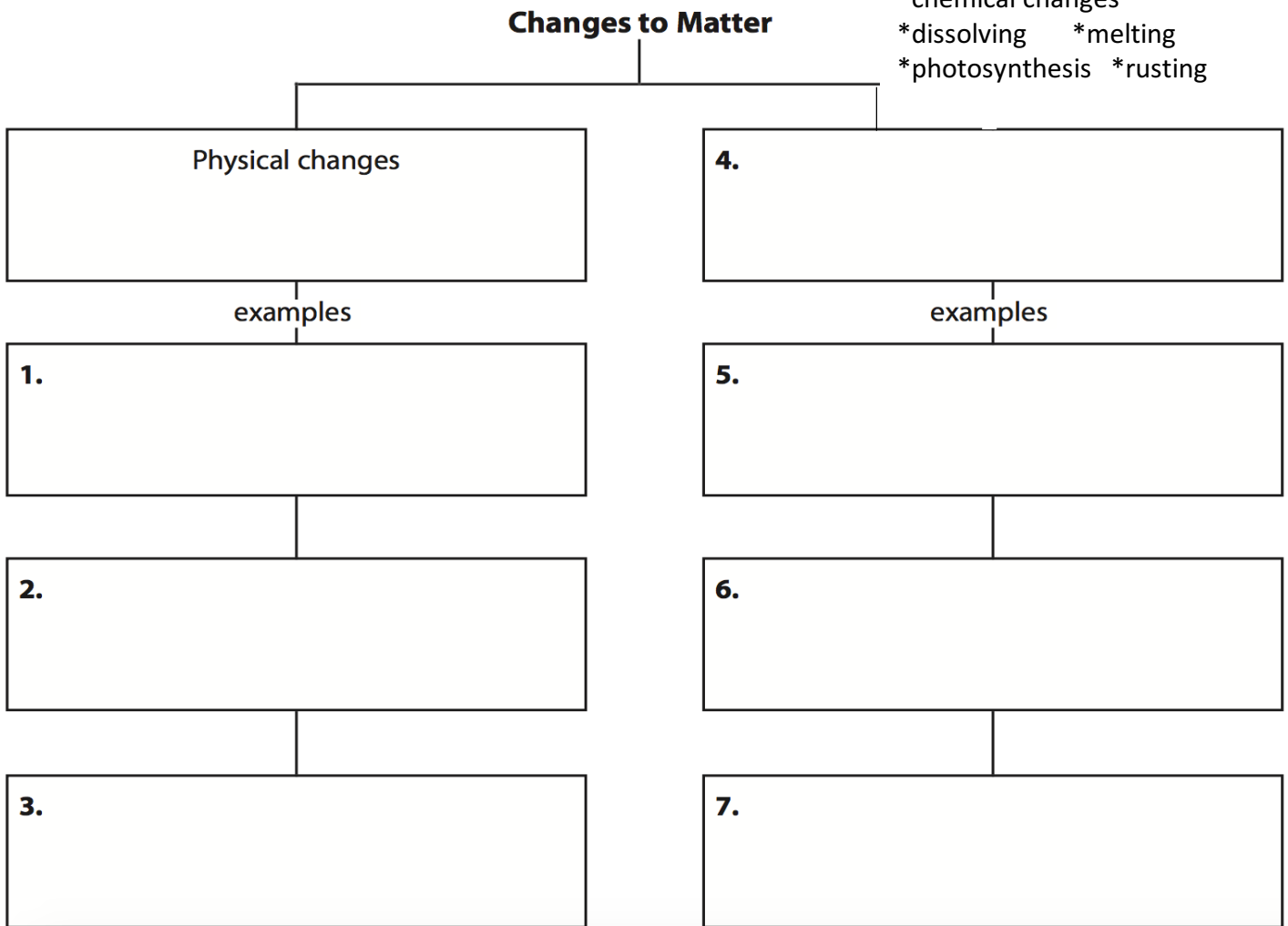


Name _____ Date _____ Hour _____ Table _____

Directions: Fill in the diagram below using words from the word bank.

- *boiling
- *burning
- *chemical changes
- *dissolving
- *melting
- *photosynthesis
- *rusting



Directions: Circle the term in parentheses that correctly completes each sentence.

8. When matter undergoes a physical or chemical change, the amount of mass (changes / stays the same)
9. All chemical reactions result in the production of a new substance and involve a change in (energy / volume).
10. Some changes cannot be (repeated /reversed).
11. Photosynthesis is an example of a (physical / chemical) change that almost all living things rely on.

Name _____ Date _____ Hour _____ Table _____

Matter and Its Properties

Directions: On the line before each definition, write the letter of the term that matches it correctly.

