

## **LESSON PLAN** by Whitley Starnes

**Guided Discovery Lesson:** Sorting objects according to physical properties

**Length:** 30 minutes

**Grade Level:** Kindergarten

### **Academic Standard:**

Physical Science - K.1.1. Use all senses as appropriate to observe, sort and describe objects according to their composition and physical properties, such as size, color and shape. Explain these choices to others and generate questions about the objects.

### **Unpacked:**

Knowledge

- 5 senses
  - Eyes – see
  - Ears – hear
  - Mouth – taste
  - Hands – touch/feel
  - Nose - smell
- Physical properties (size, color, shape, weight)

Skills

- Observe
- Sort
- Describe
- Communicate
- Question

### **Performance Objectives:**

Given eight objects, the students will sort the objects according to their physical properties at least three different ways.

Given eight objects, the students will communicate to the teacher how they sorted the objects according to their physical properties.

### **Assessment:**

To assess the performance objectives listed above, the teacher will use a record sheet, which is located at the end of the lesson plan. (Note: To know how to fill out the record there is also an EXAMPLE record sheet located at the end of the lesson plan) This is a formative assessment and will be used to plan further instruction.

### **Advanced Preparation by Teacher:**

Record Sheet (5 copies)

5 of the follow eight objects

red buttons	washers	blue plastic spoons
red pipe cleaners	nuts	brown bobby pins
small blue balls	paper clips	

\*Place each of the eight objects into a tub.

(You will have a total of 5 tubs with eight different objects in the tub.)

\*Where to find these objects: hardware store, craft store, Walmart

### **Procedure:**

#### **Introduction/Motivation (Engage):**

1. Share the following story with the students:  
 “Over the weekend, I was cleaning out my garage and I found some interesting objects.”  
 Show the eight objects to the students one by one (**Gardner: Visual/Spatial**) and ask the students after each object is shown: “What is the name of this object?” (**Bloom: Knowledge**)
2. After the students have identified all eight objects continue with the story:  
 “I took these objects into my house and discovered that I could sort these objects into different groups. For instance, I sorted the red button and the red pipe cleaner into one pile. Next, I sorted the blue plastic spoon and the small blue ball in another pile. Then, I sorted the silver washer, nut, and paper clip into another pile. Finally, I was left with the brown bobby pin, which went into its own pile.” Ask the students: “Can someone explain to the class how I sorted my objects?” Answer: by color (**Bloom: Comprehension**)
3. Say to the students: “I have a challenge for you. I have already shown you how to sort these objects by color. Your challenge is to sort these objects another way. In groups of four, I would like for you to come up with three different ways to sort these eight objects.” (**Gardner: Verbal/Linguistic**)

#### **Step-by-Step Plan (Explore):**

4. Divide the students into five groups with four in each group. (**Gardner: Interpersonal**)
5. Give each group a tub with the eight objects in it.
6. Allow the students to observe the eight objects in the tub by using two of their senses: touching and seeing. (**Gardner: Bodily/Kinesthetic**)
7. Remind the students of the challenge, which is to sort the objects into different groups.
8. Tell the students to raise their hands when they have sorted their objects a certain way, so that you can take a look at how they sorted their objects.
9. As the students are sorting their objects do the following:
  - Go around to each group and ask: “How did you sort your objects?” (**Bloom: Analysis**) Students should also support their answer with an explanation of why each object went into each group (**Bloom: Evaluation**)
  - Fill out the record sheet for each of the groups.
  - Have each group sort and show you three different ways they sorted their object.

**Closure (Engage):**

10. Have students meet you on the floor by the teacher chair.

11. Once everyone is quietly seated, have the student's share the different ways they sorted their eight objects. As the students share with the whole class how they sorted their objects, write their responses on the chalkboard. (**Gardner: Visual/Spatial**)

**Adaptations/Enrichment:****Student with a disability in reading/language arts**

As the students are sharing the different ways they sorted their eight objects, and you are writing their responses on the chalkboard, make sure you point and say out loud each response.

**Student with Gifts and Talents in Creativity**

Have the student share/write down other things that can be sorted as well as an explanation as to how they would sort. For example, we can sort our classmates by boys and girls.

**Student with a Visual Impairment**

Have the student sit up at the front when telling the story and showing the eight objects as well as when writing students' responses on the chalkboard. Also, write students' responses in large enough print for him or her to see.

**Student with a Hearing Impairment**

Have the student sit up at the front when telling the story as well as when students are sharing the different ways they sorted their eight objects. Also, when talking to the whole group, speak in a teacher voice, and make sure your back is not turned away from him or her when you are speaking.

**Self-Reflection:**

- Were my students able to sort the eight objects in at least three different ways?
- Were my students engaged?
- Was my assessment effective?
- What parts of the lesson went well?
- What parts of the lesson did not go as well?
- How will I improve my lesson for the next time I teach?

**Group #:** \_\_\_\_\_

**Name of group members:** \_\_\_\_\_  
\_\_\_\_\_

**Performance Objective:**

Given eight objects, the students will sort the objects according to their physical properties at least three different ways.

**Sort 1:** \_\_\_\_\_ **Sort 2:** \_\_\_\_\_ **Sort 3:** \_\_\_\_\_

**Performance Objective:**

Given eight objects, the students will communicate to the teacher how they sorted the objects according to their physical properties.

**Were the students able to communicate to the teacher how they sorted the objects according to their physical properties? YES NO (Circle yes or no)**

**COMMENTS:** \_\_\_\_\_

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**EXAMPLE**

**Group #:** 1 \_\_\_\_\_

**Name of group members:** \_\_\_\_\_  
\_\_\_\_\_

**Performance Objective:**

Given eight objects, the students will sort the objects according to their physical properties at least three different ways.

**Sort 1:** Color \_\_\_\_\_ **Sort 2:** Shape \_\_\_\_\_ **Sort 3:** Size \_\_\_\_\_

**Performance Objective:**

Given eight objects, the students will communicate to the teacher how they sorted the objects according to their physical properties.

**Were the students able to communicate to the teacher how they sorted the objects according to their physical properties? YES NO (Circle yes or no)**

**COMMENTS:** Explained that they sorted by color (gray, red, and blue) \_\_\_\_\_