THE SCIENTIFIC METHOD (Plummer and McGeary 1996)

1. A question is raised or a problem is presented.

2. Available information pertinent to the question or problem is analyzed. Facts, which scientists call data are gathered.

3. After the data have been analyzed, tentative explanations or solutions, called hypotheses, are proposed.

4. One predicts what would occur in given situations if a hypothesis were correct.

5. Predictions are tested. Incorrect hypotheses are discarded.

6. A hypothesis that passes the testing becomes theory, which is regarded as having an excellent chance of being true. In science, however, nothing is considered proven absolutely. All theories remain open to scrutiny, further testing, and refinement.