

School:		Grade Level:	VI
Teacher:		Learning Area:	MATHEMATICS
Teaching Dates and Time:	WEEK 3	Quarter:	4 TH 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	of solid figures and meter reading in math	ematical problems and real-life situation	ons.		
C. Learning Competencies / Objectives	solves routine and non-routine problems involving volumes of cylinder, cone and sphere M6ME-IVc-98	solves routine and non-routine problems involving volumes of pyramid, cubes and prisms. M6ME-IVC-98	creates problems involving surface area of solid/space figures, with reasonable answers. M6ME-IVc-99	creates problems involving volume of solid/space figures, with reasonable answers. M6ME-IVc-99	Get at least 80% mastery from the lessons learned.	
Measurement	Measurement	Measurement	Measurement	Measurement	Weekly Test	
III. LEARNING RESOURCES						
A. References						
1. Teacher's Guide pages	21 ST Century Mathletes	21 ST Century Mathletes	21 ST Century Mathletes	21 ST Century Mathletes,		
2. Learner's Materials pages	21st Century Mathletes 6	21st Century Mathletes 6,	21st Century Mathletes 6	21st Century Mathletes 6		
3. Textbook pages	21 st Century Mathletes 6	21 st Century Mathletes 6	21 st Century Mathletes 6	21 st Century Mathletes 6		
4. Additional Materials from Learning Resource (LR) Portal	Math 6 DLP Mod. 59	Math 6 DLP Mod. 59	Math 6 DLP Mod. 59	Math 6 DLP Mod. 59		
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		
IV. PROCEDURES						
A.Reviewing previous lesson or presenting the new lesson	Mental Computation Drill: Multiplying Fractions and Whole Numbers: ¼ x 8 x 10 ¾ x ½ x 5 75 x 8 50 x 7 1/5 x 6 Review: Match the formula to the name and picture of the solid figure.	Drill: Have a drill on the multiplication of fractions and whole numbers using the activity sheet. Example: $\frac{1}{3} \times 6 \times 8 40 \times 6$ $\frac{1}{3} \times 7 \times 9 51 \times 7$ $\frac{1}{3} \times 21 \times 4$ Review: A. Solve the ff. problems: 1.The milk can is in the shape of a cylinder. It has a radius of 3 cm. and a height of 6 cm. Find its volume. 2.The toy hat of Alex is in the shape of a cone. Its base area is 72 cm² and its height is 21 cm. What is its volume?	Activity (Group Work) Mechanics: 1)Divide the class into 3 groups. 2)Group 1 will be given name of solid figure. 3)Group 2 will be given the formula on how to get the surface area of the solid figure. 4)Pupils holding the activity cards will stand, raise the activity cards they are holding and go around to look for their partners while singing the song, "Math Song." Mathematics (2x), how it thrills (2x) It is so exciting, and so interesting I love Math (2x) Mathematics (2x), Challenging (2x)	Activity (Group Work) Mechanics: 1)Divide the class into 3 groups. 2)Group 1 will be given name of solid figure. 3)Group 2 will be given the formula on how to get the volume of solid figure. 4)Pupils holding the activity cards will stand, raise the activity cards they are holding and go around to look for their partners while singing the song, "Math Song." Mathematics (2x), how it thrills (2x) It is so exciting, and so interesting I love Math (2x) Mathematics (2x), Challenging (2x)		

	Figure Name Volume Formula a. Cylinder 1) $V = \frac{1}{3}(ur^2h)$ II. D. Rectangular Prism 2) $V = \pi r^2h$ III. c. Cone 3) $V = h dh$ IV. d. Square Pyramid 4) $V = g \frac{h}{3}$	3. a sphere has a radius of 45cm. what is its volume? B. What is the formula in getting the volume of cube? Rectangular prism? Pyramid?	Numbers are ideas, numerals are symbols Math, Math, Math (2x) 5) As soon as they find their partners, they read together what is written on their activity cards. 6) The first to find their partners will be the winner. Solid Surface Area	Numbers are ideas, numerals are symbols Math, Math, Math (2x) 5)As soon as they find their partners, they read together what is written on their activity cards. 6)The first to find their partners will be the winner. Solid Volume
			Rectangular Solid 2x[(WxL)+(WxH)+ (LxH)] Cube 6xS² Cylinder 2xπxr²+πxDxH Sphere 4xπxr² Cone πxrx[r+(r²+H²)½]	Rectangular Solid $L \times W \times H$ Cube S^3 Cylinder $\pi \times r^2 \times H$ Sphere $\frac{4}{3} \times \pi \times r^3$ Cone $\frac{1}{3} \times \pi \times r^2 \times H$
