Earth Science / Ms. Burt Name: _____ Date: _____

UNDERSTANDING VARIABLES WORKSHEET

1. The class was studying gravity. In one experiment, Ms. Burt asked the class to find out if an egg or a 10 pound weight fell to the ground faster.

   Independent variable(s):

   Dependent variable(s):

   Constant(s):

   Control:

   Problem Statement:

2. The class is studying whether polybeads, sand, or shredded paper is “better” for soaking up motor oil.

   Independent variable(s):

   Dependent variable(s):

   Constant(s):

   Control:

   Problem Statement:

3. The class was studying solubility. In one experiment the class had to determine how much sugar will dissolve in water, and how much will dissolve in rubbing alcohol.

   Independent variable(s):

   Dependent variable(s):

   Constant(s):

   Control:

   Problem Statement:

4. The class was studying the effects of acid rain on stone statues. They had learned that acid rain can dissolve stone. Which of the following materials is damaged the most by rain; a) granite, b) marble, c) sandstone?

   Independent variable(s):

   Dependent variable(s):

   Constant(s):

   Control:

   Problem Statement:

5. Use the data table below to complete the questions below it.

Type of Material	**Amount of material in graduated cylinder (mL)**	**Amount of water added to fill pore spaces (mL)**
Sand	1000	250
Beads	1000	350
Marbles	1000	500
Ping pong ball	1000	700

   Independent variable(s):

   Dependent variable(s):

   Constant(s):

   Control:

   Problem Statement: