DATE: NAME: CLASS:

GENERAL SCIENCE TOOLKIT

Developing a Hypothesis

BLM G-30

Goal • Become familiar with the development of hypotheses in science inquiry.

1. Define "hypothesis," giving an example you have learned from science.

_____

_____

2. An hypothesis statement may start with "if " (referring to cause), followed by the word "then" (referring to an effect). For example. ***If*** I brush my teeth twice a day, ***then*** I can protect my teeth from decay.

Complete the following hypothesis statements:

(a) **If** heat is applied to a liquid, **then** _____ .

(b) **If** _____ ,

then in living things in that ecosystem will be affected.

3. (a) Identify the independent variable (cause) and the dependent variable (effect).

– The "if " part of each statement is the _____ variable.

– The "then" part of each statement is the _____ variable.

(b) Explain how the relationship between cause and effect can be an hypothesis.

_____

_____

4. Develop an hypothesis for what may happen in the following situations.

(a) You have a long distance to travel when your gas needle signals empty.

Hypothesis: _____

Reasoning: _____

(b) The element on top of your stove is a bright red colour.

Hypothesis: _____

Reasoning: _____

(c) The soup you are eating is much too salty.

Hypothesis: _____

Reasoning:

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5. Complete the chart provided with your responses to question 4.

Independent Variable	Dependent Variable	Hypothesis

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