			Review: Analyze then solve the problems. 1.A box is 10 cm long, 12 cm wide and 20 cm high. Find its volume? 2. A pyramid has a square base of side 20 cm and a height of 15 cm. Find the volumeof the pyramid. 3. The height of a cube is 7 decimeter. Find the volume of the cube.	Review: Create problems involving surface area based on the given situation below. 1. the length of a box is 3 dm, the width is 6 dm, and the height is 5.2 dm 2. The side of a cube measures 12 dm. 3. The radius of a spherical tank is 2.5 m. 4. a cylindrical tank of radius 8 dm
B.Establishing a purpose for the lesson	Give each group a set of steps in solving problems. Let them arrange the steps in correct order. (This can be done in the form of a game.) Ex.: What operation is needed to solve the problem? What are the given facts? What is the correct number sentence? Write the solution with correct label. What is being asked?	Group the pupils into four. Let them write the 4-step plan in solving problems. Original File Submitted and Formatted by DepEd Club Member - visit depedclub.com for more	Let the pupils read the problem below: A cylinder shaped water pitcher has a radius of 6 inches and a height of 11.4 inches. Find the surface area of the pitcher. Ask: Can you create a problem on surface area similar to the one given? Call 1 pupil to give example problem.	and a height of 15 dm Let the pupils read the problem below: 1. A milk can has a height of 12 cm and a radius of 3.5 cm. What is its volume? Ask: Can you create a problem on volume similar to the one given? Call 1 pupil to give example problem. Say: This time you will create problems involving the volume of a solid figures.

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			Say: This time you will create	
			problems involving the volume of a	
			solid figures.	
C.Presenting Examples/Instances of	Activity 1 – News Report (Class →	Present this problem to the class:	Group activity:	Group activity:
new lesson	Group Activity)	Emilio and Jose pitched a tent that	1.Group the pupils into four.	1.Group the pupils into four.
	1)Let one pupil read the news report.	has a shape of a pyramid. The base of	2.The teacher will distribute	2.The teacher will distribute
	(This can be written on manila	the tent is a rectangle that is 2.5	problems on surface area of solid	problems on volume of solid figures
	paper.)	meters wide and 2.8 meters long. The	figures	3.Let them create their own
	Quezon City – an electric post, 150	tent is 2 meters high. What is the	3.Let them create their own	problem similar to the one given to
	cm long with radius 15 cm, was hit	volume of the tent? Round your	problem similar to the one given to	them.
	by a truck yesterday at 4:30 a.m.	answer to the nearest hundreds.	them.	4.Let them choose a reporter to
	This caused a two-hour brownout in	A.Understand.	4.Let them choose a reporter to	explain the work of the group.
	the area. The driver, Mr. Luis	What is asked?	explain the work of the group.	Group 1:
	Mercado, and his friend, Mr. Mark	What are the given facts?	Group 1:	a.A juice box is 4 in . tall, 1 in . wide,
	Fernando, were rushed to the nearby	B.Plan.	1.Jason is wrapping a present. The	and 2 in . long. How much juice fits
	hospital. Luckily, they just had mild	Which formula(s) shall we use to solve	box he is using is a rectangular	inside the juice box?
	contusions and minor bruises. The	the problem?	prism with a length of 15 inches, a	Group 2;
	two were being questioned as to the	C.Solve.	width 8 inches and a height of 6	Cinema theaters created a new
	cause of the accident – Ruby Hilario.	Show your computation.	inches. Find how many square	popcorn box in the shape of a
	2)Discussion:	D.Check.	inches of paper he needs to wrap	rectangular prism. The new
	a)What was the news all about?	Go back to your computation. Check if	the entire box.	popcorn box has a length of 6
	b)Why do you think the truck hit the	the given dimensions are properly	Group 2	inches, a width of 3 . 5 inches, and a
	post?	substituted to the formula.	2. A certain music box has the	height of 3 . 5 inches. How much
	c)How can you avoid accidents (of	Check the flow of your computation.	shape of a cube. Each side of the	popcorn does the box hold?
	any form)?	(See answer on page 294, Mathletes	music box is 20 cm long. What is the	Group 3:
	d)What kind of solid figure is given in	txbk)	surface area of the box?	1. Dante built a wooden, cubic toy
	the news?	,	Group 3	box for his son. Each side of the box
	Can you read that part.		3. A cosmetics company that makes	measures 2 feet.
