



Right Tool for the Job

Student Worksheet #3

Name _____

Tools that **repair** are tools that are used to put something in working order again.

Tools that **measure** are tools that use a unit or standard of measurement to find a property (for example length, weight, temperature) of an object.

Tools that help us **see** are tools that help us create a mental image of an object.

Directions: Decide if each tool is used to help repair, measure, or see. List each tool on the table below.

Repair	Measure	See

Repair:

Use one of the tools listed in the REPAIR column along with material provided in the plastic bag labeled REPAIR. Describe how you used the tool below.

_____.

Measure:

1. Using the ruler measure the length of both of the sides of this paper. Write the amounts below with the correct unit (inches or centimeters)

2. Using the beans in the bag labeled MEASURE complete the following.

It would take _____ tablespoons of beans to equal one cup of beans.

Using the double pan balance find something in the room that has the same weight as a cup of beans. _____ (You may use several items just be sure to list everything that you used.)

3. Fill the measuring cup with water. Using the thermometer take the temperature of the water and list below.

_____.

See

Using materials in the bag labeled SEE, complete the following.

1. Look at the picture with just your eyes. What do you notice about the picture?

_____.

2. Look at the picture again using the magnifying glass. What do you notice now that you did not notice with just your eyes?

_____.

3. Look at the picture again using your 3D glasses. What do you notice now about the picture?

_____.

4. Why do you think the picture now looks different?

_____.

5. Look at the lights in the room. Now put on the spectrum glasses and look at the lights. Do the lights look different or the same? _____ If different how? _____

_____.

6. Sometimes objects are too small to see even with a magnifying glass or a field microscope. Do you think that you could tell what something might look like if you could not see it?

_____ If your answer was yes, how would you be able to tell?

_____.

7. Find the plastic bag that is labeled FEELY SOCKS. The two socks contain objects in a box. DO NOT LOOK in the sock. Reaching your arm into a sock and using just your fingers feel the object inside the box. What do you think the object is? _____

8. Repeat step 7 with the second sock. What do you think the object in this sock is?

_____.

Sometimes we must use other tools like our senses to help us tell what something looks like. At other times objects are so small (like micro and nano size objects) that we must use very special instruments to be able to see these objects. Read pages 7 in Issue 3 of the Nanooze Magazine.