

Inquiry Lab

Group Roles (10 min suggested time)

Work with your group to define the roles that each group member will play over the course of this lab. We'll discuss potential roles in class before we get started.

Group Member	Role

Question (10 min suggested time)

Work with your group to review all of your questions and decide on a single question that your group will investigate?

Experimental Design (20 min suggested time)

Work with your group to complete the experimental design diagram on the back of this page that will help you answer your question.

Critical Element	Not Attempted (0)	Novice (1)	Practitioner (2)	Expert (3)
Stating IV and DV with justification	Left blank or response is completely inaccurate	Some error in stating the IV and DV	Identifies both the IV and DV correctly but support may lack sufficient reasoning	Identifies the IV and DV correctly and provides sufficient reasoning for support
Stating a hypothesis with justification	Left blank or response is completely inaccurate	Shows some cause and effect but errors exist	Shows a clear cause and effect	Shows and supports a clear cause and effect with sufficient reasoning
Identify Appropriate Constants	Left blank or response is completely inaccurate	Begins to identify appropriate variables but errors exist	Identifies appropriate variables	Identifies appropriate variables and provides sufficient reasoning for support
Correctly identifies the Control	Left blank or response is completely inaccurate	Begins to identify appropriate variables but errors exist	Identifies appropriate variables	Identifies appropriate variables and provides sufficient reasoning for support

Title:				
Hypothesis:				
IV:				
Levels of the IV: (indicate control)				
Repeated Trials:				
DV:				
Constants:				

Procedure (20 min suggested time)

Work with your group to write a 5-8 (or more) step procedure that you will use to answer your question.

Critical Element	Not Attempted (0)	Novice (1)	Practitioner (2)	Expert (3)
Writing a procedure	Left blank or response is completely inaccurate	Begins to write a procedure though details are lacking and experiment is not be repeatable.	Writes a clear and thorough procedure, results may not be repeatable based on level of detail	Writes a clear and thorough procedure that should generate repeatable results

Data Table (20 min suggested time)

Work with your group to design a data table where you will collect your data.

Critical Element	Not Attempted (0)	Novice (1)	Practitioner (2)	Expert (3)
Creating a data table	Left blank or response is completely inaccurate	Creates a table that contains significant omissions and/or inaccuracies	Creates a table accurately with minor omissions and/or inaccuracies	Creates a table accurately

Graph

Work with your group to graph the data that you collected.

Critical Element	Not Attempted (0)	Novice (1)	Practitioner (2)	Expert (3)
Creating a graph	Left blank or response is completely inaccurate	Creates a graph that contains significant omissions and/or inaccuracies	Creates a graph accurately with minor omissions and/or inaccuracies	Creates an appropriate graph accurately