

With your table partner, you will complete the "webquest" using MiddleSchoolChemistry.com. Follow the procedure to answer the following questions.

- 1) Google search: Middle School Chemistry.
- 2) Click on the "Multimedia" link.
- 3) You will start in Chapter 1: Matter-Solids, Liquids and Gases.
- 4) Click on the first link under Chapter 1—Molecules Matter.

** Be sure to READ the bullets as well as looking at the visuals **

First click "play" on the video—then click the "zoom in" button. The little spheres represent water molecules.

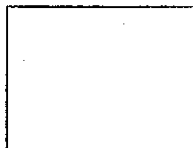
1) Describe what you see. (Describe the motion)

2) Why do the water molecules stay (semi)-close together?

3) Observing the "video" again, try to keep your eye on ONE molecule. Describe its movement.

Click the right arrow button to go to next slide.

4) Draw the water molecules, be sure to include motion lines and label the temperature!



Click the right arrow button to go to next slide.

5) Watch what happens when a water balloon pops. Briefly explain why the water acts the way it does.

Scroll down and click on Lesson 2: Molecules in Motion

6) Click the play button. Observe what happens to the water molecules when you change the temperatures. DESCRIBE how the molecules act at cold, "room-temperature" and hot temperatures. Then DRAW the motion of the water molecules at the three different temperatures (include motion lines). *(include speed/space)*

(Description)	Cold	Room-Temperature	Hot
(Drawings)			
	Cold	Room Temperature	Hot

Scroll down and click on Lesson 3: The Ups and Downs of Thermometers

Click the play button. Observe the thermometers at different temperatures.

7) Describe what the molecules are doing at EACH temperature level:

Cold Temp

Room Temp

Hot Temp

Click the right arrow button to go to next slide.

Check your descriptions above with the reading—be sure to add any descriptions that you may not have!!!

Click the right arrow button to go to next slide.

8) Critical Thinking (aka think hard) Question (refer to the picture: If the temperatures are the same, why are the liquids in the two thermometers at different heights?

Scroll Down and click on Lesson 4: Moving Molecules in a Solid

Click on the play button then click the "zoom-in" button. Observe the motion of the particles (atoms/molecules).

9) Describe what is happening.

10) The atoms in a solid are _____ attracted to each other.

11) Why do solids keep their shape?

12) Look at one of the moving particles—what is it doing?

Click the right arrow button to go to next slide.

Click the play button. 13) Compare the similarities and contrast the differences between a solid and a liquid. (List below)

Characteristics of a Solid

Similarities

Characteristics of a Liquid

Scroll Down and click on the next lesson: Lesson 5: Air, It's Really There

First slide is a similar demo to our beach ball demo but with a basketball. Read what happens (no need to play video).

Click the right arrow button to go to next slide.

You may watch this video with air compressed can. See what happens!

Click the right arrow button to go to next slide.

Click the "play" button then click the zoom-in button. 14) Describe the motion of gas particles.

15) What happens when the gas particles collide with each other?

16) Now, describe the differences between solids, liquids and gases (include motion, attraction, volume, and shape) (you may include illustrations of the particles as well)

Solids

Liquids

Gases

Click the right arrow TWICE to check your answers! Read the board for further instructions!