

Name _____

period _____

Science Skills-6

Finding Constants

As you know, whatever can change or vary in an experiment is called a variable. There are many variables in an experiment. To have a valid experiment one variable must be tested and one must respond. All the other variables must not be changed. These variables that are not changed are called constants.

Read the following experiments and identify two constants.

Jose wanted to find out if putting different amounts of water in glasses would make a different sound when a metal spoon was tapped against the side of the glass. Jose used five glasses, each the same size and shape - 16 cm tall. They were filled to the heights of 2, 4, 6, 8 and 10 cm.

1. _____
2. _____

Daisy wanted to find out if different places on the tongue tasted different flavors. She used a cotton swab and touched four places on her tongue (tip, each side and the back) with salt water, sugar water, lemon water and quinine water.

3. _____
4. _____

Christopher wanted to find out what types of food attracted houseflies. He placed a plate on the counter in the kitchen with the following foods: a slice of ham, a piece of cheese, a slice of a banana and a cooked green bean.

5. _____
6. _____

Michelle wanted to find out how long batteries lasted. She placed the D-cell batteries in flashlights and turned them on. She timed how long they stayed on. She used Duracell, Ray-O-Vac, Energizer and Dollar Store batteries.

7. _____
8. _____

Maria wanted to find out if temperature had an effect on how fast water evaporated. She placed 2 ml of water in a Petri dish and put the Petri dish under different light bulbs. She timed how long it took for the water to evaporate. She used 60, 75, 100 and 150watt light bulbs.

9. _____

10. _____

Oscar wanted to find out if the amount of water had any effect on how tall bean plants grew. He grew five bean plants. He gave a different amount of water to each bean plant. He gave the bean plants 10ml, 20ml, 30ml, 40ml and 50ml of water.

11. _____

12. _____

Jude wanted to find out which objects conducted electricity. He set up a battery and light bulb that would light up if the object conducted electricity. He tested a penny, a nickel, a Popsicle stick, his finger and a rubber ball.

13. _____

14. _____

Vanessa wanted to find out if soda was bad for your teeth. She got 4 of her baby teeth and placed one in a glass of Coca-Cola, one in Sprite and one in water. She waited 5 days and took them out of the soda.

15. _____

16. _____

Carlos wanted to find out which mosquito repellent worked the best. Each day for he put on a different brand of repellent. He used Off, Deepwoods Off, Avon Skin So Soft and Repell.

17. _____

18. _____

Pamela wanted to find out if bees were attracted to different brands of perfume. Each day she put on a different perfume. She used White Shoulders, Brittany, Tabu and Liz.

19. _____

20. _____