

Scientific Inquiry Lab Sheet Checklist

Be certain to have included all of these items within your lab sheet!

Identify the independent and dependent variable for this investigation:

- Both the IV and DV are provided

What is the question or problem that is being investigated?

- Problem is stated as a question
- Question includes both the independent and dependent variables
- Question cannot be answered with a yes/no

Write an appropriate testable hypothesis for this investigation.

- Hypothesis written as an "If...then..." statement
- Hypothesis includes both the independent (IV) and dependent (DV) variable
- Both the IV and DV are quantitative

What would be the control in this experiment and why is it important?

- Control is provided
- Explanation provided as to the importance of the control

Identify two factors that should be held constant for this investigation.

- Two factors are provided

Why is it important to keep all variables constant with the exception of the one being tested?

- Correct answer is provided

Identify three pieces of laboratory equipment necessary to conduct this investigation.

- All materials must be non-consumable
- Instruments must include items typically found within a laboratory

List a 3-step procedure that would make this a valid (fair) investigation.

- Both the independent and dependent variables are described within the steps

Construct a data chart for this investigation. Do not forget to include units for all numbers.

- All data is completed and placed in the appropriate areas of the chart
- All data has units
- IV and DV are labeled in the appropriate areas of the chart

Construct a graph from the data above:

- Appropriate type of graph used
- Graph has title with iv and dv included
- Graph is labeled with IV on the x-axis and the DV on the y-axis
- Labels contain units (i.e. gram, liter, meter, etc.)
- Appropriate scale used/evenly spaced intervals on both axes

Write a possible conclusion statement for this investigation.

- Hypothesis is re-stated in conclusion
- Statement indicating whether the data supported/did not support the hypothesis
- All data from the graph is included within the conclusion

What could you do different to improve this investigation? Explain what you would do.

- At least two possible future investigations are provided