

I understand properties of air including providing evidence & identifying examples.

Response to Instruction (RTI) – A & B

Use the knowledge gained from the different experiments to complete the following chart summarizing the properties of air.

Property of Air	I could show this by:	What happened was:
Air exists (#1 Air is everywhere)	Pour water into a beaker through a funnel surrounded by plasticine.	The air was compressed inside of the beaker when the water was in the funnel. There was no way for air to escape; therefore, the air filled all of the space in the beaker. No room for water.
Air takes up space (#2 Huff N Puff)	Trying to blow up a balloon inside of a bottle	The balloon didn't expand because the air was taking up all the space in the bottle (building up pressure)
Air has mass (#3 Air has mass)	Used a balance to measure the mass of a balloon, inflated and deflated	The inflated balloon was heavier because air has mass
Air has weight (#4 A Weigh we go)	Balance two inflated balloons on each end of a straw, popped one balloon to see if the weight of the inflated balloon would tilt that direction	When we popped one of the balloons, the straw leaned towards the balloon that still had air in it

Property of Air	I could show this by:	What happened was:
Air has pressure (#5- Test Your strength #6- Medicine Dropper Submarine #7- Let it shine)	#5- covered a ruler with newspaper, and tried to lift the paper up by hitting the end of the ruler #6- Compressed a bottle full of water and a floating medicine dropper, to try and make it sink #7- Try to blow out a candle around a book and can	#5- Air pressure was forcing down on the newspapers, breaking the ruler when we hit it (the newspaper did not rip/move) #6- When the bottle was compressed, the air pressure forced water into the medicine dropper, allowing it to sink #7- Air pressure did not blow out the candle around a book, but it did blow out a candle around a can due to the shape
Air has volume (#9 Air has volume)	Part A- cold air compressed a balloon on top a jar, Hot air expanded the balloon Part B- heated up a can with a little bit of water, and turned it upside down and dunked it into very cold water	Part A- Hot air: low pressure, expands and rises Cold air: high pressure, compresses and falls Part B- When the can is turned upside down in the cold water, air inside cools down and condenses (contracts)
Air has density (#13 That CO2 gas)	Mixed lime water and water with Alka-Seltzer tablets	The gas from the Alka-Seltzer water changed the color of the lime water (cloudy) when it transfer over

<p>Air can be compressed</p> <p>(#10 Air powered rockets)</p>	<p>Connecting an inflated balloon and straw to string tied to the door.</p>	<p>As soon as we released the compressed balloon, it glided along the string to the other end</p>
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I can recognize the different gases in the composition of air.

Response to Instruction (RTI) –H

Complete the following statements.

1. Air is a Fluid (solid, liquid, gas)
2. Oxygen/ gas is an element, which is required for a substance to burn.
3. The Atmosphere exerts pressure on the surface of the Earth.
4. The atmosphere is more dense near the surface and less dense near the top of the Mount Everest.

What is the composition of air? Please list in order of largest to smallest).

78% Nitrogen

21% Oxygen

1% Other

List 5 activities that are possible due to the presence of air.

1) Breathing

2) Blowing up a balloon

3) Blowing Bubbles

4) Filling up a bike tire

5) Blowing out a candle