Grade 7
Distance Learning Module 3:   Week of: 4/13th – 17th

Content Area: Math Course: Grade 7 Pre-Algebra   - *Modified from Unit C - Geometry*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids. Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

Vocabulary: prism, come, sphere, cylinder, pyramid, surface area, nets

Skills: Students will be able to find the volume prisms, cones, spheres, cylinders and pyramids. Students will be able to find the surface area of prisms, cylinders and pyramids by using nets.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: You will work with volume today. You will find the volume of prisms and cylinders.	What is a prism? video How to find volume of prisms or cylinders video Kuta Volume (#1,5,6,7,9,13,14) Don't do the pyramids Optional Practice Worksheet	Khan practice will be viewed by the teacher. Volume of Cylinders (Khan Practice)
Tuesday:	Video How many cones does it take to fill a cylinder with the same height and base?	Khan practice will be viewed by the teacher. Volume of Cones (Khan)

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
More work with volume today. This time we will start with the pointy" 3D shapes like pyramids and cones.	Video: How many Rect. Pyramids to Fill a Rect Prism with same Base and Height? (no words - just watch) Video on how to find the volume of pyramids and cones Kuta Worksheet (same as Monday)(do #3,4,8,11,16)	
Wednesday: Today you will add one more shape to the list of shapes that you can find the volume of: a sphere. Do enough of the worksheet to feel confident before doing the Khan Practice.	Video #1 Proof of Vol of Sphere Formula How to Use the Volume Formula Practice Problems(units can be written like: cubic ft) Kuta Worksheet Volume of Sphere(optional)	Khan Practice Volume of a Sphere
Thursday: Last Monday you found the surface area of prisms and pyramids using nets. Today we will add cylinders to the list of 3D shapes that you can find the surface area of. Before you start: Imagine a can of soup with a radius of 10 mm and a height of 20 mm. Can you find the surface area using nets? If you can you can skip all the practice problems!	Video: How to Find the Surface Area of a Cylinder Notes on SA of a Cylinder SA of a Cylinder Worksheet (do a few)	Surface Area of a Cylinder Checkin as a google form but do the one your teacher assigned in google classroom

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Friday: Today you will do a mix of problems involving 3D shapes and volume or surface area.	If you need it a volume formula sheet	Khan Academy Look on Khan for the assignment

Week criteria for success (attach student checklists or rubrics):

1) I can find the volume of a prism or cylinder using the idea: volume= (area of the base)(height of object)
2) I can find the volume of a pyramid or cone using the idea: volume = (⅓)(area of the base)(height of the object)
3) I can find the volume of a sphere using the formula: volume = $(4/3)\pi\ r^3$
4) I can find the surface area of a variety of 3D shapes including a cylinder by using nets. (but not a sphere)
5) I can solve 'real world' problems involving surface area and volume.

Supportive resources and tutorials for the week (plans for re-teaching):

1) Watch optional videos and do optional problem sets above.
2) Tell your teacher so you can get individualized help.
3) Helpful packet