

Name: _____

Period: _____

Scientific Method Review
Identifying Variables Worksheet

For the following experiments, define the IV (independent variable), DV (dependent variable), and CG (control group).

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 the experiment.

IV

DV

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

IV

DV

CG

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

IV

DV

CG

4. Pea plant clones are given different amounts of water for three-week period. The first pea plant receives 400 milliliters a day. The second pea plant receives 200 milliliters a day. The third pea plant receives 100 milliliters a day. The fourth pea plant does not receive any extra water: the plant only receives natural ways of receiving water. The heights of the pea plants are recorded daily.

IV

DV

CG

5. One tank of gold fish is fed the normal amount of food once a day. A second tank is fed twice a day. A third tank is fed four times a day during a six week study. The fish's weight is recoded daily.

IV

DV

CG

6. You decide to clean the bathroom. You notice that the show is covered in a stange green slime. You try to get rid of this slime by adding lemonade juice. You spray half of the shower with lemonade juice and spray the other half of the shower with water. After 3 days of spraying equal amounts 3 times a day, there is no change in the appearance of the green slime on either side of the shower.

IV

DV

CG

7. You decide to clean your bedroom. You notice that your floor is covetred with clothes. You try to get rid of the clothes by throwing them into the air. You throw clothes from 1/3 of the room into the closet and a second 1/3 of the room straight up in the air. The last 1/3 of the room you leave the clothes on the floor. After 30 minutes of "cleaning" the floor of the room is now visible.

IV

DV

CG

8. You want to test which size of soccer ball is easiest to juggle with your feet. You test a size 3, size 4, and size 5 ball. You count the seconds the ball stays in the air for each of the trials. You allow yourself to use both of your feet, knees, and head to juggle the ball.

IV

DV