Name _____

Vocabulary Review

Use the terms in the box to complete the sentence.

1. A change in matter in which a new substance is not formed is a ______.

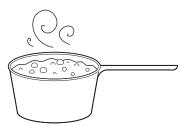
chemical change chemical property chemical reaction physical change

- 2. A characteristic that describes how a substance will interact with another substance is a _______.
- 3. Any change in matter in which a new and different substance forms is called a ______ or a _____.

Science Concepts

Fill in the letter of the choice that best answers the question.

4. Blake will cook some pasta for dinner. He puts a pot of water on the stove to boil.



What best describes the type of physical change of boiling water?

- (A) change in size
- (C) change in color
- B change in state
- (D) change in shape

5. Winnie wants to make a tossed salad. She chops lettuce, tomatoes, carrots, and other vegetables. Then she puts them into a large bowl and mixes them up. Winnie takes a bite of salad and chews it. When she swallows, her stomach digests the vegetables.

Which of the actions is a chemical reaction?

- (F) chopping carrots
- **G** mixing the salad
- (H) biting the food
- (I) digesting the vegetables

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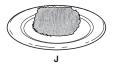
- 6. Ian pushes the mower around the yard, cutting the grass to about 2 in. tall. When he stops the mower, he removes the grass catcher and pours the clippings into the compost pile. The grass will eventually decompose. Finally, Ian sweeps the grass clippings off the sidewalk. Which statement is true?
 - (A) Cutting the grass is a chemical change.
 - (B) Composting the grass is a physical change.
 - © Sweeping the sidewalk is a physical change.
 - D Pushing the mower is a chemical change.

- 7. Before swimming, Kiera covers her arms and legs with sunscreen. She blows up an inner tube to float on and jumps into the pool. After an hour, Kiera notices that her face has become sunburned. Which action is a chemical change?
 - (F) putting sunscreen on her arms and legs
 - (G) blowing up an inner tube
 - (H) jumping into the pool
 - (I) becoming sunburned

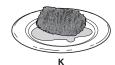
Apply Inquiry and Review the Big Idea

Write the answers to these questions.

- 8. Franco wants to test the effects of water on steel wool. He sets up two plates. Steel Wool J is dry and exposed to air. Steel Wool K is wet and exposed to air.
 - a. Franco makes some observations about the steel wool before he starts the test. What are two observations that he can make? Make a claim about what tools should he use to make those observations.



Dry Steel Wool on Plate



Wet Steel Wool on Plate

b. What changes is Franco likely to observe after one week? Make a claim about whether these changes are chemical or physical. Cite evidence to support your claim.