T1. Investigatory Project and Simple Science Investigation

T1. Investigatory Project

Title: Do Air and Water Have Mass?

Objective

To investigate whether gases (air) and liquids (water) have mass using simple science equipment.

Question

Do gases like air and liquids like water have mass?

Hypothesis

I think that _____
_____

Materials

- 2 balloons
- String
- Stick or hanger
- Tape
- Plastic bottle
- Water
- Balance or improvised balance
- Thermometer (optional)
- Notebook and pencil

Procedure – Part A: Investigating Air

1. Blow up two balloons with equal size.
2. Tie the balloons to each side of a stick or hanger.
3. Observe if the balance stays equal.
4. Pop one balloon carefully.
5. Observe what happens to the balance.

Procedure – Part B: Investigating Water

1. Get an empty bottle and place it on a balance.
2. Record its mass.
3. Fill the bottle with water.

4. Measure the mass again.
5. Compare the two measurements.

Object	Mass Before	Mass After	Observation
Balloon	_____	_____	_____
Bottle with Water	_____	_____	_____

Observations

What happened after one balloon was popped?

_____
_____

What happened after water was added to the bottle?

_____
_____

Conclusion

1. Does air have mass? Explain.

_____
_____

2. Does water have mass? Explain.

_____
_____

3. What did you learn from the investigation?

_____
_____

T1. Simple Science Investigation

Directions: Conduct the activity with your group. Observe carefully and answer the questions below.

Investigation Questions

1. What tools were used in the investigation?
■ Balance ■ Thermometer ■ Ruler ■ Balloons

2. Which material became heavier?

_____

3. Why is a balance useful in science investigations?

_____

4. Why is careful observation important during experiments?

_____

Reflection

Draw or describe your favorite part of the investigation.