Name _____ Date _____

States of Matter and Evaporation: Where Did the Puddle Go?

Directions: Read about Nia's puddle. Then answer each question.

Where Did the Puddle Go?

It rained before school. At recess, Nia found a wide puddle on the blacktop. By the end of the day, the puddle was gone. The blacktop was hard and smooth, so the water could not soak in. No one mopped it up. So where did the water go?

All matter is made of particles far too small to see. In a puddle, the water particles are always moving. The warm Sun makes them move faster. Some particles at the top move fast enough to escape into the air. There they spread out as **water vapor**, which is water as a gas. You cannot see water vapor. This change from liquid to gas is called **evaporation**.

The water did not vanish. It is still water, just in a new state. If water vapor cools, it can turn back into tiny drops of liquid. That change is called **condensation**.

1. By the end of the day, Nia's puddle was gone. According to the passage, where was its water then?

A. Soaked down into the blacktop
B. Spread out in the air as water vapor
C. Changed into dry dust on the blacktop
D. Gone for good, because it stopped existing

2. Use the word bank to finish the sentence about how Nia's puddle dried up.

Word bank

faster • particles • slower • cells

The warm Sun made the water _____ in the puddle move _____, so more of them could escape into the air.

3. Match each word from the puddle passage with its meaning.

Write the letter of the matching answer on each line.

1. _____ particle
2. _____ water vapor
3. _____ evaporation
4. _____ condensation

A. Water that has become a gas you cannot see
B. Solid turning into liquid
C. Liquid turning into gas
D. One of the tiny bits that all matter is made of
E. Gas turning into liquid

4. The passage says the puddle's water is "still water, just in a new state." What does the word *state* mean in that sentence?

A. How much of something there is

B. How warm or cold something is

C. A part of a country, such as Iowa or Texas

D. The form matter is in, such as solid, liquid, or gas

5. Nia's puddle never got hot enough to boil. What does that tell you about evaporation?

A. The puddle must have frozen into ice first.

B. Water can evaporate without boiling.

C. The water must have soaked into the blacktop instead.

D. Only boiling water can turn into a gas.

6. Nia's puddle dried up because of evaporation. Which of these is another example of evaporation?

A. An ice cube melting on a plate

B. Wet hair drying in warm air

C. A pond freezing on a cold night

D. Sugar seeming to disappear as it is stirred into lemonade

7. That afternoon, Nia pours ice water into a glass. Soon tiny drops of water cover the outside of the glass. Where did those drops come from?

A. The cold glass made brand-new water out of nothing.

B. Water from inside the glass leaked out through tiny holes.

C. The ice melted and climbed up the outside of the glass.

D. Water vapor in the air cooled on the cold glass and condensed.

8. What would happen if a puddle just like Nia's formed on a cool, cloudy day instead of a warm, sunny one?

A. It would never evaporate, because there is no sunshine.

B. It would take longer to evaporate.

C. It would evaporate faster, because cool air pulls water up.

D. It would soak into the blacktop instead.