

Monday

- Complete pg. 1
Observation vs.
Inference

Tuesday

- Complete pg. 2-3
“Independent and
Dependent
Variable Practice”

Wednesday

- Complete pg. 4-5
“Independent and
Dependent
Variable Practice”

Thursday

- Watch this video
The Scientific
Method: Sloth
Sleep Study
- Complete pg. 6
“Scientific Method”

**NO HOMEWORK !!
ENJOY YOUR WEEKEND :)**

Reminders

- Finish any missing IXLs
- PPT link pasted for review
- End of Year Science Assessment 5/14/25
- 5th Grade Science Review PPT

5th Grade Science Review PPT

Observation -vs- Inference

Directions: Label each statement as either **observation** or **inference**. Then, explain how you know that the statement is an observation or an inference. Answers must be written in complete sentences.

Example:

The boy kicked the soccer ball over the fence.

Observation:

Using my sense of sight, I could see the boy kicking the soccer ball over the fence.

1. The fire alarm is ringing.

_____:

2. John must have had a bad day at the park.

_____:

3. Rosalie fell off her bike. She scratched and bruised both her knees.

_____:

4. I can tell that Trystan did not like how he played in the baseball game today.

_____:

5. My teacher is awesome; he is so funny and smart. I learn a lot from him each day.

_____:



Name: _____

INDEPENDENT AND DEPENDENT VARIABLE PRACTICE

Coral Growth and Water Temperature

Scenario: Dory wants to investigate how different water temperatures affect the growth of coral. She sets up three aquariums with the same coral species and fills them with water at different temperatures: 20°C, 25°C, and 30°C. She measures the growth of the coral over several weeks to see which temperature promotes the most growth.

Temperature of Water	Growth of Coral (in)
20°C	2 in
25°C	3 in
30°C	6 in

What is the independent variable?

What is the dependent variable?

What must remain constant?

What conclusion can Dory make?

Light Intensity and Seaweed Growth

Scenario: Bruce is curious about how different levels of light affect seaweed growth. He places seaweed in three tanks with varying light intensities: low, medium, and high. Over a month, he tracks how much the seaweed grows in each tank to determine the optimal light intensity for its growth.

Amount of time song was played	Number of swimmers
No Music (0 Min)	67
1 Min	48
3 Min	31
5 Min	10

What is the independent variable?

What is the dependent variable?

What must remain constant?

What conclusion can Bruce make?

Fish Species and Tank Size

Scenario: Ariel is testing how different tank sizes affect the behavior of fish. She puts the same type of fish in tanks of small, medium, and large sizes. She observes and records their activity levels and behavior patterns to see if the size of the tank influences how active or social the fish are.

What was the purpose of this experiment?

What is the independent variable?

What is the dependent variable?

What must remain constant?

4. Ocean Currents and Plastic Waste Distribution

Scenario: Percy wants to understand how ocean currents affect the spread of plastic waste. He creates three small-scale models of ocean environments with different current speeds and releases a small amount of plastic waste into each. He tracks how far the plastic travels in each model to see how current speed impacts distribution. The table above shows the results of his experiment.

What must remain constant?

What is the independent variable?

What is the dependent variable?

What conclusion can Percy make?

Type of model	Distance Plastic traveled
Slow Speed	10 m
Medium Speed	28 m
High Speed	52 m

5. Marine Plant Growth and Salinity

Scenario: Kaia is exploring how different levels of salinity in seawater affect the growth of marine plants. She prepares three tanks with seawater at low, medium, and high salinity. She monitors the growth of the marine plants in each tank to find out which salinity level is best for plant health.

What was the purpose of this experiment?

What is the independent variable?

What is the dependent variable?

What must remain constant?

6. Sunlight and Algae Bloom

Scenario: Noah wants to find out how varying amounts of sunlight affect algae blooms in his local pond. He sets up four samples with algae and exposes them to different amounts of sunlight: full sunlight, partial sunlight, half sunlight and no sunlight. He observes the intensity of the algae blooms in each sample to determine how sunlight influences their growth.

What was the purpose of this experiment?

What is the independent variable?

What is the dependent variable?

What must remain constant?

7. Ocean pH Levels and Shellfish Health

Scenario: Pearl is investigating how different ocean pH levels affect the health of shellfish. She places shellfish in three tanks with varying pH levels: acidic, neutral, and alkaline. She monitors the shellfish health and shell condition over time to see which pH level is most favorable for them.

What was the purpose of this experiment?

What is the independent variable?

What is the dependent variable?

What must remain constant?

8. Beach Erosion and Tide Height

Scenario: Jackson wants to see how different tide heights affect beach erosion. He creates three beach models with varying tide heights: low, medium, and high. He simulates tidal waves and measures the extent of erosion in each model to find out how tide height influences beach erosion.

What was the purpose of this experiment?

What is the independent variable?

What is the dependent variable?

What must remain constant?

9. Shark Species and Water Depth

Scenario: Melody is curious about how different water depths affect the behavior of shark species. She places models of sharks in three different water depths: shallow, medium, and deep. She observes their movement patterns and feeding behaviors to see how water depth impacts their activities.

What was the purpose of this experiment?

What is the independent variable?

What is the dependent variable?

What must remain constant?

10. Fish Health and Marine Pollution

Scenario: Marina is testing how varying levels of marine pollution affect fish health. She sets up three tanks with different pollution levels: low, medium, and high. She monitors the health, behavior, and growth of the fish in each tank to determine how pollution affects their well-being.

What was the purpose of this experiment?

What is the independent variable?

What is the dependent variable?

What must remain constant?

Complete diagram based on the video

Scientific Method

