

**Subject (grade):** WA 20

**Lesson Title:** Area & Volume

**Teacher:** Nicholas Ciarciaglini (Mr. Ciarciaglini)

**Timeframe:**

60 Mins

**Desired Results:**

Objectives/Outcome(s)/Indicator(s):

**WA20.3** Extend and apply understanding of surface area, volume, and capacity using concrete and pictorial models and symbolic representations (SI or imperial units of measurement).

*Key Understanding ('I can' statements):*

1. I can use the formulas:
  - a. To find the area, and surface area.
  - b. To find the volume
2. I can work on my own project.

Assessments:

In this lesson I will be assessing:

Assessment of Learning (*Formative*): I will be assessing the student's work on their projects that is the appearance of their project. (**See Rubric WA20**)

Assessment of Learning (*Summative*): I will be assessing the math behind (Area and Volume) the final product of their project. (**See Rubric WA20**)

**Procedures:**

1. The students will be measuring their two mediums.
2. Then they will figure out the area and volume of their object.
  - a. In their First Medium
    - i. Find the Area.
    - ii. Find the Volume.
  - b. In their First Medium
    - i. Find the Area.
    - ii. Find the Volume.

Additional Procedures:

If students finish, they can do it quietly collect data from other students to create graphs. Please see lesson 4: Collecting Data.

**Materials:**

The students will need the following document:

- Worksheet 2
- Their Product.

Yourself (teacher) will need:

Nothing

**Resources:**

Chapter Three of the textbook: Surface Area, Volume, and Capacity.

3.1: Surface Area of Prisms

3.2: Surface Area of Pyramids, Cylinders, Spheres & Cones

3.3: Volume and Capacity of Prisms and Cylinders

3.4: Volume and Capacity of Spheres

How to go about using Microsoft Word or Google Docs to insert equations:

[Creation of a Font](#)

**Adaptions/ Differentiations:**

Some adaptations/differentiations for this lesson:

- Allowing students to type up their Projects inside Word or Docs.
- If students need more time to finish their plan give them that extra time to work on it.
- Look at examples from the textbook about finding Surface Area & Volume.

**Management Strategies:**

Here are some management strategies for this lesson:

- If the students are fooling around and not Focusing on their own Project tell them:
  - They will not get any more class time to work on their projects.