	I am going to use the electric post to		small cylindrical bars of soap wraps	How many cubic feet of toys will
	solve a problem. Let's see if you can		the bars in plastic prior to shipping.	the box hold?
	find the answer.		Find the surface area of a bar of	Group 4:
	Time the unswell		soap if the diameter is 4 cm and the	Find the volume of a right circular
			height is 2.5 cm. (Use π =3.14)	cone-shaped building with a height
			Group 4	of 10 cm and a radius of 8 cm.
			Find the surface area of a right	
			circular cone-shaped building with a	
			height of 10 cm and a radius of 8	
			cm.	
D.Discussing new concepts and	Group the pupils into 5.	Group Activity:	After the activities are done, let the	After the activities are done, let the
practicing new skills #1	Let them answer the activity below:	Present a story problem:	groups post their created problems	groups post their created problems
Practically lies of this at	Find the volume of the electric post,	Victor and Carlos are brothers. They	from the given situations and let	from the given situations and let
	150 cm long with radius15 cm,that	share their toys with each other. One	them follow the task below.	them follow the task below.
	was hit by a truck.	day, they were playing with dominoes.	Read the problem and ask the class	Read the problem and ask the class
	e)Analysis of the problem:	They were making different shapes	to solve the problem.	to solve the problem.
	Tejranaiyaia of the problem.	They were making unterent snapes	to solve the problem.	to solve the problem.

electric post using the given facts. What are we looking for in the problem?
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E.Discussing new concepts and	Present another problem to the	Group Activity: Use the 4-step plan in	Group activity: Make a problem	Group activity: Make a problem
practicing new skills #2	class.	solving the problem.	involving surface area based on the	involving the volume based on the
practicing new skins #2	A spherical tank for natural gas has a	A water container measures 5 dm on	given situation. Let the other group	given situation. Let the other group
	radius of 7 meters. About how many	each edge. How much water can it	find the answer to the problems.	find the answer to the problems.
	cubic meters of natural gas can it	hold?	1. the length is 2 m, the width is 3	1. the length is 2 m, the width is 3
	hold? Use $\pi = 22/7$. Round your	noid:	m, and the height is 1.2 m of a	m, and the height is 1.2 m of a
	answer to the nearest hundredth.	Understand	rectangular box.	rectangular box.
	Analysis of the problem: (Let the	Know what is asked.	2. The side of a cube measures 25	2. The side of a cube measures 25
	group of pupils answer the ff.	Know the given facts.	Cm.	CM.
	questions, then choose 1 leader to	Plan	3. The radius of a spherical tank is	3. The radius of a spherical tank is
	explain their work)	Determine the operation or formula	1.5 m.	1.5 m.
	A.Understand.	to use	4.A pyramid has a square base of	4.A pyramid has a square base of
	What is asked?	Solve	side 15 cm and a height of 14 cm.	side 15 cm and a height of 14 cm.
	What are the given facts?	Show how the solution is done.	5. a cylindrical tank of radius 5 dm	5. a cylindrical tank of radius 5 dm
	B.Plan.	Check and Look Back	and a height of 10 dm	and a height of 10 dm.
	Which formula(s) shall we use to	Verify if the answer is correct.		
	solve the problem?			
	C.Solve.			
	Show your computation.			
	D.Check.			
	Go back to your computation. Check			
	if the given dimensions are properly			
	substituted to the formula.			
	Check the flow of your computation.			
F.Developing mastery	Group Activity:	A pyramid has a height of 16 dm. Its	Pair-share:	Pair-share:
(Leads to Formative Assessment)	Solve the following problems. (The	base is 84 sq. dm. What is its volume?	Create problem surface area using	Create problem surface area using
	pupils may follow the analysis format	1. What is asked? The volume of the	the given data below.	the given data below.
	as given or they can make their own	pyramid.	1)A piece of soap is 9 cm by 4 cm by	1)A piece of soap is 9 cm by 4 cm by
	as long as they can explain their	2. What are given? Height = 16 dm,	3cm.	3cm.
