Solution:	**Sketch of the figure:**

V. Synthesis/Extended Practice/Differentiation:

Read and answer the following questions. Write your answer in the space provided.

1) How did you solve the missing dimensions and areas to complete the table?

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2) What steps did you take to solve the problems?

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3) What challenges did you encounter in solving the problems?

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4) What is/are the importance of solving problems involving volumes of prisms and areas of circles?

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LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	4	**Date:**	
Lesson Title/ Topic:	Volume of Cylinder		
Name:		**Grade & Section:**	

I. **Activity No. 2:** Practice/Drill 1 (20 minutes)

II. **Objective(s):** By the end of this activity, the learners should be able to solve problems involving the volumes of cylinders.

III. **Materials Needed:** pencil or ballpen; and calculator

IV. **Instructions:** Find the volumes of each solid figure by doing the steps below.

1. Draw the solid figure in the space provided.
2. Label the drawing with the corresponding measurements.
3. Answer the guide questions in complete sentences.
4. Write the complete solution of each problem inside the box.
5. Be guided by the rubric.

Criteria	Points	Accumulated Points
Accuracy of solution	**3**	
Correct diagram/sketch	**2**	
Proper use of mathematical symbols	**2**	
Correct final answer	**3**	
Total	**10**	

1) A cylinder with a diameter measuring 24 in and a height of 24 in.

- What is asked in the problem?

  _____

- What is the unit used in the problem?

  _____

- What is the volume of the cylinder?

  _____

Solutions:

Final Answer: _____

2) A cylinder whose radius measures 40 cm and height 30 cm.

- What is asked in the problem?

  _____

- What is the unit used in the problem?

  _____

- What is the volume of the cylinder?

  _____

Solutions:

Final Answer: _____

3) A can of paint whose diameter is 6.5 in and height of 8 in.

- What is asked in the problem?

  _____

- What is the unit used in the problem?

  _____

- What is the volume of the cylinder?

  _____

Solutions:

Final Answer: _____

V. Synthesis/Extended Practice/Differentiation (if needed):

Read and answer the following questions. Write your answer in the space provided.

1. How did you solve the problems?

_____
_____
_____
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2. What steps did you take to solve the problem?

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3. What challenges did you encounter in solving the problems?

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LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	4	**Date:**	
Lesson Title/ Topic:	Volume of Cylinder		
Name:		**Grade & Section:**	

I. **Activity No. 3:** Practice/Drill 2 (15 minutes)

II. **Objective(s):** By the end of this activity, the learners should be able to solve problems involving cylinders.

III. **Materials Needed:** pencil or ballpen; and calculator

IV. **Instructions:** Solve the following problems by doing these steps.

1. Draw the solid figure in the space provided.
2. Label the drawing with the corresponding measurements.
3. Answer the guide questions in complete sentences.
4. Show the solutions.
5. Be guided by the rubric.

Criteria	Points	Accumulated Points
Accuracy of solution	**3**	
Correct diagram	**2**	
Proper use of mathematical symbols	**2**	
Correct final answer	**3**	
Total	**10**	

1) Find the height of a cylinder with a volume of 10,851.84 in^3 and a radius of 12 in.

- What is asked in the problem?

  _____

- What is the unit used in the problem?

  _____

- What is the height of the cylinder?

  _____

Solutions:

Final Answer: _____

2) Find the radius of a cylinder whose volume is 150,720 cm^3 and height of 30 cm.

- What is asked in the problem?

  _____

- What is the unit used in the problem?

  _____

- What is the height of the cylinder?

  _____

Solutions:

Final Answer: _____

3) Find the area of the base of a can of paint whose volume is 265.33 m^3 and height of 8 meters.

- What is asked in the problem?

  _____

- What is the unit used in the problem?

  _____

- What is the height of the cylinder?

  _____

Solutions:

Final Answer: _____

V. Synthesis/Extended Practice/Differentiation (if needed):

Read and answer the following questions. Write your answer in the space provided.

1. How did you solve the problems?

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2. What steps did you take to solve the problem?

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3. What challenges did you encounter in solving the problems?

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LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	4	**Date:**	
Lesson Title/ Topic:	Volume of Cylinder		
Name:		**Grade & Section:**	

I. **Activity No. 4:** Formative Assessment (50 minutes)

II. **Objective(s):** By the end of this activity, the learners are able to solve problems involving volumes of cylinders.

III. **Materials Needed:** Pencil or Ballpen; and Calculator

IV. **Instructions:** Solve the following problems using the steps below. Use $\pi = 3.14$. (10 pts each item)

1. Draw the solid figure in the space provided.
2. Label the drawing with the corresponding measurements.
3. Show the solutions.
4. Write the final answer in complete sentences.
5. Be guided by the rubric.

Criteria	Points	Accumulated Points
Accuracy of solution	**3**	
Correct diagram	**2**	
Proper use of mathematical symbols	**2**	
Correct final answer	**3**	
Total	**10**	

1) Find the volume of a cylinder having a radius of 7 inches and a height of 10 inches.

Solutions:

Final Answer: _____

2) What is the radius of a cylinder having a height of 5 meters, and a volume of 141.3 cubic meters?

Solutions:

Final Answer: _____

3) What is the height of a cylinder having a volume of 549.5 cubic feet and a radius of 5 feet?

Solutions:

Final Answer: _____

4) How many liters of water is needed to fill a circular swimming pool of a diameter 21 feet and a depth of 8 feet? (1 cu. ft. ≈ 28.32 liters)

Solutions:

Final Answer: _____

5) The owner of a newly constructed house plans to install a cylindrical water tank with exactly 4 feet in diameter that can hold at least 50 cubic feet of water. At least how long/high should the tank be?

Solutions:

Final Answer: _____

V. Synthesis/Extended Practice/Differentiation (if needed):

Read and answer the following questions. Write your answer in the space provided.

1. How did you solve the problems?

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_____

2. What steps did you take to solve the problem?

_____

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3. What challenges did you encounter in solving the problems?

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