**States of Matter**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the qualities of the three states of matter? Give an example of each.

|  |  |  |
| --- | --- | --- |
| Solid | Liquid | Gas |
| Qualities: | Qualities: | Qualities: |
| Example: | Example: | Example: |

1. Explain the difference between physical and chemical changes in matter.

|  |  |
| --- | --- |
| Physical | Chemical |
| Explanation: | Explanation: |
| Examples: | Examples: |

1. On the slide, “Is this a solid, liquid or gas?” list examples of each from the slide and 3 of your own.

|  |  |  |
| --- | --- | --- |
| Solid | Liquid | Gas |
|  |  |  |

1. On the slide “Is this a physical change or a chemical change, list examples of each (from the slide and 2 of your own).

|  |  |
| --- | --- |
| Physical | Chemical |
|  |  |

**Slime Experiment**

1. Are the ingredients for slime solids, liquids or gases?

|  |  |
| --- | --- |
| Ingredients | State of Matter (solid, liquid or gas) |
| Borax |  |
| Glue |  |
| Water |  |
| Food colouring |  |

1. What type of change happens when you turn those ingredients into slime, physical or chemical? How do you know?
2. Is slime a solid, liquid or gas? How do you know?

States of Matter Rubric

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Expectation | Level 1 | Level 2 | Level 3 | Level 4 |
| 2.3 use scientific inquiry/experimentation skills to investigate changes of state and changes in matter | Student uses experimentation skills with limited effectiveness to create slime | Student uses experimentation skills with some effectiveness to create slime | Student uses experimentation skills with considerable effectiveness to create slime | Student uses experimentation skills with a high degree of effectiveness to create slime |
| 2.5 use appropriate science and technology vocabulary | Student uses appropriate science and technology vocabulary with limited effectiveness | Student uses appropriate science and technology vocabulary with some effectiveness | Student uses appropriate science and technology vocabulary with considerable effectiveness | Student uses appropriate science and technology vocabulary with a high degree of effectiveness |
| 3.4 describe physical changes in matter as changes that are reversible  3.5 describe chemical changes in matter as changes that are irreversible  3.8 distinguish between a physical change and a chemical change | Student describes reversible physical and irreversible chemical changes with limited effectiveness | Student describes reversible physical and irreversible chemical changes with some effectiveness | Student describes reversible physical and irreversible chemical changes with considerable effectiveness | Student describes reversible physical and irreversible chemical changes with a high degree of effectiveness |
| 3.2 identify properties of solids, liquids, and gases | Student identifies properties of solids, liquids and gases with limited effectiveness | Student identifies properties of solids, liquids and gases with some effectiveness | Student identifies properties of solids, liquids and gases with considerable effectiveness | Student identifies properties of solids, liquids and gases with a high degree of effectiveness |
| 3.3 explain changes of state in matter (e.g., evaporation, condensation, solidification or freezing, fusion or melting, sublimation), and give examples of each | Student identifies changes in states of matter and gives examples with limited effectiveness | Student identifies changes in states of matter and gives examples with some effectiveness | Student identifies changes in states of matter and gives examples with considerable effectiveness | Student identifies changes in states of matter and gives examples with a high degree of effectiveness |

Slime Recipe

* + Making the slime:
    - Mix ¼ cup glue with ¼ cup water
    - Add a few drops of food coloring to color
    - Dissolve ½ teaspoon borax in ½ cup water
    - Slowly pour glue into borax water

\*\* Brought premixed Borax/ water solution to class and made it in Ziploc bags to reduce mess.