

1) The characteristic bright line spectrum of an element is produced when an electron

- a) moves to higher energy levels.
- b) falls back to lower energy levels.
- c) is emitted as gamma radiation.
- d) is absorbed into the nucleus.

2) Each horizontal row on the periodic table is called a

- a) period.
- b) family.
- c) group.
- d) cohort.

3) Each vertical column on the periodic table is called a

- a) series.
- b) period.
- c) principal quantum level.
- d) group.

4) The ground state electron configuration for an atom of carbon is

- a) $1s^2 2s^2$.
- b) $1s^2 2s^2 2p.^2$
- c) $1s^2 2s^2 2p^4$.
- d) $1s^2 2s^4$.

5) All of the following are used to characterize electromagnetic radiation except

- a) charge.
- b) frequency.
- c) speed.
- d) wavelength.