

Name: _____ Date _____

Does Air Have Mass?

Question: Does air have mass?



Did you remember to...

- Include your units?
- Answer all of your questions?

Hypothesis: If air (has mass/has no mass) then the difference of the mass of the deflated and inflated balloon will (be the same/be different.)

Materials:

- deflated balloon
- inflated balloon
- triple balance scale
- air
- Petri dish if needed to hold balloon on balance

Procedure:

- Use the balance to find the mass of a deflated balloon
- Blow up the balloon and tie the neck closed.
- Find the mass of the inflated balloon. Compare this mass to the mass of the deflated balloon.

Data Collection:

Mass of small inflated balloon:	Mass of large inflated balloon:
Mass of small deflated balloon:	Mass of large deflated balloon:
Difference in mass of the 2 balloons:	Difference:

Analysis/Conclusion: (What did you learn?)

Questions (answer in complete sentences):

1. Identify the independent variable and the dependent variable.

2. Identify the control.

3. Identify the constant.

4. As air is released from the balloon, explain what is happening to the pressure and the volume.

5. As air is being added to the balloon, explain what is happening to the pressure and the volume.

6. Explain what is happening to the balloon as it floats up in the troposphere.