SCIENCE 8
ROCKRIDGE

NAME: _____
BLOCK: ____ DATE: _____

Identifying Variables Practice

Instructions: For the following experiments, *identify and describe* the (IV) independent variable, (DV) dependent variable, (CG) control group, and (Con) the constant.

1) Different rose bushes are grown in a greenhouse for two months. The number of flowers on each bush is counted at the end of an experiment.

IV type of rose bush

DV # of flowers

Con environment, length of time

2) You water three sunflower plants with salt water. Each plant receives a different concentration of salt solutions. A fourth plant receives regular water. After a two-week period, the height is measured.

IV concentration of salt solution

DV height

CG 4th plant (regular water)

3) Three wax palm trees are kept at different humidity levels inside of a greenhouse for 12 weeks. One tree is left outside in normal conditions. Height of the tree is measured once a week.

IV humidity level

DV height of tree

CG tree outside in normal conditions

Con type of tree, length of time

4) One tank of goldfish is fed the normal amount of food once a day, a second tank is fed twice a day, and a third tank four times a day during a six week study. The fish's body fat is recorded daily.

IV # of feeding times per day

DV fish body fat

CG tank fed normal amount of food

Con type of fish, length of time, type of food

5) Strawberry plant clones are given different amounts of water for a 3-week period. First strawberry plant receives 400 millilitres (ml) a day. The second strawberry plant receives 200ml a day. The third strawberry plant receives 100ml a day. The fourth strawberry plant does not receive any extra water; this plant only receives natural ways of receiving water. The height of the strawberry plants is recorded daily.

IV amount of water

DV height of plant

CG 4th plant watered normally

Con type of plant, type of water, length of time.