Subject/Grade:Math 9	**Lesson Title:Surface Area**	**Teacher: Mr. Zanidean**

Stage 1: Identify Desired Results

Established Goals: (Learning outcome/s & indicator/s from curriculum)

SS9.2 Extend understanding of surface area of right rectangular prisms, right cylinders, right triangle prisms, to composite 3D objects.

Determine the surface area of 3D composite objects

Understandings: (can also be written as 'I Can' statements) U *Students will understand…* *3D composite objects*	**Essential Questions:** **How do we find the area?** **How do we find surface area?** **How do we find the surface area of a composite object?**

Students will know… K *surface area*	*Students will be able to…* D determine

Stage 2: Determine Evidence for Assessing Learning

Have students determine the length of all the shapes and put one answer they have found on the board. This allows them to share their work but still have individual responsibility. Can keep this anonymous when sharing the work. All the Lengths will be pre determined so it allows assessment of their understanding of the topic.

Stage 3: Build Learning Plan

Instructional Strategies:

-Think-Share-Compare
-Engage activity
- Collective problem solving

Set (Engagement): Group Review **Length of Time: 10 min** **Have shapes drawn on the board as 2 dimensional, work through the problems with students to refresh them on area of all the common shapes. Present the objects they will be determining the surface area. Ask the questions without giving them answers to engage in thinking how to find the surface area of each.** **Development: Self Exploration Time: 20 min** **Have the shapes in different areas of the room so that students can get up and move around the room while figuring out the surface area of each object. This allows the students to work as a group without actually assigning groups. Walk between stations to assist students who are struggling and keep them on task.** **Closure: Composite Objects Time: 15 min** Have students gather back at their desk and review the surface area of the shapes they were working with. Then take different shapes and get students to see and think how we would find the surface area of a 3D composite object. Work through the problem as a class.	**Materials/Resources:** **Rulers** **Paper** **Pencils** **Shapes** **Possible Adaptations/ Differentiation:** **-Get students to do different parts of solving for area depending on comprehension levels** **-Allow students to work in pairs to compare thoughts** **Management Strategies:** **Ask students questions about how they are determining key aspects (Length, width, height)** **Safety Considerations:**
Stage 4: Reflection	
Blake - have better time management. I would like to set a time and actually aim to have my lesson be that amount of time and make it work.	