

Assessment

Chemistry: Lesson 01



Which of the following is a false statement?

- a) Molecules are formed by two or more atoms bonded together.
- b) Atoms of different elements have different properties.
- c) The smallest particle of a compound is an atom.
- d) Matter occupies a certain amount of space and also has a definite mass.
- e) Matter can exist as both atoms and molecules.

Which of the following can be classified as matter?

- a) Lead
- b) Salt
- c) Car
- d) Chair
- e) All of the above

A state of matter that has a definite volume and is relatively incompressible is a

- a) solid.
- b) liquid.
- c) gas.
- d) All of the above
- e) Two of the above



Which of the following would NOT be considered matter?

- a) Water
- b) Sugar
- c) Light
- d) Gasoline
- e) Sand

Which of the following has a fixed volume and a definite shape?

- a) Liquid mercury
- b) H_2O as ice
- c) H_2O as water
- d) Oxygen gas
- e) A compressible gas

Which of the following is an example of an <u>amorphous</u> solid?

- a) Diamond
- b) Table Salt
- c) Gold
- d) Water
- e) Plastic



(a) Crystalline solid



(b) Amorphous solid

Which of the following is an example of a **<u>Crystalline</u>** solid?

- a) Table Salt
- b) Glass
- c) Carbon
- d) Plastic
- e) Non of the above



(a) Crystalline solid



(b) Amorphous solid

Which of the following is a mixture?

- a) Seawater
- b) Iron ores
- c) Air
- d) Milk
- e) All of the above



Which of the following is an element?

- a) Sugar
- b) Salt
- c) Helium
- d) Air
- e) All of them

Which of the following is a compound?

- a) Water
- b) Sodium
- c) Hydrogen
- d) Air
- e) All of them



Assessment

Chemistry: Lesson 02



Which of the following is a physical change?

- a) A piece of paper burns.
- b) An apple ripens.
- c) Gasoline is changed into carbon dioxide and water.
- d) Heat causes ice to change into water vapor.
- e) Sugar is digested.

Which of the following is <u>NOT</u> a chemical property?

- a) The density of a liquid
- b) The ability of iron to rust
- c) Flammability of gasoline
- d) Reactivity of acids with metals
- e) All of these are chemical properties.

Which is the opposite of evaporation?

- a) Sublimation
- b) **Deposition**
- c) Melting
- d) Freezing
- e) Condensation

Which of the following is <u>true</u> for chemical changes?

- a) They are changes in state.
- **b)** They form new substances.
- c) They can usually be reversed.
- d) All of the above

Which one of the following choices includes only <u>chemical changes</u>?

- a) Decay, digestion, and burning
- b) Rusting, evaporation, and decay
- c) Melting, freezing, and digestion
- d) Corrosion, sublimation, burning
- e) Melting, evaporation, and sublimation

Which of the following is a physical property?

- a) A metal can react with acids.
- b) Paper can be burned.
- c) Salt crystals have a cube shape.
- d) A metal can corrode by combining with oxygen.
- e) Sugar can be digested

Physical properties are usually determined by observing how a

substance reacts with another one.

a) True

b) False

Which of the following is a physical change?

- a) Burning butane
- b) Barbequing a steak
- c) Decomposing water into hydrogen and oxygen gases
- d) Breaking a piece of glass
- e) Baking a cake

Which of the following statements is <u>FALSE</u>?

- a) The freezing of water is a physical change.
- b) The conversion of compounds into elements is a physical change.
- c) Combining sodium metal and chlorine gas to form sodium chloride is a chemical change.
- d) Photosynthesis is an example of a chemical change.

Boiling point is an example of a

- a) physical change.
- b) chemical change.
- c) quantitative property.
- d) physical property.
- e) chemical property.





Assessment

Chemistry: Lesson 03



The "SI" unit for mass is the:

- a) pound
- b) kg
- c) cubic cm
- d) inch

The "SI" unit for length is the:

a) Kg

- b) cm
- c) m

d) km

Convert 64 kg into lbs. [1 kg = 2.2 lbs]

- a) 0.034
- b) 29.1
- c) 140.8
- d) 128.5
- e) 101.7

A measurement of 7.2 cm equals ____ meters.

- a) 0.072
- b) 0.0072
- c) 720
- d) 7200
- e) Non of the above

Density is the ratio of:

- a) Volume to mass
- b) Length to mass
- c) Mass to volume
- d) Mass to area

Which of these units is the same in both the English and the metric system?

- a) Second
- **b)** ⁰C
- c) Kilogram
- d) Meter
- e) Liter

What are the fundamental SI units of length, mass, time, and temperature, respectively?

- a) km, kg, s, K
- b) m, g, s, °C
- c) m, g, s, K
- d) m, kg, s, °C
- e) m, kg, s, K

Convert 42 °C to °F and express the answer to the correct number of significant figures.

- a) 42 °F
- b) 107 °F
- c) 107.6 °F
- d) 108 °F
- e) 315 °F

Convert 97 °C to K and express the answer to the correct

number of significant figures.

a) 369 K

- b) 370 K
- c) 397 K
- d) –176 K
- e) No listed answer is correct.

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What is the density (g/mL) of an object that has a mass of 14.01 grams and, when placed into a graduated cylinder, causes the water level to rise from 25.2 mL to 33.6 mL?

a) 0.60

- b) 1.7
- c) 1.8
- d) 2.4
- e) None of the above

