

Name _____ Hour _____ Date _____

Study Guide Learning Target I.3: I can write a testable question and a hypothesis.

Resources:

- http://sites.isdschools.org/brian_stockdell
- http://www.sciencebuddies.org/science-fair-projects/project_hypothesis.shtml
- The Nature of Science and Technology; Chapter 2, Section 1: *Scientific Inquiry* (online textbook available on class website)

Basic (Level 2):

Write the definitions of the following terms using your scientific method foldable or the Testable Question & Hypothesis Practice Worksheet.

Testable Question

Hypothesis

Independent Variable:

Dependent Variable:

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Proficient (Level 3):

Directions: Write a testable question for the examples below. Remember, a testable question is the question you are trying to answer by doing an experiment. It is the problem you are trying to solve.

A testable question is often written in the form:

"Does _____ *IV* _____ affect _____ *DV* _____?"

Does wearing a lighter colored shirt on a hot day keep you cooler?

Could putting Mentos in diet Pepsi make a bigger fountain than diet coke?

Are sixth graders smarter than fifth graders?

Do crickets chirp more when it is hot outside?

Directions: Write a hypothesis for each testable question below.

Remember, a hypothesis is a proposed explanation for a problem. It is often described as a "prediction" or "educated guess."

Write your hypothesis in the form of,

"If _____ *IV* _____, then _____ *DV* _____, will _____ (increase/decrease/stay the same) _____."

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