Uses and Changing Forms of Matter

A. Fill in the Blanks

Word Bank: matter melting evaporation freezing condensation

1. Everything around us that has mass and takes up space is called _____.

2. The change from a solid, like an ice cube, to a liquid is called _____.

3. When a puddle dries up, the water has turned into a gas. This is called _____.

4. The process of a liquid turning into a solid is _____.

5. Dew on the grass in the morning is an example of _____.

B. Match the Following;

Column A (Insect)	Column B (Description)
1. Solid	A. Water turning into ice.
2. Liquid	B. Has no definite shape or volume; fills its container.
3. Gas	C. An ice cube turning into water.
4. Melting	D. Has a definite shape and volume, like a book.
5. Freezing	E. Water droplets forming on a cold glass.
6. Evaporation	F. Has a definite volume but takes the shape of its container.
7. Condensation	G. A puddle disappearing on a hot day.

C. Practice Problems

1. What happens to an ice cream cone if you leave it in the hot sun?

2. What is the process called when water turns into ice?

3. When you boil water in a kettle, it creates steam. What is steam?

4. Why does a wet swimsuit dry faster on a sunny day than on a cloudy day?

5. What is the name for the process when a gas cools down and turns into a liquid?

D. Warm-up Questions

1. What are the three main states of matter?

2. What state of matter is a wooden chair?
3. What state of matter is the milk you drink?
4. What state of matter is the air you breathe?
5. Does a rock have its own shape? (Yes or No)

E. Challenge Questions

1. On a cold morning, you can sometimes see your breath. Explain what you are seeing using the word "condensation."
2. A chocolate bar is a solid. If you melt it, it becomes a liquid. If you let the liquid chocolate cool down, it becomes a solid again. Is it still chocolate? Why?
3. Why can you smell dinner cooking from another room in the house? (Hint: Think about how gases move).
4. Imagine you have a glass of water with ice cubes in it. What two states of matter are in the glass?
5. Why is a metal key a good choice for opening a lock, but a key made of water wouldn't work?

F. Word Problems & Application

1. Leo pours juice into a popsicle mold and puts it in the freezer. The next day, he has a solid popsicle. What process changed the juice from a liquid to a solid?
2. On a hot summer day, Maria leaves a glass of iced water outside. She notices little drops of water forming on the outside of the glass. Where did this water come from?
3. A snowman is built in the yard. It is a solid. After a few warm, sunny days, the snowman is gone, and there is only a puddle of water. What process happened to the snowman?
4. Dad is boiling water to cook pasta. He sees lots of steam rising from the pot. What is happening to the liquid water?
5. Why do we use solid wood to build a house instead of liquid water?

G. True or False

1. Freezing is when a solid turns into a liquid. _____
2. Air is not matter because you can't see it. _____
3. A liquid takes the shape of its container. _____
4. Melting is caused by adding heat to a substance. _____
5. Steam from a kettle is in a solid state. Correction: _____