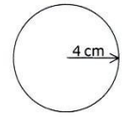
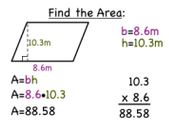
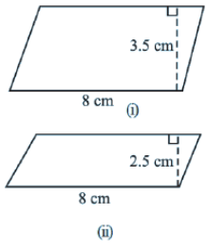
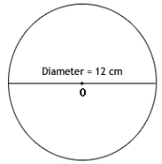
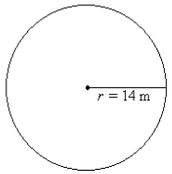
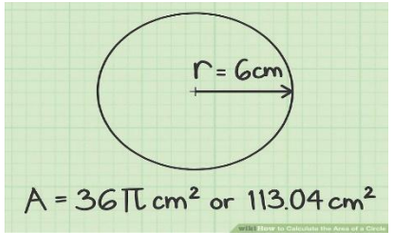
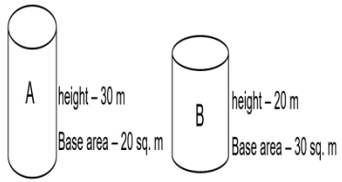
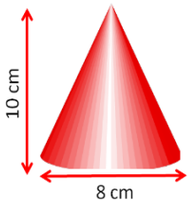
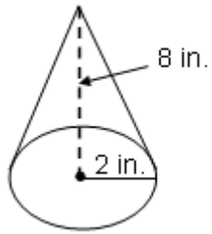
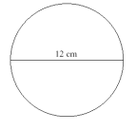
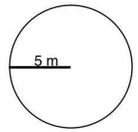
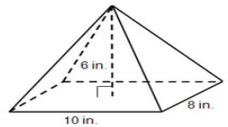
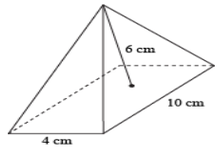
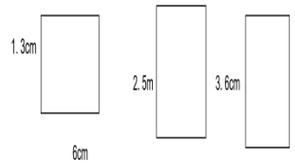
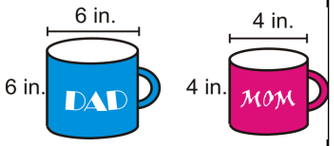
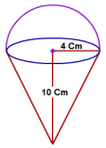
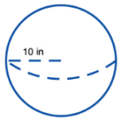
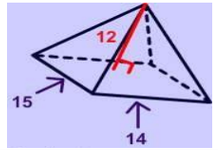
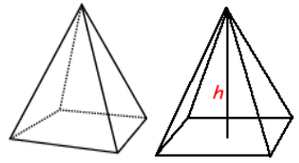
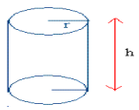
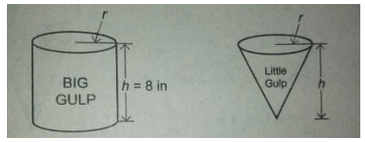
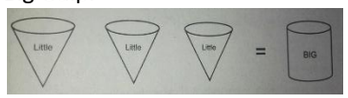
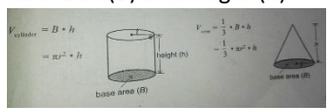
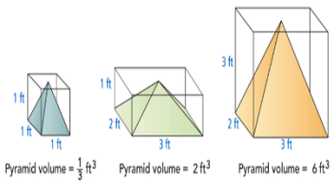
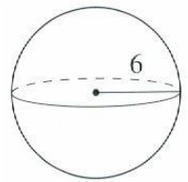
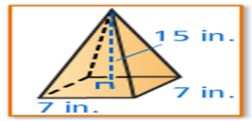
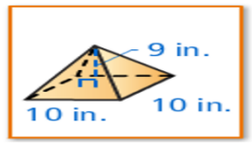
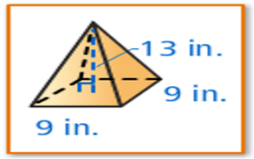
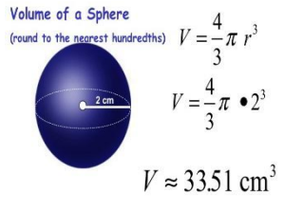
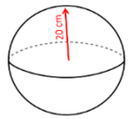
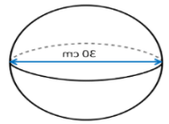
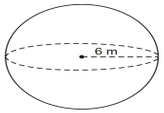
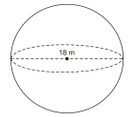
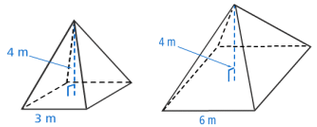
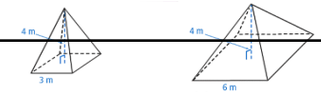
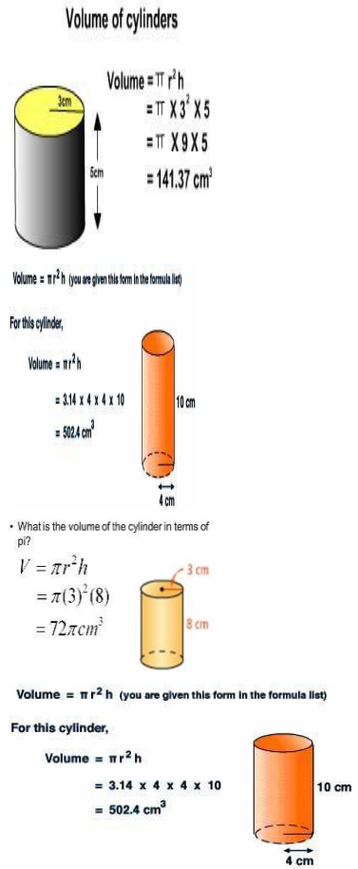
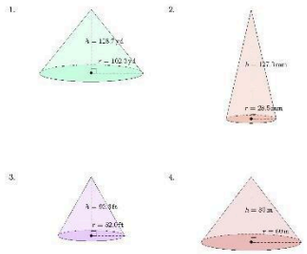
