

Name _____

Date _____

Class _____

MYSTERY BOXES!

A-B Share: What is the purpose of science? Might someone be doing when they're doing scientific work?

In your own words, explain what you think science is:

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You are about to be given a small black disk. **BE VERY CAREFUL WITH THIS ITEM.** It is fragile and can easily break. You can hold it, move it around, turn it over, and gently explore it. **DO NOT SHAKE IT, PRESS ON IT, OR TRY TO OPEN IT.**

Observe: Record at least 3 observations about the items:

1.
2.
3.
4.

A-B Share: Share your observations with your partner. Then work together to come up with at least 3 questions related to this activity. Record those questions below:

1.
2.
3.

A-B Share: Choose a question and discuss a possible *procedure* for testing that question.

In your opinion, is what we are doing right now science? Why or why not?

PART 2

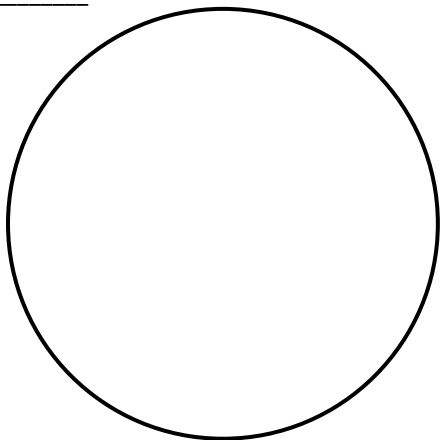
Questions: What is the configuration, or design, inside the closed container? Is the inside of every container the same? Are some the same and some different? Are they all different?

Known Data: The mystery boxes have a steel ball inside that moves within the container. You are unable to see or touch the inside of the box.

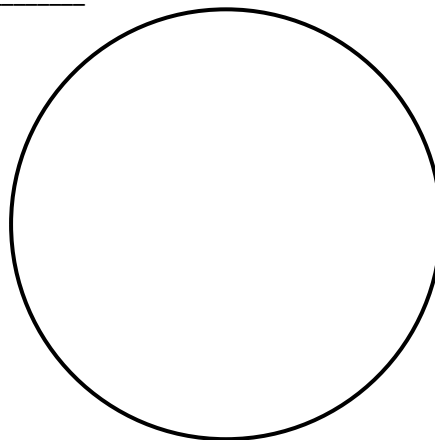
Procedure:

- 1.) Carefully tilt your container around.
- 2.) From the sound and path of the steel ball, determine the shape and location of the walls inside.
- 3.) Draw your “hypothesis” or best guess for the appearance of the inside of the container.
- 4.) Repeat with 3 additional containers.

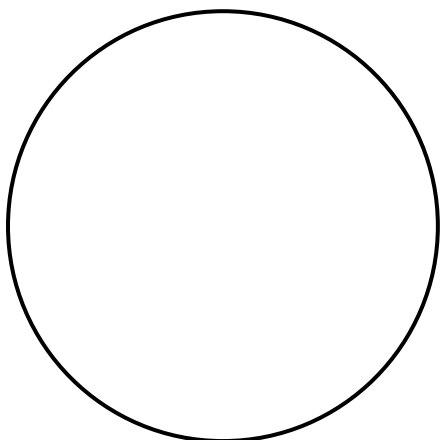
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