

Directions: This is to give you an idea about how the material you learned might look in multiple choice format. It is also to help you see what the time will feel like during the test. Each Practice test should take you no more than 20 minutes. This is NOT an all-encompassing practice test – some topics might be missing, some might be over or under represented here. It is just practice!

Practice Test #1 - SHOW ALL WORK IN YOUR NOTEBOOK!

- An atom with 15 protons and 16 neutrons is an atom of
 - P
 - Ga
 - S
 - Pd
 - Rh
- How many protons, electrons, and neutrons, respectively, does ^{16}O have?
 - 8, 18, 8
 - 8, 8, 8
 - 8, 10, 8
 - 8, 14, 8
 - 8, 18, 16
- Which particle has the smallest mass?
 - neutron
 - proton
 - electron
 - helium nucleus
- $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^7$ is the electron configuration for which of the following atoms?
 - Ca
 - Fe
 - Cr
 - Ar
 - Co
- A _____ change is one in which a given substance changes into a different substance or substances.
 - chemical
 - physical
 - mixed
 - potential
 - kinetic
- Which of the following processes is a **chemical** change?
 - Dry ice sublimates when left on the demo table in lecture.
 - The wick on a candle burns.
 - When a few drops of red food coloring are added to a beaker, the water turns red.
 - Liquid nitrogen dumped onto the floor vaporizes at room temperature.
 - None of the above processes are chemical changes.

- Express 1740000 in scientific notation.
 - 5.12×10^{-8}
 - 1.74×10^{-6}
 - 1.74×10^6
 - 174×10^6
 - 174×10^4
- Convert 3.5 kilograms into grams.
 - 3.5×10^2
 - 3.5×10^3
 - 35
 - 0.35
 - 3.5×10^{-3}
- Water has a density of 1.0 g/mL. Which of these objects will **float** in water?
 Object I: mass = 50.0 g; volume = 60.8 mL
 Object II: mass = 65.2 g; volume = 42.1 mL
 Object III: mass = 100.0 g; volume = 20.0 mL
 - I only
 - I, III
 - II only
 - II, III
 - III only
- Which metric prefix is used to designate 1000?
 - m
 - M
 - K
 - c
 - d
- Perform the following conversion:
 $5.54 \text{ m/s} = \underline{\hspace{2cm}} \text{ mi/h}$
 - 0.404 mi/h
 - 12.4 mi/h
 290. mi/h
 207. mi/h
 - 11.1 mi/h
- A cat is 7.4 lb. What is the mass of the cat in kilograms? (1 kg = 2.2046 lb)
 16. kg
 - 0.30 kg
 - 3.4 kg
 - 9.6 kg
 - 7.4 kg

Finished in time? Yes No	Gussed _____%	Actual _____%
	#1 Topic to Study	

Practice Test #2 - SHOW ALL WORK IN YOUR NOTEBOOK!

13. Convert: 1.4 mm = _____ km.
A) 1.4×10^{-6} km
B) 1.4×10^{-3} km
C) 1.4×10^3 km
D) 1.4×10^6 km
E) 1.4×10^2 km
14. Convert 8.20 kg to pounds (1 lb = 453.6 g).
A) 18.1 lb
B) 1.81×10^{-2} lb
C) 3.72×10^3 lb
D) 3.72 lb
E) 3.72×10^6 lb
15. A phosphorus atom needs to gain _____ electrons to achieve a noble gas configuration.
A) 2
B) 3
C) 4
D) 5
E) 6
16. A given set of *f* orbitals consists of _____ orbital(s).
A) 1
B) 3
C) 5
D) 7
E) 9
17. The maximum number of electrons allowed in each of the *p* orbitals is
A) 2
B) 4
C) 8
D) 18
E) 6
18. The maximum number of electrons allowed in the *p* sublevel is
A) 1
B) 2
C) 3
D) 6
E) 8
19. The probability map for an electron is called
A) an orbit
B) a photon
C) an orbital
D) an electron configuration
E) probability map
20. The electron configuration for the sulfur atom is
A) $1s^2 2s^2 2p^6 3s^2 3p^2$
B) $1s^2 2s^2 2p^6 3s^2 3p^4$
C) $1s^2 2s^2 2p^6 3s^5$
D) $1s^2 2s^2 2p^6 3s^2 3p^5$
E) $1s^2 2s^2 2p^6$
21. The number 0.005824 expressed in scientific notation is
A) 5.82×10^3
B) 5.824×10^3
C) 5.82×10^{-3}
D) 5.824×10^{-3}
E) 5824×10^{-6}
22. A _____ change is one where there is **no** change in the fundamental components that make up the substance.
A) chemical
B) physical
C) mixed
D) potential
E) kinetic
23. The density of mercury is 13.6 g/mL. What is the mass of 66.8 mL of mercury?
A) 9.08×10^2 g
B) 4.91 g
C) 1.00 g/mL
D) 0.204 g
E) none of these
24. Convert 10.1 cm to inches (2.54 cm = 1 in).
A) 25.7 in
B) 2.57 in
C) 3.98 in
D) 39.8 in
E) 0.398 in

<u>Finished in time?</u> Yes No	<u>Guessed</u> _____%	<u>Actual</u> _____%
<u>#1 Topic to Study</u>		