

## Writing Assignment #1

### Elements of the Scientific Method

One of the objectives of General Biology is to learn how to apply the scientific method. One way of doing this is to recognize the application of the scientific method by others. When one reads scientific papers it is often very easy to see how scientists identified the causal question, the hypothesis, the experiments, the predictions and the conclusions. For many people however, scientific papers are just a little too difficult to read without a great understanding of the subject. Reading popular science writing is a way of introducing larger, more complex concepts to a broader, more general audience. One of these complex concepts is the scientific method. The article, "Eat Dirt!" by Jared Diamond illustrates every part of the scientific method. It is your assignment to identify those parts of the scientific method that are presented in the paper and to answer some short questions about the content. Your paper must be between 2-3 pages, typed, and double spaced. Your paper must also answer the following questions. I will grade on content, grammar and spelling. You must write an essay and not simply itemize the answers. Study hint: take notes while reading the article and write a rough draft first!

1. What is the initial observation made by the author to generate the causal question?
2. What is the causal question in the article?
3. What are the potential answers (hypotheses) that are generated by the scientists?
4. What were some of the predictions made by the author regarding the outcome of experiments that specifically deal with the potential answers to the causal question?
5. What are some of the observations and/or experiments performed or mentioned in the article that either support or dispute the potential answers for the causal question?
6. What are the conclusions that are arrived at that seem to answer the causal question?
7. What were the test(s) that confirmed or disputed the final answer to the causal question?

Article: "Eat Dirt, In the competition between parrots and fruit trees, it's the winners who bite the dust." By Jared Diamond. DISCOVER Vol. 19 No. 02, February 1998.