# Changes in the State of Water and the Water Cycle

#### A. Fill in the Blanks

Word Bank:	Condensation	Sun	Precipitation Collection	Evaporation
1. The	heats up water in o	ceans an	nd lakes.	
2. The proces	ss of water turning into v	vater vap	oor is called	
3	is when water vapor co	ols and f	orms clouds.	
4. Rain, snow	, or hail falling from the	sky is cal	led	
5.	is when water gathers i	n oceans	. rivers, and lakes.	

## B. Match the Following;

Column A (Process)	Column B (Description)
1. Melting	A. Water vapor turns back into liquid water.
2. Freezing	B. Water falls from the clouds as rain or snow.
3. Evaporation	C. Liquid water turns into a solid (ice).
4. Condensation	D. A solid (ice) turns into liquid water.
5. Precipitation	E. Liquid water turns into a gas (water vapor).

#### C. Practice Problems

- 1. What happens to a puddle of water on the sidewalk on a hot, sunny day? Which process is this?
- 2. What is the name for the process when water vapor in the air gets cold and changes back into liquid water, forming clouds?
- 3. When the water droplets in a cloud get too heavy, they fall to the Earth. What is this process called?
- 4. If you put an ice cube on the kitchen counter, it will slowly turn into liquid water. What is this process called?
- 5. After it rains, water flows into rivers, lakes, and oceans. What is this stage of the water cycle called?

## D. Warm-up Questions

- 1. What are the three states (or forms) of water?
- 2. What do we call water in its solid state?

- 3. What is the main source of energy that drives the water cycle?
- 4. When water gets very cold and turns into a solid, what is this process called?
- 5. What are clouds in the sky made of?

### E. Challenge Questions

- 1. Can water evaporate on a cool, windy day? Why or why not?
- 2. If the water cycle completely stopped, what are two things that might happen to our planet?
- 3. Why is the water cycle called a "cycle"?
- 4. On a very cold winter day, you can see your breath. Which part of the water cycle does this look like? Explain why.
- 5. Where on Earth would you find the most water in its solid state (ice)?

### F. Word Problems & Application

- 1. Leo bought a frozen ice pop. He left it on the picnic table in the sun while he went to play. When he came back, his ice pop was a puddle of sticky juice. What process happened to his ice pop?
- 2. Maria's mom is boiling a pot of water to make pasta. Maria sees steam rising from the pot. The steam is water turning from a liquid into a gas. What is this process called?
- 3. After a big rainstorm, a huge puddle formed in Sam's backyard. The next day was very sunny, and by the afternoon, the puddle was gone. Where did the water go?
- 4. Tia wants to make ice cubes for her juice. She fills an ice cube tray with water and puts it in the freezer. A few hours later, she has solid ice cubes. What process turned the water into ice?
- 5. On a cool morning, the grass is covered in tiny water droplets called dew, even though it didn't rain overnight. What process caused this to happen?

#### G. True or False

1. Freezing is when water turns from a solid to a liquid.	
2. Clouds are made of heavy gas.	
3. The sun's heat causes <u>condensation</u> .	
4. Rain and snow are forms of <u>collection</u> .	
5. The three states of water are solid, liquid, and <u>air</u> .	