

**Oceanography Section 5-1 and 5-2 Questions****Multiple Choice**

Identify the choice that best completes the statement or answers the question.

- \_\_\_\_\_ 1. Atoms are
- Composed of a nucleus consisting of elements and neutrons with protons orbiting about the discrete proton shells.
  - The smallest particles of a material that displays all the properties of that material.
  - Chemically bound together to form isotopes.
  - Electrically stable when the number of electrons and neutrons are the same.
- \_\_\_\_\_ 2. Electrons
- Leave or join an atom in the formation of ions.
  - Are only found in the electron shells, never in the nucleus.
  - Have a negative electrical charge.
  - Travel in orbits around the nucleus.
  - All of the above
- \_\_\_\_\_ 3. Solids differ from liquids in that
- In solids the atoms contain more energy and this helps hold them in place.
  - In liquids that atoms and molecules possess more kinetic energy.
  - Solids possess greater heat.
  - Solids must release heat to form a liquid.

**Completion**

Complete each statement.

4. Atoms are composed of three basic types of particles. \_\_\_\_\_ and \_\_\_\_\_ are present in the nucleus and \_\_\_\_\_ orbit the nucleus. The basic unit of a chemical compound made of two or more types of atoms is called \_\_\_\_\_.
5. The physical manifestation of kinetic energy is called \_\_\_\_\_ and can be measured with a \_\_\_\_\_.
6. The physical state when atoms or molecules have great kinetic energy and are largely independent is called \_\_\_\_\_. The process of changing from a liquid to a solid is called \_\_\_\_\_ and from a gas to a liquid is called \_\_\_\_\_. In reverse, going from a solid to a liquid is called \_\_\_\_\_ and from a liquid to a gas is either \_\_\_\_\_ or \_\_\_\_\_.