	answers.)	base = 84 sq. dm.	Problem:	Problem:
	Answer the ff. questions.	3. What operation will be used?	Answer:	Answer:
	1. What is asked?	Multiplication and Division.	2)An aquarium is 0.8 m long, 0.4 m	2)An aquarium is 0.8 m long, 0.4 m
	2. What are given?	4. What is the number sentence? V	wide, and 0.45 dm deep.	wide, and 0.45 dm deep.
	3. What operation will be used?	=1/3 Bh	3)An iron bar 2 m long and 0.05 m	3)An iron bar 2 m long and 0.05 m
	4. What is the number sentence?	5. What is the solution?	in diameter.	in diameter.
	5. What is the solution?	V = 1/3 Bh	Problem:	Problem:
	6. What is the answer?	V = 1/31/3x 84 dm ² x 16 dm	Answer:	Answer:
	1.Peter has a cylinder shaped can. If	$V = 1/3x 1,344 \text{ dm}^3$	4)An ice cream cone 2 cm in radius	4)An ice cream cone 2 cm in radius
	the can measures 30 cm.	V = 1,344/3	and 6 cm in height.	and 6 cm in height.
	high and has a radius of 10 cm. how	V= 448 dm ³	Problem:	Problem:
	much water can it hold?	6. What is the answer? The volume	Answer:	Answer:
	2.An ice cream cone has a diameter	of the pyramid is 448 dm ³ .		
	of 32 mm. and a height of 45 mm.	''		
	What is its volume?			
	vviiat is its voiume:	l .	l .	

	3.Find the volume of a volleyball that	I			ī
	has a radius of 4 ½ decimeters. Use				
	$\frac{1}{22}$ 7 for π .				
C Finding anatical analizations of	-	A Deed and analyse arch much law	Cura va Antivita v	Cura una Alabinista u	
G.Finding practical applications of	Solving word problems involving	A. Read and analyze each problem.	Group Activity:	Group Activity:	
concepts and skills in daily living	measurement of volume following	Then answer the questions that	Let the pupils create problems	Let the pupils create problems	
	the steps in solving problems	follow.	involving surface area for the	involving volume for the following	
	Analyze the problem and study the	1.The base of a pyramid is 15 cm by	following situations then solve for	situations, then solve for the	
	answers to the questions.	21 cm. Its height is 28 cm. Compute	the answer:	answer.	
	1.)Find the volume of a ball with a	the volume.	a)a box 44 cm by 9 cm by 6 cm	a)a box 44 cm by 9 cm by 6 cm	
	diameter of 112 cm.	2. How many cubic meters of palay	Problem:	Problem:	
	1. What is asked?	can be placed in a box that is 45 m	Answer:	Answer:	
	2. What are given?	long, 8 m wide and 7 m high?	b)a cone with height 9 dm and	b)a cone with height 9 dm and	
	3. What operation is to be used?	3. A chalk box measures 18 cm on	radius 4 dm	radius 4 dm	
	4. What is the number sentence?	each edge. What is the volume of the	Problem:	Problem:	
	5. What is the solution?	box??	Answer:	Answer:	
	6. What is the answer?		c)a cabinet 1.2 m by 0.9 m by 0.5 m	c)a cabinet 1.2 m by 0.9 m by 0.5 m	
	2.)A cylinder has a radius of 8 cm.	1. What is asked?	Problem:	Problem:	
	and a height of 20 cm. What is its	2. What are given?	Answer:	Answer:	
	volume?	3. What operation will be used?	d)a ball with radius 10 cm	d)a ball with radius 10 cm	
	1. The problem asked for is	4. What is the number sentence?	Problem:	Problem:	
	2.The given are	5. What is the solution?	Answer:	Answer:	
	3.The number sentence is	6. What is the answer?	e)a cylindrical tank 25 dm long and	e)a cylindrical tank 25 dm long and	
	4.The answer is		radius 8 dm	radius 8 dm	
	3.)A cone has a radius of 10 m and a		Problem:	Problem:	
	height of 18 meters. Find its volume.		Answer:	Answer:	
	1. What is asked?		,		
	2. What are given?				
	3. What operation is to be used?				
	4. What is the number sentence?				
	5. What is the solution?				
	6. What is the answer?				
II Making ganavalizations and	 	lying mansurament of volume?	Ask the following questions:	Ask the following questions:	
H.Making generalizations and abstractions about the lesson	How do you solve word problems invol	=	Ask the following questions:	Ask the following questions:	
abstractions about the lesson	The following are the steps in solving w		What did you do to be able to	What did you do to be able to	
	of volume following the steps in solving		create problems involving the	create problems involving the	
