

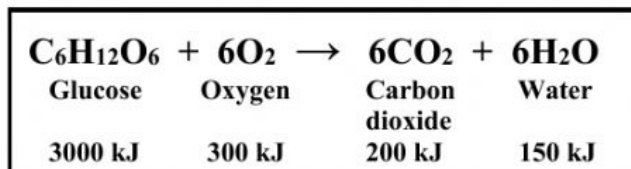
Name:

Date:

Period:

Test #1

Select the best answer for each of the following questions and write your answer in the blank.



1. Why is the sum of the products' energy in this reaction less than the sum of the reactants' energy?

- a. Energy is given off as heat.
- b. The products absorb available energy.
- c. Energy is trapped in the reactants.
- d. The reactants' energy is less than the melting point of glucose.

2. Energy conversion within an animal cell would be severely limited by removal of the cell's –

- a. mitochondria
- b. chloroplasts
- c. plastids
- d. lysosomes

3. Which of the following is an example of a chemical change?

- a. glass cracking
- b. salt dissolving
- c. iron rusting
- d. gold melting

4. All living things store their energy as what type of energy?

- a. mechanical
- b. chemical
- c. kinetic
- d. radiation

5. Which of these changes is an example of erosion?

- a. Acid rain damaging marble
- b. Radiation fading the paint on a building
- c. Sulfuric acid weathering a statue
- d. A river washing silt down stream

6. Which of the following is an example of an **endergonic** reaction?

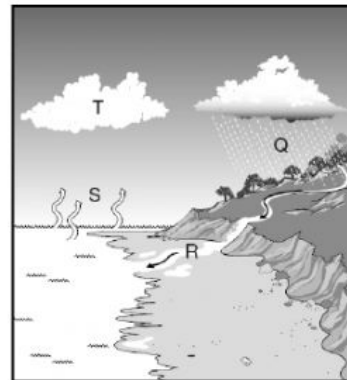
- a. The combustion of a log of wood
- b. Baking a frozen turkey in the oven
- c. A battery generating electrical current
- d. A glow stick emitting radiation

7. Some species of kelp anchor themselves to the seafloor. These species have small air sacs, called air bladders, at the base of each leaf. The air bladders raise the top of the kelp to the water's surface. What advantage do air bladders give the kelp?

- A They allow the kelp to obtain more salt from the water.
- B They prevent the kelp from breaking during a storm.
- C They allow kelp leaves to receive greater amounts of sunlight.
- D They provide the kelp with protection from herbivores.

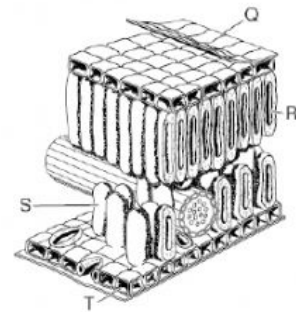
8. Which step in the water cycle represents condensation?

- A Q
- B R
- C S
- D T



9. Which of these structures protects a leaf from drying out?

- A Q
- B R
- C S
- D T



10. When a 1-kilogram log was burned, 0.05 kilogram of ash was produced. The mass of the ash is less than the mass of the log because —

- A wind carried away some matter before it burned
- B some matter was converted to gases that were released
- C combustion changed some matter into energy
- D some matter was decomposed by organisms in the soil

11. How is the circulatory system related to the digestive system?

- F** The brain stem controls the heart rate.
- G** Blood carries nutrients to body cells.
- H** Stomach muscles contract and expand.
- J** The pharynx is a passageway for air and food.

12. Because chewing begins the breakdown of food before it is swallowed, digestion starts in the mouth and throat. Which of the following systems aids most in this early stage of digestion?

- A** Immune system
- B** Excretory system
- C** Muscular system
- D** Respiratory system

13. If all the reactants in a chemical reaction are completely used, which of the following statements accurately describes the relationship between the reactants and the products?

- F** The products must have a different physical state than the reactants.
- G** The total mass of the reactants must equal the total mass of the products.
- H** The reactants must contain more complex molecules than the products do.
- J** The density of the reactants must equal the density of the products.

Calcium	+	Zinc carbonate		Calcium carbonate	+	Zinc
64 g		192 g		152 g		? g

14. According to the law of conservation of mass, how much zinc was present in the zinc carbonate from the reaction above?

- A** 40 g
- B** 88 g
- C** 104 g
- D** 256 g

15. Which of the following processes is an example of a physical change associated with an oak tree?

- A** Decomposition of bark by bracket fungi
- B** Starches and sugars being broken down during energy production
- C** Water and carbon dioxide being converted to glucose
- D** Evaporation of water from the surfaces of leaves

16. Food provides the human body with all of the following except –

- A calories
- B amino acid
- C hydrochloric acid
- D lipids



17. When 254 g of copper reacts with 64 g of oxygen gas to form copper (II) oxide, no copper or oxygen is left over. How much copper (II) oxide is produced?

- A 64 g
- B 190 g
- C 254 g
- D 318 g