

# Student Journal



Name \_\_\_\_\_  
Date \_\_\_\_\_

## Worksheet 2.4: Data Analysis – The Cold Lab (Scientific Lab Report)

Below, in **bold**, are the steps of the scientific method. Using today's research, describe which steps/processes of the lab correspond with which parts of the scientific method. Explain, specifically what happened.

**Title of Experiment:** \_\_\_\_\_

**Date/Time:** \_\_\_\_\_

**Materials.**

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**Observations.** These are observations made BEFORE the experiment. These are things that are already known on which an experiment is based. Name some observations/examples seen in nature that illustrate differences between light and dark surfaces? Also, observations include knowledge that is already available about the topic i.e. scientific laws or theories that apply to the situation. Identify any previous scientific knowledge that applies to this topic?

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**Develop a question.** What is the question being asked about these observations?

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**Form a Hypothesis.** This is a statement or a prediction of what you think is the correct answer to the question. It is based on your observations and previous knowledge of the subject. Write a statement predicting what you think will happen.

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**Design Procedures** to test the hypothesis. Briefly describe the procedures used in the lab.

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**Data Collection/Experimentation.** Test the hypothesis through experimentation. What data was collected? Was there any specific technology or equipment used?

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**Data Analysis and Interpretation.** How was the data analyzed?

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**Results/Conclusion.** What is your conclusion? Did it confirm your hypothesis?

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**Re-Evaluate and Modify Hypothesis** , when necessary. Return to beginning

Use the space below for your own ideas, thoughts, questions, diagrams, illustrations, etc.