

Name: \_\_\_\_\_  
Period/Date: \_\_\_\_\_

# MATTER WEBQUEST

## 1. Characteristics Of Matter Hangman!!!

Play hangman to review some of the terms that you have learned. To play this game, visit <http://www.quia.com/hm/40795.html>. You will then need to read the clue and guess the answer. If you don't know the answer try a letter. Write the answers below:

- |    |     |     |     |
|----|-----|-----|-----|
| 1. | 7.  | 13. | 19. |
| 2. | 8.  | 14. | 20. |
| 3. | 9.  | 15. | 21. |
| 4. | 10. | 16. | 22. |
| 5. | 11. | 17. | 23. |
| 6. | 12. | 18. | 24. |

How did you do? \_\_\_\_\_ out of 24.

## 2. States of Matter:

To learn more about the states of matter visit the Chem4kids website at [http://www.chem4kids.com/files/matter\\_states.html](http://www.chem4kids.com/files/matter_states.html) and answer some questions.

The 5 main states of matter are: \_\_\_\_\_.

Now click on "phase changes" on the menu on the right:

Atoms in a liquid have more \_\_\_\_\_ than the atoms in a solid.

Now click on "plasmas" on the menu on the right:

Plasmas are made up of \_\_\_\_\_.

Three examples of plasmas are: \_\_\_\_\_.

Now click on "BE Condensate" on the menu on the right:

BEC's were discovered in \_\_\_\_\_ but were actually predicted in \_\_\_\_\_.

BEC's are super-\_\_\_\_\_ and super-\_\_\_\_\_ atoms.

What does condensation mean?

What element did these scientists use? \_\_\_\_\_.

At close to absolute zero, atoms begin to \_\_\_\_\_ and become a single blob.

## 3. Kinetic Molecular Theory

The kinetic molecular theory says that all matter is made up of molecules that are always in motion. Visit the "molecules in motion" page to study this theory further at <http://mc2.cchem.berkeley.edu/Java/molecules/index.html>

As the temperature of matter increases, the speed of the particles also \_\_\_\_\_.

If the temperature stays the same, heavier particles move \_\_\_\_\_, than lighter particles.

As temperature increases, pressure \_\_\_\_\_.

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#### 4. More Kinetic Molecular Theory

Go to [http://www.mpcfaculty.net/mark\\_bishop/KMT.htm](http://www.mpcfaculty.net/mark_bishop/KMT.htm) to explore this theory further. Please read along with each slide.

What are the four assumptions of the kinetic molecular theory?

- 1.
- 2.
- 3.
- 4.

Describe what a solid looks like and what happens if temperature is increased:

How is a liquid different from a solid (microscopically)?

What is the conversion of a liquid to a gas called? \_\_\_\_\_

The average distance between particles of a gas is about \_\_\_\_\_.

99.9% of the volume of a gas is \_\_\_\_\_.

#### 5. Who wants to be a millionaire?

If you are done early, test your general science knowledge with a game of who wants to be a millionaire. <http://education.jlab.org/million/index.html>

How much money did you win?     \$\_\_\_\_\_