

ESS 110: Introduction to Geology Dr. Woltemade Scientific Method	Name: _____ Section (circle): 8:00 AM 9:30 AM 11:00 AM
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Instructions: Use your text book (Chapter 1) to answer the following questions.

1. Basics of the scientific method.	
Define a <i>hypothesis</i> . Just a few words are sufficient.	
How does a scientist evaluate a hypothesis? That is, what are the key next scientific steps to test such an idea?	
What are the possible outcomes of hypothesis testing? What happens next after the step you just described above?	
How is a <i>theory</i> different from a <i>hypothesis</i> ?	

2. Application to the Cumberland Valley, Pennsylvania
Suppose we developed the hypothesis that the lower elevations of the Cumberland Valley are composed of rock types that are less resistant to weathering and erosion (generally weaker) than more resistant rocks that make up the nearby ridges (generally stronger rocks making up South Mountain and North Mountain). How could we test that hypothesis? Briefly describe 3 ways to collect data that could be used in a scientific investigation.
1. 2. 3.