**The Nature of Matter Exam Key**

**Match the terms to the correct definitions.**

|  |  |  |  |
| --- | --- | --- | --- |
| **1.** | **Matter** | **D** | **A** Matter composed entirely of identical atoms |
| **2.** | **Atom** | **C** | **B** Results when atoms of different elements are |
|  |  |  | joined chemically |
| **3.** | **Element** | **A** | **C** Smallest unit of matter |
| **4.** | **Compound** | **B** | **D** Anything that occupies space; can be solid, |
|  |  |  | liquid, or gas |

**Match the term with its descriptions.**

|  |  |  |  |
| --- | --- | --- | --- |
| **5.** | **Molecule** | **B** | **A** An electrically charged atom |
| **6.** | **Mixture** | **D** | **B** Basic unit of a compound |
| **7.** | **Ion** | **A** | **C** An excess or deficiency of electrons |
| **8.** | **Charge** | **C** | **D** Results when substances are together but not |
|  |  |  | joined chemically |

**Match the terms to the correct descriptions.**

**9. Electron** **C** **A** A heavy, uncharged elementary particle that is

located in the nucleus

**10. Neutron** **A** **B** Particles in the outmost orbit of an atom that

can move freely from one atom to the next

**11. Proton** **D** **C** Lightest, negatively charged elementary particle,

which orbits around the nucleus

**12. Free electrons B** **D** Positively charged elementary particle located in

the nucleus

1. **Which particle or name is NOT found in the center of an atom?**

**A Electron**

**B** Nucleus

**C** Neutron

**D** Proton

1. **Which of the following describes the outer orbit of electrons of an atom?**

**A** Furthest orbit from the nucleus

**B** If partially filled, contains free electrons

**C Contains no free electrons D** Orbit may be partially filled

1. **The movement of an electron from the orbit of one atom to the orbit of another atom naturally, with no controlling force applied is called:**

**A** Electron drift

**B random drift**

**C** Electromotive force

**D** Negative particle drift

1. **Which of the following statements describes the law of electrical charges?**

**A** Like charges repel

**B** Unlike charges attract

**C All of the above**

**D** None of the above