

# Hypotheses, Theories and Scientific Law Bell work – Student Edition

## I. **MULTIPLE CHOICE** - Select the best answer.

1. Which of the following represents the correct order of steps in the scientific method?
  - a) Observation, hypothesis, evaluation, experimenting, evaluation, interpretation
  - b) hypothesis, observation, experimenting, evaluation, interpretation, questioning
  - c) Observation, questioning, hypothesis, experimenting, interpretation, evaluation
  - d) questioning, interpretation, evaluation, hypothesis, observation, experimenting
  
2. If the data being collected is not consistent, what should be done?
  - a) Gather more data
  - b) Refine, alter or expand the hypothesis
  - c) Alter the data to fit
  - d) Start again
  
3. Which of the following is not a feature of the nature of science?
  - a) Based on empirical evidence
  - b) Tentative and subject to change
  - c) Linked to society and culture
  - d) Linear with one correct answer

## II. **Below are descriptions of the six steps of the scientific method, in the incorrect order.**

Identify which step is being described and write the name of the step next to it.

1. Collecting qualitative and quantitative data using your senses.
2. Making a prediction based on evidence which you already have.
3. Making sense of the data and presenting it as graphs and tables.
4. Analyzing the investigation to determine whether the data is reliable
5. Developing an open-ended question which will be the focus of the investigation.
6. Designing a method and then carrying out multiple tests to determine the relationship between the variables.