

Week of September 8, 2015



Do Now: Science

- 1. Write down your Homework and leave your agenda open.
- 2. Put your NAME, STUDENT NUMBER, and CLASS on your "Do Now" Sheet.
- 3. Complete today's "Do Now" Question: Does air always take up the same amount of space? Create a CLAIM for this question.

Example: Air does not always take up the same amount of space. Air can be compressed into a smaller space or can expand into a larger space.





Nucleus

- The nucleus is the center of an atom.
- It is surrounded by the electron cloud.
- It is made up of protons and neutrons.
- Makes up the total weight of an atom.





Neutrons

- Neutrons are particles found in the nucleus of an atom.
- Charge: Neutral (No Charge)





Protons

- Protons are particles found in the nucleus of an atom.
- Charge: Positive (+)



Electrons

- Electrons are particles found outside of the nucleus, in the ELECTRON CLOUD.
- Charge: Negative (-)
- Electrons do not account for any of the atom's weight.





Do Now: Social Studies

1. Complete today's "Do Now"

What do the following words have to do with geography:

- Scale
- Key
- Coordinates



Do Now: Science

1. On your Do Now page,

Question: Does air always take up the same amount of space?

List your EVIDENCE for this question.

Example: When I trap air in a syringe, I can press down on the syringe to make the amount of space that the air of space that the air took up smaller. I can also pull the syringe back up to allow the air to take up more space



How to Make a Flip-Book

- Step 1: Place 3 sheets of paper together with a 1 inch offset at the bottom.
- Step 2: Fold the papers in half so they make 6 flaps each approximately one inch in height.
- Step 3: Staple the top of the flip book.





Cover Page

- Name (First & Last)
- Student #
- Class
- Title "PHASE CHANGES"



Label the Tabs

- Label the 5 tabs with the five types of phase changes:
 - Melting
 - Freezing
 - Evaporation
 - Boiling
 - Condensation





Do Now: Social Studies

1. Complete today's "Do Now"

What do you think a historian is? What do you think they do?



Do Now: Science

 On your Do Now page, Question: Does air always take up the same amount of space?

Write your REASONING for each for this question. (Hint: Link each reasoning with an evidence from yesterday)
Example: The air in the syringe is made of particles that have nothing in between them. Since the air is trapped in the syringe the number of particles stays the same and can't change. The space between the air particles gets closer together when I compress the end of the syringe.
When the syringe is pulled out, the space between the air particles increases and the space the air takes up expands.



Changing States

- Matter can change state if you raise or lower the temperature
 - Solid to a liquid: melting point
 - Liquid to a solid: freezing point
 - Liquid to a gas: boiling point
 - Gas to a liquid: condensation
 - Solids to a gas: sublimation

http://www.harcourtschool.com/activity/states_of_matter/

How are the phases changing?

- One the top flap for EACH phase change:
 - Indicate from what phase it is changing
 - Illustration of how the molecules move in each phase





How are the phases changing?

- One the top flap for EACH phase change:
 - Indicate from what phase it is changing
 - Melting: solid to a liquid
 - Freezing: liquid to a solid
 - Boiling: liquid to a gas
 - Condensation: Gas to a liquid



How are the phases changing?

- One the top flap for EACH phase change:
 - Illustration of how the molecules move in each phase





Exit Ticket

On a sticky note, put your NUMBER & answer the question below.

What 3 subatomic particles make up an atom?



Do Now: Social Studies

1. On your Do Now page,

How do you keep track of events in your life and/or events that are coming up?



Do Now: Science

1. On your Do Now page,

Question: Does air always take up the same amount of space?

Write your conclusion. Include your claim, evidence & reasoning.

What goes on during a Phase Change?

- Written definition/description
- Energy (added or removed)
- Changes in molecular motion
- Examples (2 minimum) from 'real life'



Bottom Page of each phase change

- Divide the bottom into four parts and label them.
- Label each section:
 - Definition
 - Real Life Examples
 - Change in Energy
 - Change in
 Molecular
 Movement





Definitions

- **Melting:** Matter changing from a solid to a liquid because of increase in heat.
- Freezing: Matter changing from a liquid to a solid due to the decrease in heat.



Definitions

• **Evaporation:** Matter changing from a liquid to a gas because of increase in heat.

• **Boiling:** Boiling occurs when all the liquid is turned to a gas quickly.

• **Condensation:** Matter changing from a gas to a liquid due to the decrease in heat.



Do Now: Social Studies

Why is today an important day to learn about in history?

What artifacts/evidence is available for people to learn about the events that happened on this day 14 years ago?