**Scientific Inquiry- Individual Reflection Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*Read the following scenario and investigative question. Then write an appropriate hypothesis, identify the variable being tested/manipulated (Independent Variable), the responding variable being measured (Dependent Variable) and two other factors (also variables) which must be controlled so that the test is valid and fair. Record answers in space provided below.*

**Scenario:** Kelly and Jack are playing in the park. Jack rolls a marble down the small playground slide. Kelly proposes the idea that the marble would travel at a faster pace if it is rolled down the longer slide. This discussion leads to the following investigative question.

**Investigative Question:** What happens to the speed at which a marble travels when the height of a ramp is changed?

**Hypothesis:**

**Experiment Design**

**Independent Variable: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Dependent Variable: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Controlled variables (state two factors that must be controlled for each test)**

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| **Learning Targets: Clearly state a testable, appropriate hypothesis. Identify the variables that must be manipulated, measured or controlled so that the experiment results are meaningful** |
| * Does not understand how to write a hypothesis and cannot identify the variables that must be manipulated, controlled or measured
 | * Hypothesis is unclear or not testable
* Variables are rarely correctly identified
 | * Hypothesis weakly stated
* Some variables correctly identified and classified
 | * Hypothesis is appropriate and testable.
* Good description of variables manipulated/controlled or measured
 | * Hypothesis is well written and testable
* Excellent description of variables manipulated/controlled or measured
 |
| **Not Meeting Expectations** | **Beginning** | **Developing** | **Competent** | **Mastery** |