

**Grade Level:** Kindergarten  
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**Topic:** Science and Technology

**Title:** *Scientists use Tools!*

### **Standards**

**K.1.1** Raise questions about the natural world.

**K.2.2** Draw pictures and write words to describe objects and experiences.

### **Goals and Objectives**

- Students will conduct observations and record their data by using pictures and words in their journal.
- Students will communicate their findings verbally.
- Students will learn when and how to use a variety of scientific tools.

### **Materials**

Chart paper

Classroom magnifying glasses

Tape measure

Rulers

Pencils

Paper

Measuring cups

Thermometers

Additional items (Microscope, Binoculars, and Telescope)

Book: Science Tools by J.A. Randolph, Newbridge Discovery

Science notebooks

Post-its

Icons

### **Activities**

**Introduction:** Teacher and students will explore science tools in the classroom.

### **Procedures:**

1. Give students the Pre-test one day before the lesson (no explanation).
2. Give students the science tools and let them explore in the classroom, without directions from the teacher.
3. Regroup and list how the children used the science tools on chart paper.
4. Take the students on a picture walk of: Science Tools by J.A. Randolph.
5. Read aloud the story: Science Tools by J.A. Randolph.
6. Whole group discussion from book and inquire about how a scientist uses tools and how they used their tools. Connecting to real life experiences.
7. Divide chart paper into halves and place the science tools icons at the top of each half. (two tools to each page)

8. Pass out post-its to children and have them return to their tools and draw one thing that they could use that tool for.
9. The students will place post-its on the charts as they finish each drawing.
10. As students finish they can explore with tools until everyone has completed this activity.
11. Regroup and share their discoveries.
12. Give students the Post-Test following the lesson.

### **Assessment**

The assessment will be their drawings on their post-its as well as whole group discussion.

Pre- and Post-Test: Matching Icons to objects that can be measured.

### **Extensions:**

1. Writing in their science journal how they are like a scientist.
2. Compare ways that students used their tools (Venn Diagrams...).
3. Graph students' usage in a bar graph by rearranging the post-its they drew.
4. Give the students objects and ask them what tool they should use.