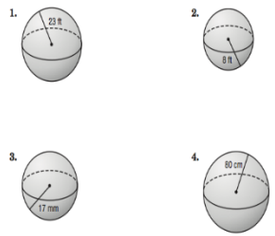
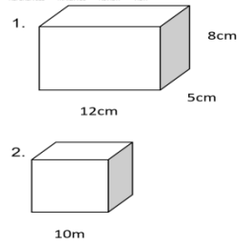
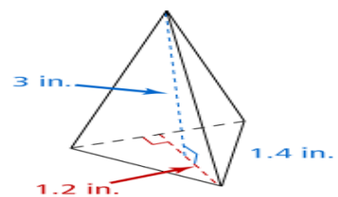
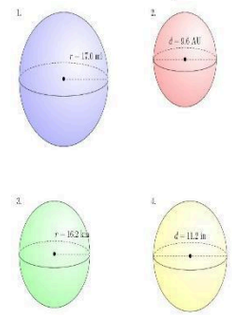
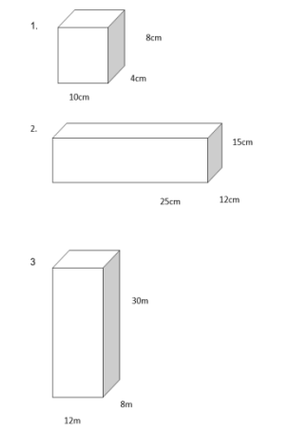
GRADES 1 to 12 DAILY LESSON LOG	School:	Visit DepEdResources.com for More	Grade Level:	VI
	Teacher:	File created by Ma'am ANNALICE R. QUINAY	Learning Area:	MATHEMATICS
	Teaching Dates and Time:	APRIL 8 – 12, 2024 (WEEK 2)	Quarter:	4TH QUARTER

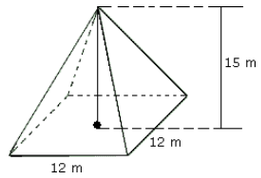
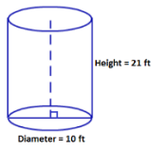
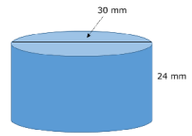
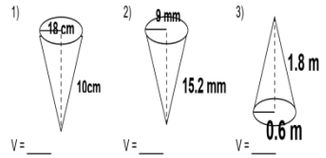
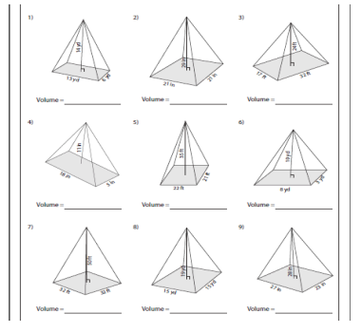
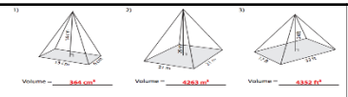
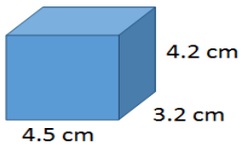
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
I. OBJECTIVES	The learner…….				
A. Content Standard	demonstrates understanding of volume of solid figures and meter reading.				
B. Performance Standard	is able to apply knowledge of volume of solid figures and meter reading in mathematical problems and real-life situations.				
C. Learning Competencies / Objectives	finds the volume of cylinders M6ME-IVb-97	finds the volume of cones M6ME-IVb-97	finds the volume of pyramids M6ME-IVb-97	finds the volume of spheres. M6ME-IVb-97	Finds the volume of a given cube and rectangular prism. M6ME-IVb-97
Measurement	Measurement	Measurement	Measurement	Measurement	Measurement
III. LEARNING RESOURCES					
A. References					
