



Variables, Constants, and Controls Worksheet

Read the given scenarios below. Identify each required component.

Scenario 1:

A student is studying how far room temperature water would squirt out of a plastic milk carton when 4mm holes are punched at different heights from the bottom of the container.

Independent variable: _____

Dependent variable: _____

Constants: _____

Scenario 2:

A student is studying how long it takes a cat to react to different sounds played at the same volume each time.

Independent variable: _____

Dependent variable: _____

Constants: _____

Scenario 3:

A student is trying to find out which type of fertilizer is the best for getting a plant to grow as tall as possible. She is planning to keep all of the plants she is testing indoors, on the window sill of her classroom.

Independent variable: _____

Dependent variable: _____

Constants: _____

What could the student use as a control for this experiment? _____



Scenario 4:

A student wanted to find out if different mixtures would result in an ice cube floating at a different height than only using water. He created solutions of salt water, sugar water, and water with potassium added to it. He used an ice cube tray to create ice cubes that were all the same volume and mass.

Independent variable: _____

Dependent variable: _____

Constants: _____

What could the student use as a control for this experiment? _____