

Scenario 6 * Amount of water & plants

Ten seeds were planted in each of 5 pots found around the house that contained 500 g of "Pete's Potting Soil." The pots were given the following amounts of distilled water each day for 40 days: Pot 1, 50 ml; Pot 2, 100 ml; Pot 3, 150 ml; Pot 4, 200 ml; Pot 5, 250 ml. Because Pot 3 received the recommended amount of water, it was used as a control. The height of each plant was measured at the end of the experiment.

Scenario 7 * Color of Food & Student Choice

Gloria wanted to find out if the color of food would affect whether kindergarten children would select it for lunch. She put food coloring into 4 identical bowls of mashed potatoes. The colors were red, green, yellow and blue. Each child chose a scoop of potatoes of the color of their choice. Gloria did this experiment using 100 students. She recorded the number of students that chose each color.

Scenario 8 * Height of Hole in a carton & distance

Susie wondered if the height of a hole punched in the side of a quart-size milk carton would affect how far from the container a liquid would spurt when the carton was full of the liquid. She used 4 identical cartons and punched the same size hole in each. The hole was placed at a different height on one side of each of the containers. The height of the holes were 5, 10, 15 and 20 cm from the base of the carton. She put her finger over the hole and filled the carton to a height of 25 cm with a liquid. When each carton was filled, she placed it in the sink and removed her finger. Susie measured how far away from the carton's base the liquid had squirted when it hit the bottom of the sink.

Scenario 9 * Insulation & Heat Transfer

Ester became interested in insulation while her parent's new house was being built. She decided to determine which insulation transferred the least heat. She filled each of 5 jars half-full with water. She sealed each jar with a plastic lid. Then she wrapped each jar with a different kind of insulation. She put the jars outside in the direct sunlight. Later, she measured the temperature of the water in each jar.

Scenario 10* Competition & Growth

Sandy heard that plants compete for space. She decided to test this idea. She bought a mixture of flower seeds and some potting soil. Into each of 5 plastic cups she put the same amount of soil. In the first cup she planted 2 seeds, in the second cup she planted 4 seeds, in the third cup 8 seeds, and in the fourth cup she planted 16 seeds. In the last cup she planted 32 seeds. After 25 days, she determined which set of plants looked best.