

I AM NOT AN ORDINARY CHIP

Prep Time: 30 minutes

Teaching Time: 60 minutes

INSTRUCTIONS
Grade 3



Science Concept:

Materials can be classified by their physical properties.

Objectives:

The student will:

- classify objects according to their physical properties; and
- write about classification of objects.

GLEs Addressed:

Science

- [3] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.
- [3] SB1.1 The student demonstrates an understanding of the structure and properties of matter by classifying matter according to physical properties (i.e., color, size, shape, weight, texture, flexibility).

Writing

- [3] W1.2.2 The student writes for a variety of purposes and audience by using expressive language when responding to literature or producing text (e.g., journals, pictures supported by text or poetry).

Vocabulary:

categorize- to put into a category

classify- to arrange in or assign to classes (classify books by subjects)

property- a special quality of something; an attribute (the commutative property of addition) (sweetness is a property of sugar)

Materials:

- Large resealable bags (two per group)
- Pencil (one per group)
- Pen (one per group)
- Book (one per group)
- Magazine (one per group)
- Glue stick (one per group)
- Life Savers® candy (one package per group)
- Rubber band (one per group)
- Hair band tie (one per group)
- Chips, five different kinds of wide variety
- Small resealable or sandwich bags (five per group)
- Paper towels

Activity Preparation:

Prepare bags for the Gear Up and Explore activities. Prepare one set of bags per group. The bags should contain the following items:

Bag 1: a pen, a book, a glue stick, and a rubber band

Bag 2: a pencil, a magazine, a pack of Life Savers® candy, and a hair tie

Bags 3-7: a different kind of chip in each bag

Activity Procedure:

Gear Up

Process Skills: *observing, communicating, classifying, and inferring*

1. Divide students into small groups of four or less.
2. Distribute one set of bags (Bag 1 and Bag 2) to each group.
3. Instruct students to pick an item from Bag 1; each student should pick a separate item. Ask students to discuss the properties of their item within their group.
4. Ask students to pick an item (without looking) out of Bag 2 that is similar to the first item they chose; students should use their sense of touch to determine which item is similar. Instruct students to describe to group members how the second item is similar to and different from their first item.
5. Start a list on the board titled "properties," and ask students to name the properties they used to describe their objects. List items such as color, size, shape, etc.
6. Introduce the term "classify," and ask groups to classify the objects in their bags. Ask groups to explain their classification with another group. Verify students have a basic understanding of this concept before moving on.

Explore

Process Skills: *observing, communicating, classifying, and inferring*

7. Distribute one set of bags of chips (Bags 3-7) and a stack or roll of paper towels to each group.

Teacher's Note: Students will likely want to taste the chips. Explain they shouldn't taste the chips during the activity. However, depending upon school policy and classroom rules, they may be able to taste their favorite chips after the lesson is complete.

8. Instruct students to place the chips on paper towels in as many different groupings as possible; chips should be classified by their physical properties (size, shape, length, texture, color, etc.).
9. Ask students to write down their classifications.

Generalize

Process Skills: *communicating, inferring, and investigating*

10. As a class, discuss what groups discovered about their chips.
11. Ask students how they classified their chips.
12. Ask students what they have learned about classifying different groups of items.

Apply/Assess

Process Skills: *infer and classify*

13. Instruct students to retrieve five to eight items from their desks or the classroom in three to five different ways.
14. Instruct students to draw the items on paper and write a few words or sentences to explain the different classifications.

Extension Idea:

Process Skill: *measuring*

15. Ask students to compare and order objects according to their shape and size.

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Objective	GLE	Emergent	Developing	Proficient	Advanced
The student classifies objects according to their physical properties.	[3] SA1.1 [3] SB1.1	The student does not classify any objects using physical properties.	The student classifies in one or two ways using physical properties.	The student classifies in three or four ways using physical properties.	The student classifies in five ways using physical properties.
The student writes about classification of objects.	[3] W1.2.2	The student does not write any sentences.	The student draws pictures of items but does not write any sentences.	The student draws pictures of three to four items that are classified and writes a sentence for each classification.	The student draws five or more items and writes a sentence for each classification.