	A. Know and understand the problem,		surface area of solid figures?	volume of solid figures?	
	1. What is asked?		What are the steps in creating	What are the steps in creating	
	2. What are given?		problems?	problems?	
	3. What is the word clue and operation	to be used?	Steps in creating problems.	Steps in creating problems.	
	B. Plan for the solution.		Familiarize yourself in the concepts.		
	1. What is the number sentence?		Think of an explanation to everyday	Familiarize yourself in the concepts.	
	C. Carry out the plan.		life real situations.	Think of an explanation to everyday	
	1. Solve the number sentence.		Think of the type of problem you	life real situations.	
	2. What is the answer?		want to create and the formula to	Think of the type of problem you	
	D. Look back and check.			want to create and the formula to	

Analyze then solve the problems. 1)A conical tent has a base of 45.7dm in diameter and a height of 24.8dm. What is the volume of the air that it holds? 2.A milk can has a height of 2.A milk can has a height of 3.5 cm. What is its volume? Find the volume of a pipe with a height of 1.5 m and a diameter of 0.18 m. Analyze then solve the problems. 1.A box of corn flakes is 7 cm long, 9 cm wide and 14 cm high. Find its volume? 2.Each book of a set of encyclopedia measures 2.85 dm by 2.15 dm by 0.4 dm. The encyclopedia has 19 books. What is the total volume of all 19 books? Analyze then solve the problems. 1.A box of corn flakes is 7 cm long, 9 cm wide and 14 cm high. Find its volume? 2.Each book of a set of encyclopedia measures 2.85 dm by 2.15 dm by 0.4 dm. The encyclopedia has 19 books. What is the total volume of all 19 books? Analyze then solve the problems. 1.A box of corn flakes is 7 cm long, 9 cm wide and 14 cm high. Find its volume? 2.Each book of a set of encyclopedia measures 2.85 dm by 2.15 dm by 0.4 dm. The encyclopedia has 19 books. What is the total volume of all 19 books? What is the total volume of all 19 books? Analyze then solve the problems. 1.A box of corn flakes is 7 cm long, 9 cm wide and 14 cm high. Find its volume? 2.Each book of a set of encyclopedia measures 2.85 dm by 2.15 dm by 0.4 dm. The encyclopedia has 19 books. What is the total volume of all 19 books? What is the total volume of all 19 books? Analyze then solve the problems. Analyze then sol		Solve the ff. problems: 1)A cone hat has a radius of 1.2 dm and a height of 3.4 dm. What is its volume? 2)Harold is molding a cylindrical candle with a diameter of 12 cm and a height of 18 cm. About how much wax does Harold need to mold the candle? 3.) A volleyball has a radius of 5.2 decimeters. What is its volume? Use 22/7 for π . 4.) A cone-shaped paper cup has a		be used. Relate the problem to real life situations. Study the solution in solving the problems. Make your own styles/strategies to justify the solutions. Let the pupils create problems involving surface area for the following situations: Solve for the answer. 1. A small gift box measures 8 cm long, 7 cm wide and 2 cm high. 2. A rectangular water tank is 5 meter high, 2 m wide and 3 m long. 3. rectangular prism with length of 5 m, width 7 m, and the height is 14.5 m. 4. a cube measures 30 cm. 5. a spherical tank with a radius of 1.5 m	be used. Relate the problem to real life situations. Study the solution in solving the problems. Make your own styles/strategies to justify the solutions Let the pupils create problems involving surface area for the following situations. Solve for the answer. 1. A small gift box measures 8 cm long, 7 cm wide and 2 cm high. 2. A rectangular water tank is 5 meter high, 2 m wide and 3 m long. 3. rectangular prism with length of 5 m, width 7 m, and the height is 14.5 m. 4. a cube measures 30 cm. 5. a spherical tank with a radius of 1.5 m	
V. Remarks	and remediation	1)A conical tent has a base of 45.7dm in diameter and a height of 24.8dm. What is the volume of the air that it holds? 2.A milk can has a height of 12 cm and a radius of 3.5 cm. What is its volume? Find the volume of a pipe with a height of 1.5 m and a	1.A box of corn flakes is 7 cm long, 9 cm wide and 14 cm high. Find its volume? 2.Each book of a set of encyclopedia measures 2.85 dm by 2.15 dm by 0.4 dm. The encyclopedia has 19 books. What is the total volume of all 19	surface area. Write the answer to each problem on your answer sheet. You may use an aquarium, shoebox, swimming pool, and other	volume. Write the answer to each problem on your answer sheet. You may use an aquarium, shoebox, swimming pool, and other	
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?			

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