1. Teacher's Guide pages	21ST Century Mathletes	21ST Century Mathletes	21ST Century Mathletes	21ST Century Mathletes,	21ST Century Mathletes
2. Learner's Materials pages	21st Century Mathletes 6	21st Century Mathletes 6,	21st Century Mathletes 6	21st Century Mathletes 6, p. 272-285	21st Century Mathletes 6
3. Textbook pages	21st Century Mathletes 6	21st Century Mathletes 6	21st Century Mathletes 6	21st Century Mathletes 6	21st Century Mathletes 6
4. Additional Materials from Learning Resource (LR) Portal					
B. Other Learning Resources	Mathletes 6 textbook, power point presentation	Mathletes 6 textbook, power point presentation	Mathletes 6 textbook, power point presentation	Mathletes 6 textbook, power point presentation	Mathletes 6 textbook, power point presentation
IV. PROCEDURES					
A.Reviewing previous lesson or presenting the new lesson	**Mental Computation Drill: Pi x a number.** 1. π2 2. π5 3. π10 4. $\pi 6^2$ 5. $\pi 3^2$ Review: Find the area of the ff. circles:	Drill: Find the product of the ff. 1. 1/3 x 8 2. 1/3 x 5 3. 1/3 x 3.14 x 3 4. 1/3 x 22/7 x 6 5. 1/3 x 3.14 x 2 Review: Look at the illustrations below. Which cylindrical will hold more	Drill: Find the product of the ff. 1. 12 x 8 x 1/3 2. 1/3 x 10 x 7 3. 1/3 x 15 x 8 4. 1/3 x 20 x 6 5. 0.6 x 2 x 1/3 Review: Find the volume of the ff:	Drill: Find the product of the ff. 1. 8 x 8 x 8 2. 5 x 5 x 5 3. 10 x 10 x 10 4. 7^3 5. 6^3 Drill: Find the area of the ff. circles 1.  2.	Drill: Finding the area of parallelogram,rectangle and square.  

