States of Matter (Basic) PhET Exploration Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour \_\_\_\_\_\_

Website: <http://phet.colorado.edu/en/simulation/states-of-matter-basics>

**Checking My Understanding- Comparing Solids, Liquids, and Gases**

Once at the site, hit the Run Now button. Complete the following matrix using the States of Matter (Basic) Simulation. Focus on similarities and differences.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Items to be compared** | | |
| **State of Matter-NEON** | **Solid** | **Liquid** | **Gas** |
| **Shape** |  |  |  |
| **Space between atoms** |  |  |  |
| **Attraction between the atoms** |  |  |  |
| **Describe the motion of the atoms** |  |  |  |
| **Kinetic Energy of the atoms** |  |  |  |
| **Draw a picture** |  |  |  |

Adapted from Marzano *A Handbook for Classroom Instruction that Works*.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Items to be compared** | | |
| **State of Matter-OXYGEN** | **Solid** | **Liquid** | **Gas** |
| **Shape** |  |  |  |
| **Space between atoms** |  |  |  |
| **Attraction between the atoms** |  |  |  |
| **Describe the motion of the atoms** |  |  |  |
| **Kinetic Energy of the atoms** |  |  |  |
| **Draw a picture** |  |  |  |

Compare the Neon matrix with the Oxygen matrix and answer the following.

1. What knowledge did you need to complete this task?
2. What insights did you gain (what did you learn) about the process of identifying similarities and differences while using these comparison matrixes.

Adapted from Marzano *A Handbook for Classroom Instruction that Works*.