

Subject (grade): WA 10

Lesson Title: Perimeter, Area, Volume, & Mass

Teacher: Nicholas Ciarciaglini (Mr. Ciarciaglini)

Timeframe:

Introduction:

5 – 15 minutes

Desired Results:

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

WA10.1 Demonstrate understanding of the preservation of equality including solving problems that involve the manipulation and application of formulas related to:

- Perimeter
- Area
- the Pythagorean Theorem
- primary trigonometric ratios
- income.

WA10.11 Demonstrate understanding of income including:

- wages
- salary
- contracts
- commissions
- piecework
- self-employment
- gross pay
- net pay.

Key Understanding ('I can' statements):

1. I can log all my hours.
2. I can find different measurements of their objects.
3. I can bring the materials to create my project.
4. I can design my word to in a creative way.

Assessments:

In this lesson I will be assessing:

Assessment of Learning (*Formative*): I will be assessing the student's time, going into figuring out their project (perimeter, area, volume, & mass).

Assessment of Learning (*Summative*): I will be assessing the student's calculations that they do in their project, and how accurately they do their math.

Please see the **WA10 Rubric**.

Procedures:

1. They will have 15 minutes a day in class for 5 days (1 hr 15 min) at the beginning or end of class to figure out the calculations.
 - a. Perimeter
 - b. Area
 - c. Volume
 - d. Mass
2. They will log all of their minutes working on their project.

Additional Procedures:

Please see Lesson 4: Converting.

Materials:

The students will need the following document:

- Worksheet 1: Perimeter, Area, Volume, & Mass.
- Worksheet 3: Timecard
- Worksheet 2: Converting
- Laptop (if they want to do it online)
- Workbook

Yourself (teacher) will need:

- Signing their timecard.

Resources:

Chapters Three & Four of the textbook: Length, Area and Volume & Mass Temperature, and Volume.

3.1 System of Measurements

3.3 Surface Area

3.4 Volume

4.2 Mass in Imperial

4.3 Mass in Système International

They will need if they decided to do this project in Minecraft.

[Creation of a font \(https://yarnbender.ca/home/e-portfolio/edtc-educational-technology-media/edtc-400/final-curricular-project-creation-of-a-font/\)](https://yarnbender.ca/home/e-portfolio/edtc-educational-technology-media/edtc-400/final-curricular-project-creation-of-a-font/)

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

[Creation of a font \(https://yarnbender.ca/home/e-portfolio/edtc-educational-technology-media/edtc-400/final-curricular-project-creation-of-a-font/\)](https://yarnbender.ca/home/e-portfolio/edtc-educational-technology-media/edtc-400/final-curricular-project-creation-of-a-font/)

Adaptions/ Differentiations:

Some adaptations/differentiations for this lesson:

- Allowing students to type up their plans 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 Perimeter, Area, Volume, & Mass.

Management Strategies:

Here are some management strategies for this lesson:

- Have a 15-minute timer to allow the students to work on their projects.
 - Tell them if they do not work on their projects they will lose marks.