



- \_\_\_\_\_ 1. Emily found a helium-filled balloon floating a few feet above the floor with its string dragging on the floor. She then did the following:

- I. She lifted the string of the balloon gently off the floor and noticed that the balloon started to rise.
- II. She said, "I think the balloon cannot lift the whole length of string. If I cut the string shorter, the balloon should rise."
- III. She cut the string very short.
- IV. Seeing that the balloon then rose, she said, "I think I was right."

At which point did Emily formulate a hypothesis?

- A. I
  - B. II
  - C. III
  - D. IV
- \_\_\_\_\_ 2. Emily now decides to setup an experiment to officially test her hypothesis. She begins by having an experimental group of 10 balloons with just enough helium so that their strings drag the floor. Her control group uses 10 balloons fully filled with helium resting against the ceiling with strings hanging down. She then cuts the strings of the balloons in the experimental group. Her science teacher looks at her plan and suggests she has made a mistake. What is her mistake?
- A. She is using too many balloons in each group.
  - B. The balloons in the experimental group are only partially filled with helium.
  - C. The balloons in the control group have full strings.
  - D. The balloons in the control group are fully filled with helium.