

Material Testing

Name: _____

Student worksheet

Date: _____

1. Test Procedure

Follow the instructions below for each test and observe what happens to the material.

- **Flexibility:** Try to deform the material by bending it with your hands as hard as you can.
- **Hardness:** Scratch the material with a coin as hard as you can.
- **Transparency:** Shine a flashlight onto a wall and place the material into the beam of light. Observe if light passes through the material or if the material casts a shadow. *Do not shine the light into another person's eyes!*
- **Water Resistance:** Put a drop of water on the material with the medicine dropper/pipette.
- **Behavior in Water:** Carefully place the material in the bowl of water.

2. Test Results

After you have finished each test, record your results in the table shown on page 2.

Material Testing —Page 2

Name: _____

Date: _____

Material	Flexibility	Hardness	Transparency	Water Resistance	Behavior in Water
	<i>Does the material break?</i>	<i>Does the material's surface get scratched?</i>	<i>Does the material cast a shadow?</i>	<i>Does the material absorb water?</i>	<i>Does the material float?</i>
	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
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	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no