

Name: _____

Section: _____

Understanding the Components of an Experiment

Directions: After completing the following table, read the passage ("The Experiment") below and show your understanding of the different components of an experiment by providing examples and explanations in the table on the reverse side of this paper.

Component	Definition/Description
Hypothesis	
Quantitative Data	
Qualitative Data	
Repeated Trials	
Independent Variable	
Dependent Variable	
Control	
Constants	

The Experiment

A shopping mall wanted to determine whether the more expensive "Tough Stuff" floor wax was better than the cheaper "Steel Seal" floor wax at protecting its floor tiles against scratches. One liter of each type of floor wax was applied to each of the 5 test sections of the main hall of the mall. The test sections were all the same size and were covered with the same kind of tiles. Five (5) other test sections received no wax. After 3 weeks, the number of scratches in each of the test sections were counted.

Component	Example from "The Experiment"	Reasoning
Hypothesis		
Type of Data (quantitative or qualitative)		
Number of Trials		
Independent Variable		
Dependent Variable		
Control		
Constants		