

NNIN Nanotechnology Education

## **Teacher's Preparatory Guide**

## Instructions for Measuring Center

1. Show the students each tool at the center and tell them the name and what it measures.

- 2. Some tools measure the length of something.
  - Have a student use a ruler to measure the width of a sheet of paper.
  - Have each child stand next to the wall. Put a piece of painter's tape at their height and have them use a measuring tape to measure their height.
- 3. Some tools measure the weight or mass of something.
  - Explain the double pan balance to the students.
  - Using the weights, have 2-3 students measure weight of the beans.
- 4. Some tools measure how hot or cold something is.
  - Show students the temperature of the room.
  - Let someone tell the temperature of a cup of ice
- 5. Some tools measure the volume of something.
  - Give each student a plastic bag.
  - Have a student measure 2 cups of plain flour and add to bowl.
  - Have a student measure 1 cup of salt and add to bowl.
  - Have a student measure 1 cup of cold water and add to bowl.
  - Have a student measure 1 tablespoon of baby oil and add to bowl.
  - Have a student add a drop of food coloring to bowl.
  - Mix all ingredients and then place some into each student's bag.
  - Tell them to knead their bags and when they get home they will have play dough to play with.