Grade Level: 6-8
Time Estimate: 4-6 days

UNIT CONVERSION / LESSON OVERVIEW

Objectives

The students will:
- understand why different systems of measurement exist;
- understand basic principles of both the customary and metric systems of measurement;
- perform unit conversions both within and between measurement systems;
- solve unit conversion problems based on real scientific data;
- select appropriate representations of measurements based on real life situations.

Lesson Summary

Part 1. Introduction (15 – 20 minutes)
Why is measurement important? Define the units of measurement for length, weight, and volume.

Part 2. The Customary System (60 – 75 minutes)
Understand the basics of the Customary System of measurement. What are the pros and cons of using the Customary System? Is the Customary System of measurement suitable for scientific research?

Part 3. The Metric System (60 – 75 minutes)
Understand the basics of the Metric System of measurement. What are the pros and cons of using the Metric System? Is the Metric System of measurement suitable for scientific research?

Part 4. Converting between Customary and Metric (60 – 75 minutes)
Students will learn how convert data from one system of measurement to another. In doing so, students will understand the value of this skill and how it relates to scientific research.

Part 5. Review

Activity. Sharks at Great Length (30 – 45 minutes)
With this activity, students will solve unit conversion problems to determine the lengths of different species of sharks. After calculations, students will then compare the length of the sharks to everyday classroom objects.

Materials: Ruler, paper, pencils, calculator, and worksheet (provided).