Matter Detectives

Observe properties, make groups, and find patterns.

2-PS1-1 "Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. Clarification Statement: Observations could include color, texture, hardness, and flexibility..."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the words that tell how Jada tested the objects. Circle each group of objects that shared a property.

Jada's Sorting Test

1. Jada wanted to sort some classroom objects by what she could observe. She made a plan. First, she would look at color and feel texture. Next, she would gently bend each item and press it with a fingernail.

2. Jada tested a blue plastic spoon, a red paper strip, a smooth metal key, and a soft cloth square. The spoon and key felt hard. The paper strip and cloth square bent easily, so they were flexible.

3. She put the spoon and key in a hard group. She put paper and cloth in a flexible group. Jada noticed a pattern: objects made from different materials can share a property. She wrote down her observations. Groups may overlap: an object could be both hard and flexible. Test each property separately.

2 ANSWER WITH EVIDENCE

Use the passage

1. What two properties did Jada plan to observe first?

2. Which objects did Jada classify as hard, and what property did they share?

3. What pattern did Jada notice about materials and properties?

3 YOUR TURN

Your own words

Choose three safe objects near you. Write a plan that tells two properties you will observe, then sort the objects into one or more groups and name the shared property for each group.

ANSWER KEY

Matter Detectives

GRADE 2 · 2-PS1-1

PART 1 · READ AND MARK

Underline the words that tell how Jada tested the objects. Circle each group of objects that shared a property. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What two properties did Jada plan to observe first?	**Color and texture.**
2	Which objects did Jada classify as hard, and what property did they share?	**The plastic spoon and metal key. They both felt hard.**
3	What pattern did Jada notice about materials and properties?	**Objects made from different materials can share a property.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I will observe texture by feeling each object and flexibility by gently trying to bend it. If my rubber band and thin plastic lid bend easily, I put them in the flexible group. If my wooden block does not bend easily, I put it in the not-flexible group. I also record each object's observed texture. My groups use the properties I actually tested.

Accept any safe objects and observable properties, such as color, texture, hardness, or flexibility. The response should include a plan, a classification, and a property shared by the objects in each group. Require a stated observation supporting each classification. Hardness and flexibility are different properties, and groups based on different properties can overlap.