

# Dimensional Analysis *Teacher's Guide*

*Students gather data, select appropriate units of measure and convert from one system to another.*

**GRADE LEVEL:** 8th

**SUBJECT AREA/COURSE:** Algebra I

**SUNSHINE STATE STANDARDS:**

- The student uses direct (measured) and indirect (not measured) measures to compare a given characteristic in either metric or customary units. (MA.B.2.3.1)
- The student solves problems involving units of measure and converts answers to a larger or smaller unit within either the metric or customary system. (MA.B.2.3.2)
- The student selects appropriate units of measurement and determines and applies significant digits in a real-world context. (Significant digits should relate to both instrument precision and to the least precise unit of measurement.) Selects appropriate units of measurement and determines and applies significant digits in a real-world context. (Significant digits should relate to both instrument precision and to the least precise unit of measurement.) (MA.B.4.3.1)

**ACADEMIC OUTCOMES/LESSON OBJECTIVES:**

- Students will convert units between standard and metric systems.
- Students will use ratios to compare units.
- Students will gather data and extrapolate information.
- Students will determine units best suited to represent data.

**MATERIALS NEEDED:** Internet access with [www. Seminole.WaterAtlas.org](http://www.Seminole.WaterAtlas.org) bookmarked, scientific calculator

**SAFETY:** N/A

**VOCABULARY:** Metric prefixes, Conversion

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