- _____ 12. anything that has mass and takes up space
- _____ 13. a state of matter with a definite shape and volume
- _____ 14. a state of matter with a definite volume but no definite shape
- _____ 15. a state of matter that does not have a definite volume or a definite shape
- _____ 16. the amount of matter in an object
- _____ 17. temperature at which liquid changes to a gas
- _____ 18. the amount of space an object occupies
- _____ 19. temperature at which a solid changes to a liquid
- _____ 20. a characteristic of a material that can be observed without changing the identity of the material
- _____ 21. a characteristic of a material that can be observed as the material reacts with or changes into a different substance
- _____ 22. the ability of one material to dissolve in another
- _____ 23. the ability to burn easily
- _____ 24. the gravitational pull on an object
- _____ 25. the mass per cubic volume of a substance
- _____ 26. any change in matter in which the identity of the matter is not changed
- A. liquid**
- B. mass**
- C. physical property**
- D. volume**
- E. gas**
- F. solubility**
- G. chemical property**
- H. solid**
- I. weight**
- J. flammability**
- K. matter**
- L. density**
- M. boiling point**
- N. melting point**
- O. physical change**

Name _____ Date _____ Hour _____ Table _____

Directions: Circle the correct answer to each question below. On the line before each question, record the page number where you found the answer.

_____ **27.** The melting point of gold is 1064°C . Which of the following could describe gold?

- A. gas at 1000°C
- B. liquid at 1000°C
- C. liquid at 1100°C
- D. solid at 1100°C

_____ **28.** Ten grams of one substance reacts with 20 g of another substance. What is true about the materials after the reaction?

- A. The mass of the materials is less than 30 g.
- B. The mass of the materials is more than 30 g.
- C. The mass of the materials is exactly 30 g.
- D. It is not possible to determine the mass of the mixture.

_____ **29.** The force of gravity on the Moon is about $\frac{1}{6}$ as strong as the force of gravity on Earth. Identical balls are placed on the Moon and the Earth. Which is true?

- A. The ball on the Moon weighs $\frac{1}{6}$ as much as the ball on Earth.
- B. The ball on the Moon weighs 6 times as much as the ball on Earth.
- C. The ball on the Moon weighs 36 times as much as the ball on Earth.
- D. Both balls weigh the same.

_____ **30.** Which is an example of a chemical change?

- A. breaking a bottle
- B. cooking an egg
- C. cutting carrots
- D. freezing water

_____ **31.** An old car is left outside in the rain. Over a period of time rust begins to form. This is an example of what?

- A. irreversible chemical change
- B. reversible chemical change
- C. irreversible physical change
- D. reversible physical change

_____ **32.** A solid that forms as a result of a chemical reaction between two liquids is a _____.

- A. mineral
- B. precipitate
- C. solute
- D. supernate

_____ **33.** According to the law of conservation of mass, what is true in a chemical reaction?

- A. Matter cannot be created or destroyed; it can only change forms.
- B. Matter can be created and destroyed, but it cannot change forms.
- C. The mass of the products is always less than the starting mass of the reactants.
- D. The mass of the products is always more than the starting mass of the reactants.

_____ **34.** Which is an example of a physical change?

- A. baked bread rising
- B. metal rusting
- C. water boiling
- D. wood burning

Name _____ Date _____ Hour _____ Table _____

Content Practice

Directions: On the line before each change, write **P** for **physical change** or **C** for **chemical change**.

_____ 1. glass melting

_____ 6. leaves changing color

_____ 2. wood burning

_____ 7. sugar dissolving

_____ 3. bread baking

_____ 8. oxygen becoming liquid

_____ 4. water vapor condensing

_____ 9. silver tarnishing

_____ 5. iron rusting

_____ 10. carving a pumpkin

Directions: Some changes can be reversed—others cannot. Put a check mark on the line before each change that is reversible. Put an X on the line before each change that is not reversible.

_____ 11. making water into ice

_____ 12. hard-boiling an egg

_____ 13. dissolving salt in water

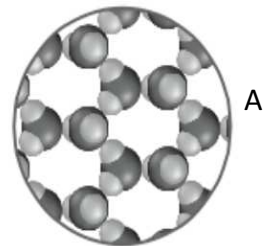
_____ 14. breaking a window

_____ 15. scorching fabric

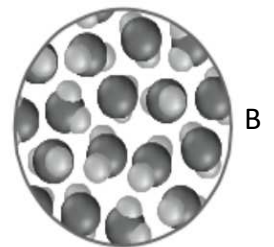
Directions: Use the diagram to answer the question.

16. The pictures show particles of water in three different states of matter.
Which state is shown in each picture and how can you tell?

Picture A shows water as a _____. I know this because



Picture B shows water as a _____. I know this because



Picture C shows water as a _____. I know this because