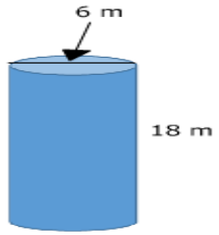
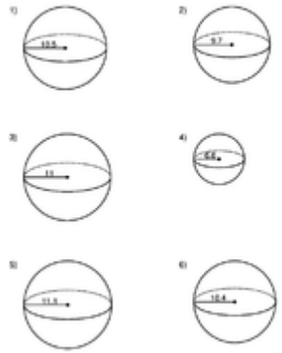
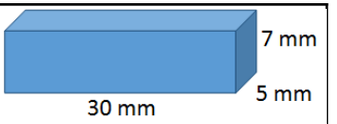
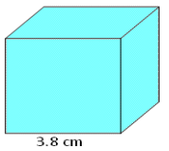
	  	water? Show your solutions. 	 	 3.  4.What is the area of a circle with radius of 3 m ? 5. The diameter of a circle is 0.4m. What is the area? Review: Find the volume of the ff:  	 Review: Find the volume of the ff.    
B.Establishing a purpose for the lesson	Show 2 cylinders to the class and guess which has the greatest or least volume.	What kinds of things can you think of, in real life, when you hear the word cone? possible answers: ice cream cone,orange caution cone, birthday hat, and volcano. Let them draw the objects. Have them define or describe a cone. Original File Submitted and Formatted by DepEd Club Member - visit depedclub.com for more	Take a look at the following pyramids.  How are they different from the rectangular prisms? Possible answer: Pyramid has only 1 base while rectangular prism has two Bases.	What are examples of spheres found all around us? -The planet is a sphere. -Basketballs and soccer balls are spheres	Show a transparent plastic container filled with balls. Ask pupils to guess the number of balls inside the container. Let a volunteer count the balls to find out the answer. Elicit from them how they can make a good guess of the total number of balls. Relate this to the concept of volume.

			The bases are joined together by the sides		
C.Presenting Examples/Instances of new lesson	**Volume of cylinders** The volume of a cylinder is the amount of space inside the cylinder. Finding the volume of cylinder is similar to finding the volume of any prism. Given the radius and h, the volume of cylinders can be found by using the formula:  **Volumecylinder = Area of base × height = pi × r^2× h**and you can use 3.14 for pi. Example: Find the volume of coffee in this mug at the right. (See p. 291) Solution: πx r^2xh =3.14 x 6^2 x 12 =3.14 x 36 x 12 V= 1356.48 cm^3 So, the volume of this mug is 1356.48 cm^3	At Five-six convenience store, you can buy a Big Gulp or a Little Gulp juice. The Big Gulp comes in a can, while the Little Gulp is served in cone.  How many bases does a cone have? What is the shape of the base of the cone? The Big Gulp and Little Gulp containers have equal radii (plural of radius) and equal heights. So, it takes three Little Gulps to fill one Big Gulp.  What fraction of the volume of the Big Gulp is the volume of Little Gulp? The volume of cones is 1/3 the volume of a cylinder with same base area (B) and height (h)  The formula for the volume of cone is 1/3 the base (B) times the height (h) **V=1/3 x Bxh or 1/3 x πr²xh**	Look for a pattern in the volumes of the prism and pyramid pairs  Suppose you have a pyramid and a prism with the same base and the same height. By turning these solid figures into containers you can show a relationship between their volumes. It **takes 3 of the pyramid to fill the prism.** **So** the volume of the prism is three times the volume of the pyramid. This means that the volume of the pyramid is 1/3 the volume of the prism. So **the volume of a pyramid equals 1/3*Bh.**	**A sphere is the set of all points that are a given distance from a given point, the center.** **To calculate volume of a sphere, use the formula in the blue box.** **V= 4/3πr³** Volume is measured in cubic units. Example: Find the volume of sphere below.  Solution: V = $\frac{4}{3}\pi r^3$ = $(3.14)(6)^3$ = (678.24) = 904.32 $units^3$ **VOLUME OF A SPHERE** **Words**: The volume V of a sphere is $\frac{4}{3}\pi$ times the cube of the radius r. **Numbers**:  $V = \left(\frac{4}{3}\right)\pi(3^3)$ $= \frac{108}{3}\pi$ $= 36\pi$ $\approx 113.1\ units^3$ **Formula**: $V = \left(\frac{4}{3}\right)\pi r^3$	Using concrete objects Let a pupil fill a rectangular box with cubes. Ask the pupils the following questions: How many cubes did it take to fill the prism? How many cubic units is the length/ the width? the height? Define these situations as finding the volume of solids. Define volume as the number of cubic units used to fill up a space. Use correct unit of measure. Using this definition, ask the pupils the volume of rectangular prism. Let them state the formula for the volume of a rectangular prism as V=lxwxh.
