

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## 2.3 Concept 1: The States of Matter

**Matter** is anything that has \_\_\_\_\_ and \_\_\_\_\_.

Examples: \_\_\_\_\_

**Mass** is \_\_\_\_\_.

**Volume** is \_\_\_\_\_.

Matter can come in different states. Depending on its state, it has different properties (meaning, it looks and behaves differently). The four states of matter are:

Characteristics	Solid	Liquid	Gas	Plasma
<b>Volume</b> (Does the volume change if you squish it?)				
<b>Shape</b> (Is the shape fixed? Can you 'pour' it?)				
<b>Examples</b>				

What is **plasma**?

- Does not have a defined \_\_\_\_\_ and \_\_\_\_\_ (similar to \_\_\_\_\_)
- Have different \_\_\_\_\_ than gases
- Examples: \_\_\_\_\_, visible fork of a lightning bolt, glowing gas of a neon sign.



## NOTES TO ACCOMPANY MINI-LAB

### 2.3: The States of Matter

*Review: matter is anything that has **mass** or **volume**.*

Matter can come in different states. Depending on its state, it has different properties (it looks and behaves differently). The four states of matter are: **solid, liquid, gas, plasma**.

Property	Solid	Liquid	Gas
Shape (Does it have its own shape, or does it take the shape of its container?)	<b>Constant shape (does not change)</b>	<b>Takes shape of container</b>	<b>Takes shape of container</b>
Volume (Does the volume change?)	<b>Constant volume (does not change)</b>	<b>Constant volume (does not change)</b>	<b>Takes the volume of container</b>
Compressible (Can you squish it?)	<b>No</b>	<b>No</b>	<b>Yes</b>
Viscosity (Can you pour it?)	<b>No</b>	<b>Yes</b>	<b>Yes</b>

What is plasma?

- Does not have a defined **shape** and **volume** (similar to **gas**)
- Have different **electrical properties** than gases
- Examples: **the Sun**, visible fork of a lightning bolt, glowing gas of a neon sign.