

Name: \_\_\_\_\_ Group: \_\_\_\_\_ Date: \_\_\_\_\_

## Viscoelasticity Worksheet

1. What two categories of materials have viscoelastic material behavior?

\_\_\_\_\_

2. \_\_\_\_\_ is when energy is lost during the process of loading and unloading a material (one cycle).

3. \_\_\_\_\_ is when a material responds differently depending on how fast it's stretched.

4. \_\_\_\_\_ is when a material continues to deform over time with a constant force.

5. Describe one example of when preconditioning a material is advantageous.

6. Draw an example stress vs. time curve of a viscoelastic material that is stretched and held at a constant displacement. Be sure to label your axes.