D.Discussing new concepts and practicing new skills #1	Show a video of volume of cylinder.	Show a video of volume of cone	Show a video of volume of pyramid	Show a video of volume of sphere	Show a video of volume of rectangular prism

E.Discussing new concepts and practicing new skills #2	Group Activity: 1) Distribute a cylinder to each group. 2) Let them measure the height and the radius of each cylinder in cm. 3) Let them solve for the volume of their cylinders using the formula. 4) Group sharing follows afterwards.	Group Activity: 1) Distribute a cone to each group. 2) Let them measure the height and the radius of each cone in cm. 3) Let them solve for the volume of their cone using the formula. 4) Group sharing follows afterwards.	Group Activity: Find the volume of the ff.   	Group Activity: Find the volume of the ff. Example:  1.  2.  3.  4. 	Solve for the volume of these rectangular prisms, given their measurements. 1. l=9m w=4m h=3m 2. l= 10cm w=7cm h=15cm 3. s=12cm 4.l=14 m w=10m h=9m 5. s=6m
F.Developing mastery (Leads to Formative Assessment)	Pair-share: Find the volume of the ff.	Pair-share: Find the volume of the ff.	What happens to the volume of a square pyramid when you double the side length of the base?  Solution:  V = 1/3 Bh V = 1/3 (3) (3) (4) V = 1/3 Bh V = 1/3 (6) (6) (4)	Find the volume of each sphere.Round to the nearest tenth.	Pair-share: Find the volume of the ff.

					
G.Finding practical applications of concepts and skills in daily living	Individual practice: 1.Calculate the Volume of cylinder if r = 2 cm and h = 5 cm Answer: Volumecylinder = pi × r2× h Volumecylinder = 3.14 × 22× 5 Volumecylinder = 3.14 × 4 × 5 Volumecylinder = 3.14 × 20 Volumecylinder = 62.8 cm3 2. Calculate the Volume of cylinder if r = 4 inches and h = 8 inches Answer: Volumecylinder = pi × r2× h Volumecylinder = 3.14 × 42× 8	Individual practice: **1:** Find the volume of a cone, if radius is 4 cm and height is 9 cm. **Solution:** Radius r= 4 cm Height h= 9 cm Using the volume of a cone formula, Volume of cone = $\frac{1}{3}\pi r^2 h$ Volume of cone = 1/3 x 3.14 x 4² x 9 = 150.72 cm³	Individual practice: Ms. Adventure's tea package has the shape of a regular triangular pyramid. To the nearest tenth of a cubic inch, how much tea can the package hold? 1. 	Individual practice: Find the volume of the ff. 	Find the volume: 

	Volumecylinder = 3.14 × 16 × 8 Volumecylinder = 3.14 × 128 Volumecylinder = 401.92 inches3	**2:** Find the volume of a cone which has the base radius of 8 cm and height 10.24cm **Solution:** Given, Radius r= 8 cm height= 10.24 cm Using the formula of volume of cone, Volume of cone = $\frac{1}{3}\pi r^2 h$ Volumeof cone = $\frac{1}{3} \times \frac{22}{7} \times 8^2 \times 10.24 = 686.65cm^3$	V = 1/3 Bh V = 1/3 (1/2*bh) (h) V = 1/3 (1/2)(1.4) (1.2) (3) V = 5.04/6 V = 0.84 in³ V = 0.8 in³ 2. 		
