

Section Quiz

Section: The Nature of Matter

Match the correct description with the correct term. Write the letter in the space provided.

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| _____ 1. the space taken up by an object | a. atom |
| _____ 2. the basic building block of matter | b. matter |
| _____ 3. a measure of the gravitational force exerted on an object | c. volume |
| _____ 4. the amount of matter in an object | d. weight |
| _____ 5. has mass and takes up space | e. mass |

Write the letter of the correct answer in the space provided.

- _____ 6. The volume of liquids is most often expressed as
- liters (L) and millimeters (mm),
 - liters (L) and cubic meters (m³),
 - liters (L) and milliliters (mL),
 - liters (L) and milligrams (mg).
- _____ 7. The formula *length* \times *width* \times *height* is used to measure
- volume.
 - mass.
 - weight.
 - matter.
- _____ 8. The properties of a substance are determined by
- the kind, number, and speed of its atoms.
 - the kind, number, and arrangement of its atoms.
 - the kind, number, and arrangement of its protons.
 - the kind, number, and speed of its protons.
- _____ 9. To measure the volume of water in a graduated cylinder, you must look at
- the top of the meniscus.
 - the bottom of the meniscus.
 - the line at the top of the cylinder.
 - the number of milliliters.

Section Quiz

Section: Physical Properties

Match the correct definition with the correct term. Write the letter in the space provided.

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|--|----------------------------|
| _____ 1. the ability of a substance to be made into thin sheets | a. density |
| _____ 2. a change in the form of a substance that does not change its identity | b. physical property |
| _____ 3. the ability to conduct electric current | c. solubility |
| _____ 4. the relationship between mass and volume | d. physical change |
| _____ 5. the ability of a substance to dissolve | e. malleability |
| _____ 6. can be observed or measured without changing the matter's identity | f. electrical conductivity |

Write the letter of the correct answer in the space provided.

- _____ 7. Why is 1 kg of lead easier to carry around all day than 1 kg of feathers?
- Lead has more mass but less density than feathers.
 - Lead has the same mass but more density than feathers.
 - Lead has less mass but less density than feathers.
 - Lead has less mass but more density than feathers.
- _____ 8. Which of the following is NOT an example of a physical change?
- the shaping of a gold bar
 - the melting of a Popsicle
 - the explosion of fireworks
 - the sanding of a piece of wood
- _____ 9. What kinds of changes in a substance are always physical changes?
- changes of state
 - changes that form a new substance
 - changes in identity of the substance
 - changes in density of the substance

Section Quiz

Section: Interactions of Matter

Match the correct description with the correct term. Write the letter in the space provided.

- _____ 1. law that states energy cannot be destroyed or created, only changed a. entropy
- _____ 2. the ability to do work b. exothermic
- _____ 3. a chemical change that releases energy c. energy
- _____ 4. a measure of randomness or disorder d. conservation of energy
- _____ 5. a chemical change that takes in energy e. endothermic

Write the letter of the correct answer in the space provided.

- _____ 6. The mechanical energy used to move airboats forward in the Everglades
 - a. is converted from energy stored in gasoline.
 - b. is destroyed as it is used to move the airboat.
 - c. is created by energy stored in gasoline.
 - d. is converted back to energy stored in gasoline.
- _____ 7. The energy of an object that is due to its motion is
 - a. potential energy.
 - b. kinetic energy.
 - c. thermal energy.
 - d. physical energy.
- _____ 8. During a chemical change, atoms in the substance
 - a. are destroyed.
 - b. are created.
 - c. are rearranged.
 - d. change their state.
- _____ 9. What happens to energy that cannot be used to do work?
 - a. It is destroyed and disappears.
 - b. It increases randomness or disorder.
 - c. It is used to create new energy.
 - d. It is converted into new forms of matter.

Section Quiz

Section: Chemical Properties

Match the correct definition with the correct term. Write the letter in the space provided.

- _____ 1. the type of matter and its arrangement in an object a. reactivity
- _____ 2. the ability of a substance to burn b. chemical change
- _____ 3. a change from one substance to an entirely new substance c. flammability
- _____ 4. changes in matter that do not change the composition of the substance d. composition
- _____ 5. the ability of two or more substances to combine to form other substances e. physical change

Write the letter of the correct answer in the space provided.

- _____ 6. Why are chemical properties harder to observe than physical properties?
 - a. Chemical properties change the substance's identity.
 - b. Chemical properties depend on the size of the sample.
 - c. Physical properties change the substance's identity.
 - d. Physical properties change the reactivity of a substance.
- _____ 7. What is the best way to tell if a chemical change has taken place?
 - a. The matter changes color.
 - b. The change is reversible.
 - c. A mixture separates into layers.
 - d. The composition changes.
- _____ 8. Which of the following is NOT the result of a chemical change?
 - a. soured milk
 - b. rusted metal
 - c. ground flour
 - d. digested food
- _____ 9. Which of the following is a chemical property of matter?
 - a. solubility
 - b. volume
 - c. density
 - d. reactivity
- _____ 10. Why are characteristic properties useful in identifying a substance?
 - a. Characteristic properties change with the size of the sample.
 - b. Characteristic properties are always the same.
 - c. Characteristic properties are always easy to observe.
 - d. Characteristic properties are always physical.