

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

### *Experimental Design Scenarios*

You are given an experiment below that has been developed to test a possible explanation for a problem, the experiment may not be perfect, your task is to use your process of science knowledge to find the parts of the experimental.

1. Ms. Southworth's 10th grade classes decided to perform an experiment to test the durability of zip top bags using



Goldfish and Oscar fish. They placed five goldfish in five different brands of zip top bags and placed them into large aquarium swarming with ten hungry Oscars. The same type of and amount of water was used in each bag and they were left for five hours.



**Question/Problem:**

**Hypothesis:**

**Prediction:**

**Variables:**

**Independent Variable:**

**Levels of Independent Variable:**

**Dependent Variable:**

**# of trials:**

**2 constants:**

**Control:**

**Type of Data:**

**2 Improvements:**

For each of the part listed above explain their importance in developing a solid experiment. In other words why are they important in good science? (write on back)