H.Making generalizations and abstractions about the lesson	**How can you find the volume of a cylinder?** Calculate the area of the base (which is a circle) by using the equation πr² where r is the radius of the circle. Then, multiply the area of the base by the height of the **cylinder** to find the **volume**.	**How can you find the volume of a cone?** You can calculate the volume of a cone easily once you know its height and radius and can plug those measurements into the formula for finding the volume of a cone. The formula for finding the volume of a cone is **v = hπr²/3 or** $\frac{1}{3}\pi r^2 h$	**How can you find the volume of a pyramid?** To calculate the volume of a pyramid, use the formula *V=1/3lwh* , where *l* and *w* are the length and width of the base, and *h* is the height. You can also use the equivalent formula *V=1/3 $A_b h$* , where A_b is the area of the base and *h* is the height. The method varies slightly depending on whether the pyramid has a triangular or a rectangular base.	**How can you find the volume of a sphere?** This is the equation: V = ⁴⁄₃ π r³. ... Find the radius. If you're given the radius, then you can move on to the next step. ... Cube the radius. ... Multiply the cubed radius by 4/3. ... Multiply the equation by π.	**How can you find the volume of a cube/ rectangular prism?** To **find the volume of a rectangular prism**, we multiply the length of the **prism** by the width of the **prism** by the height of the **prism**
I.Evaluating Learning	Find the exact volume of each cylinder: 1.  2. 	Find the exact volume of each cone:  Fill in the blanks:	Find the volume of the ff.  Answer: 	Find the volume of each sphere.	Find the volume of each figure. 1.  2.

	 3. 4) B = 530.66 sq. m. h = 18 cm V = _____ 5.radius= 1.5dm height= 3.7 dm Volume= _____	1)diameter=16 radius = _____ height = 2.6 m Volume = _____ 2)diameter = 14 cm, radius = _____, height = 5.1 cm, Volume = _____ 3)diameter= 24, r = _____, h = 2.1 m, V = _____		 7.radius=25 cm Volume= _____ 8. diameter=8 m Volume= _____ 9. r=6.5 cm V= _____ 10. r=18 dm V= _____	 3.  4. l=4m w=7mh=3m 5.s=18cm 6. s=25cm 7.l=8cm w=6cm h=10cm
J.Additional activities for application and remediation	A. Complete the table. Use the formula $V = \pi r^2 h$, where $\pi = 3.14$. |	Radius (r)	Diameter (d)	Height (h)	Volume
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Cylinder A	6 cm		14 cm	
Cylinder B	110 mm		250 mm	
Cylinder C		40 cm	75 cm	
Cylinder D	1.75 dm		3.9 dm	
Cylinder E		9 m	7.1 m			Solve for the missing value to complete the table. Use $\pi = 3.14$. | Cone	Radius	Diameter	Height	Volume
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1	___	20 dm	15 dm	___
2	1.5 m	___	2.7 m	___
3	40 cm	___	72 cm	___
4	48 cm	___	___	72 345.6 cm^3
5	___	___	9 dm	150.72 dm^3			Find the volume of each prism. 1. l=4m w=2.5m h=-3.5m V=____ 2. l=8cm w=4cm h=5cm V=____ 3. l=16.5cm w=12cm h=8cm V=____ 4. l=7m w=2m h=4m V=____ 5. l=16cm w=7cm h=12cm V=____
V. Remarks					
VI. REFLECTIONS					
A. No. of learners who earned 80% on the formative assessment					
B. No. of learners who require additional activities for remediation who scored below 80%					
C. Did the remedial lessons work? No. of learners who have caught up with the lesson					
D. No. of learners who continue to require remediation					

E. Which of my teaching strategies worked well? Why did this work?					
F. What difficulties did I encountered which my principal or supervisor can help me solve?					
G. What innovation or localized materials did I use/discover which I wish to share with other teachers?					