Name_____ Date_____ Physical Science Period_____

Scientific Method Worksheet

For each of the examples below, find the independent variable, dependent variable, control(s), and constants; and then write a hypothesis for the outcome.

1. Bailey wants to find out which frozen solid melts the fastest: soda, ice, or orange juice. She pours each of the three liquids into the empty cubes of an ice tray, and then places the ice tray in the freezer over night. The next day, she pulls the ice tray out and sets each cube on its own plate. She then waits and watches for them to melt. When the last part of the frozen liquid melts, she records the time.

Independent Variable:

Dependent Variable:

Constants:

Hypothesis:

2. Jack wants to find out which laundry detergent cleans the best (Gain, Tide, or Purex). So, he takes a cotton sheet and cuts it up into equal squares. He stains four squares with chocolate, and four with grape juice. He washes one of each of the squares in each of the 3 detergents. One from each set of squares is washed in water alone. For each wash load, he used: the same amount of water, the same amount of detergent, and the same temperature of water.

Independent Variable:

Dependent Variable:

Constants:

Hypothesis:

3. Maverick wants to find out whether or not Miracle Grow really makes plants grow faster. He takes two identical pots, puts ½ cup of dirt into each one, puts 3 pea plant seeds into each one, and tops each off with ½ cup more dirt. He waters the plants the same amount at the same time each day. The only difference is that one plant is watered with regular water, while the other is watered with water that has Miracle Grow in it.

Independent Variable:

Dependent Variable:

Constants:

Hypothesis: