Reading Measurement Scales

<u>Grade Level</u>: 8th Grade <u>Subject</u>: Physical Science

<u>Overview</u>: Correctly reading a scale is a skill that is important to master. Many items found in a lab use scales: thermometer, graduated cylinder, beaker, ruler, spring scales, and triple beam balances.

Objective: This lesson will enable students to:

- -Define and identify various units of measurement
- -Identify the unmarked increment between the labeled intervals on a scale, such as the units between 1 and 2 centimeters on a ruler.

Materials:

- Computer and projector or print out of worksheets
- Examples of equipment where a scale of measurement must be read, such as thermometer, graduated cylinder, beaker, ruler (inches and centimeters), spring scale, and triple beam balance.

<u>Bellringer</u>:

Students should list any scales that they have used in the past week.

Lesson: Using the attached reading scales worksheets, discuss the way a measurement scale is read. Show the students how to determine the interval measurements between two indicated units. Students are to be reminded of the proper use of each piece of equipment, such as reading the meniscus on the graduated cylinder. Students can use the links below to practice reading measurement scales.

Website Links:

http://www.bbc.co.uk/schools/ks2bitesize/maths/activities/measures_fs.shtml

http://www.jabe.com/docs/Graduated%20Cylinder%20Worksheet.pdf

http://www.ehow.com/video_4994140_reading-ruler-measurement.html

http://www.active-maths.co.uk/worksheets/2measure/scales1.html

Evaluation: Set up a rotation in the lab where the students use the lab equipment (thermometer, graduated cylinder, beaker, ruler - both inches and centimeters, spring scale, and triple beam balance) to measure various objects.