

Perfect Pumpkins

Alberta, Megan, and Tom are trying to grow the largest pumpkin for the state fair. They decide to use the greenhouse behind Mr. K's room. They want to test which type of soil is best suited for growing pumpkins. Alberta, Megan and Tom decide that if they can determine which type of soil is best suited to grow pumpkins, they will win the blue ribbon. Before completing the tests, they all think that potting soil will work best because it contains plenty of organic material, which helps the soil hold water. They plant pumpkin seeds in regular dirt dug from behind the school, sandy soil found at Megan's house, and store-bought potting soil. They fill three clay pots with the regular dirt and label them Pot A, Pot B, and Pot C. They also fill three clay pots with the sandy soil and label them Pot A, Pot B, and Pot C. Finally, they fill three clay pots with the potting soil and label them Pot A, Pot B, and Pot C. In each pot, they plant the same species of pumpkin seed, water them with the same amount of water, and place them in the greenhouse so that they all get the same amount of sunlight. After the pumpkins grow, they measure how much each pumpkin weighs from each type of soil and record their findings.

What is the independent (manipulated) variable in the experiment?

What is the dependent (responding) variable in the experiment?

Name three controls (constants) involved in the experiment.

According to the passage, what was their hypothesis?

On loose leaf paper, write a detailed procedure to complete this investigation. Include a data table for the results.