

D44b weight to the nearest ounce or nearest 5 grams

D44c Temperature to the nearest 5

Liquid capacity to the nearest fluid ounce

D82a approximate comparisons between metric and US units (liter to quart kilometer to 6/10th mile)

D83a lengths to the nearest mm or 1/16th inch

D83b weight to the nearest .1 gr or .5 ounce

D83c liquid capacity to the nearest ml

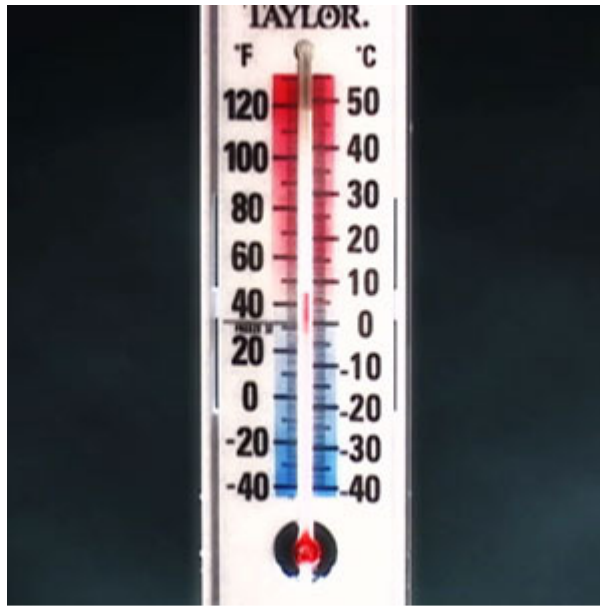
Estimation_Continued

Materials needed: Liquid measurers, weights/scale, and thermometer

Previous knowledge: How to read scales, thermometer, etc

How to round

Procedure:



1.

<http://www.learner.org/channel/courses/essential/physicalsci/images/s7.thermometer.jpg>

2. Invite a group to lesson
3. Explain that when people talk about the daily temperature, they don't always want the exact (53.4°F), but would like to know approximately or about what the temperature is going to be. Today we are going to learn how to round the temperature.
4. Remind students how we rounded with golden bead material (possibly have those materials out so the students see what an example.) Do an example of rounding to the nearest 5 with golden bead materials.
5. Have a variety of pictures of thermometers or have a cup of ice, water and air to test the temperature in.
6. Show how if the number end is 8, or 9 round up to the nearest number ending in 0 (67 goes to 70)
 - a. 0, 1, or 3 we round down to the nearest 0 (Ex: 72 goes to 70)
 - b. If it is 3, 4, 5 round up to nearest 5 (74 goes to 75)
 - c. If it ends in 6 or 7 round down to nearest number ending in 5 (66 goes to 65)

Extensions/Variation:

- Provide sufficient amount of material so students have the choices to do their follow-up work
- Do same lesson but with rounding with other measurements (grams, ounces, ml etc)