

8th Science Assignments 3/30-4/3

We are going to review states of matter, and then complete some interactives regarding matter phase changes. There will be an “open book” quiz to complete based on reading linked in this assignment.

ALL will be due on Friday 4/3

REVIEW:

1. Describe each of the main 3 states of matter.
2. Sketch each state of matter- ie-particles in a box
3. Give an example of each state of matter

INTERACTIVE SIMULATIONS:

1. https://phet.colorado.edu/sims/html/states-of-matter-basics/latest/states-of-matter-basics_en.html
 - Go through each of the 4 atoms and molecules adjusting the temperature for each and note what you observe. Do this for all 4 atoms/molecules at each state of matter.
 - Next, go through each phase change for each of the 4 atoms/molecules adjusting temperature. Note what happens to pressure for each.

Questions to answer and submit:

- a. How does temperature affect phase change? What did temperature change specifically do to cause a phase change?
- B. Contrast & Compare the effect temperature how change had on each of the atoms/molecules
- C. How was pressure affected by phase change? Why do you think this occurred?

2. https://phet.colorado.edu/sims/density-and-buoyancy/density_en.html

Go through each of the material types and note how the density changes (this is measured in kg/l). Adjust mass for each material type and note what occurs.

Questions to answer and submit:

- a. How does material type affect density?
- b. How does mass affect density?
- c. How does volume affect density?
- d. How could you determine density differences at home using different materials?
How would you set up the experiment? What would need to remain constant?

3. Reading material for the open book quiz:

https://drive.google.com/open?id=17PQaFzYg8Qlsuul9ZeUxu2o_06UPbj71

4. OPEN BOOK QUIZ:

https://docs.google.com/document/d/11m64s3lATXtn38h-K5gD7v5_FFhceDrMR6QDkz3a2hQ/e/dit