

Cause and Effect

The following examples are actual MCAS questions. However, due to copyrights laws the actual text is not available.

1. The picture below shows five ring magnets that are stacked around a pencil. When the pencil is held upright, the magnets do not touch, but appear to be suspended in the air. When the magnets are pushed closer together, they quickly return to their original positions.

- a. Explain why the magnets are not touching each other and appear to be suspended in air.
- b. Describe what would happen if the pencil were taken away.
The magnets were then rearranged so they stacked around the pencil as shown below.
- c. Explain how the magnets were rearranged on the pencil so that they stacked directly on top of each other as shown.
- d. Describe what would happen if the pencil were taken away. (Grade 5, 2006)

2. Volcanoes sometimes erupt violently for days or weeks. At other times, volcanoes can be quiet, with only a small amount of activity coming from their cores.

- a. Describe how volcanoes can change the landscape rapidly. In your description, be sure to include which parts of the landscape change and what materials are involved.
- b. Describe how the landscape around the volcano can change over many years. In your description, be sure to include what parts of the landscape are changed and what materials are involved. (Grade 5, 2006)

3.. A satellite dish and a dog's ears are pictured below. The satellite dish and the dog's ear are alike in some ways.

- a. Describe one way the structure of the satellite dish is similar to the structure of the dog's ear.
- b. Describe one similarity in what the satellite dish does and what the dog's ear does.
- c. Describe one difference between what the satellite dish does and what the dog's ear does. (Grade 5, 2006)