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ED514: Lesson Plan

**Objective:** The students will investigate and solve problems involving surface area.

M2C7 Solve problems involving circumference and/or area of a circle and surface area/volume of a rectangular or triangular prism, or cylinder

**Analysis:** This lesson will be the introduction to surface area of figures and will take 1 class period. The students will need to know how to find the area of different polygons before beginning this lesson. They will then take what they know about area and relate that to finding the surface area of figures. Finding the surface area of a figure is hard for students to get a full understanding when using a 3 dimensional figure on paper; the students have to make up the net for it. Using the online figures will allow the students to take the figures apart and add dimensions and then provide instant feedback so the students can check their progress.

**Design and Development:**

Materials Needed

* Internet
* Smartboard
* Computers for each student
* Pencil
* Paper

The lesson will begin by discussing what they think the surface area of a figure is. Then we will go through the interactive lesson on <http://www.brainingcamp.com/resources/math/surface-area/lesson.php> . The online lesson will allow them to discover how the area of each side of a figure relates to the formula for surface area of each figure. We will then practice finding the surface area of a few using the interactive problems on that website. After a few problems the students will find the surface area of prisms and cylinders using the website provided for them, <http://www.learner.org/interactives/geometry/area_surface.html>. As the students get done finding the surface area they will click on the website provided. These questions are word problems of how surface area is used real life applications

**Implementation:** There is only one teacher in the room with many questions. To help solve this problem the students will be buddied up with someone and they will do the work on their own but if they get stuck they are to ask their partner for assistance first. Also I implemented the word problems if students get done early. These practice problems allow the students to think more because now they cannot just plug numbers in the formula they will have to think about what the question is asking.

**Evaluation:** I will assess the students with an exit ticket. The students will be asked to explain in words what surface area is and then also the steps to solving a surface area problem. This will allow me to decide if they understood the objective today or reteach what surface area is the following day. Rubric will be 0- 2 pts for each question, 2 pts awarded for clear and detailed explanations and 0 for inaccurate answers.