

# I. WHAT IS SCIENCE (1.1)

## A. WHAT SCIENCE IS AND IS NOT

{ GREEN  
BOLD, ABOVE  
PARAGRAPH }

1. SCIENTIFIC KNOWLEDGE IS ALWAYS CHANGING
2. SCIENCE IS A PROCESS - AN ORGANIZED WAY OF OBSERVING AND ASKING QUESTIONS.
3. SCIENCE DEALS ONLY WITH THE NATURAL WORLD.
4. ALL OBJECTS AND INTERACTION AMONG THOSE OBJECTS ARE GOVERNED BY NATURAL LAWS.
5. ONE GOAL OF SCIENCE IS TO PROVIDE NATURAL AND TESTABLE EXPLANATIONS FOR EVENTS IN THE NATURAL WORLD.
6. ALMOST ALL SCIENTIFIC DISCOVERIES RAISE MORE QUESTIONS THAN IT ANSWERS.
7. SCIENCE IS MORE THAN MEMORIZING ITS UNDERSTANDING, WHAT WE DON'T KNOW.
8. TRY TO UNDERSTAND HOW SCIENTIST DEVELOP IDEAS.

I.

## B. SCIENTIFIC METHODOLOGY

1. ONE USES SCIENTIFIC THINKING TO SOLVE MANY PROBLEMS.
2. SCIENTIFIC METHODOLOGY INVOLVES OBSERVING AND ASKING QUESTIONS, FORMING, HYPOTHESES, CONDUCTING CONTROLLED EXPERIMENTS, COLLECTING AND ANALYZING DATA AND DRAWING CONCLUSIONS.
3. OBSERVATION THE ACT OF NOTICING AND DESCRIBING EVENTS OR PROCESSES IN A CAREFUL ORDERLY WAY.
4. INFERENCE - A LOGICAL INTERPRETATION BASED ON WHAT IS KNOWN.
5. HYPOTHESIS - A TENTATIVE SCIENTIFIC EXPLANATION.
6. CONTROLLED EXPERIMENT - EXPERIMENT WHERE ONLY ONE VARIABLE IS CHANGED.
7. INDEPENDENT VARIABLE -
8. DEPENDENT VARIABLE -
9. CONTROL GROUP -

10. DATA -

11. ~~~~~

12. ~~~~~

13. ~~~~~

C. SCIENTIFIC THEORIES

1. THEORY -

2. ~~~~~

3. ~~~~~

II. SCIENCE IN CONTEXT (1.2)

A. EXPLORATION AND DISCOVERY

1.

2.

3

4

B. COMMUNITY ANALYSIS AND CHANGES

1.

2.

3

4

C. BENEFITS AND OUTCOMES

1.

2.

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