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Mr. Schmidt Science 7

Glencoe Earth Science Chapter 3 Vocabulary

atomic number electron element ion isotope mass number

matter neutron nucleus proton acid base

chemical bond chemical reaction compound covalent bond ionic bond metallic bond

molecule solution condensation crystalline structure evaporation

glass plasma sublimation

1. Chemical reaction – change of one or more substances into other substances.
2. Atomic number – number of protons contained in an atom’s nucleus.
3. Electron – tiny atomic particle with little mass and a negative charge; an atom’s electrons are equal in number to its protons and are located in a cloudlike region surrounding the nucleus.
4. Covalent bond – attraction of two atoms for a shared pair of electrons that holds the atoms together.
5. Ion – an atom that gains or loses an electron.
6. Molecule – combination of two or more atoms joined by covalent bonds.
7. Base – solution that contains an excess of hydroxide ions (OH-) in water.
8. Ionic bond – attractive force between two ions with opposite charge.
9. Element – natural or artificial substance that cannot be broken down into simpler substances by physical or chemical means.
10. Proton – tiny atomic particle that has mass and a positive electric charge.
11. Crystalline structure – regular geometric pattern of particles in most solids, giving a solid a definite shape and volume.
12. Isotope – an atom of an element that has a different mass number than the element but the same chemical properties.
13. Compound – substance composed of atoms of two or more different elements that are chemically combined.
14. Acid – solution containing a substance that produces an excess of hydrogen ions in water.
15. Solution – homogeneous mixture whose components cannot be distinguished and can be classified as liquid, gaseous, solid, or a combination.
16. Plasma – hot, highly ionized, electrically conducting gas.
17. Evaporation – vaporization-change of state from a liquid to a gas, involving thermal energy.
18. Neutron – tiny atomic particle that is electrically neutral and has about the same mass as a proton.
19. Condensation – process by which a cooling gas changes into a liquid and releases thermal energy.
20. Matter – anything that has a volume and mass.
21. Nucleus –positively charged center of an atom, made up of protons and neutrons and surrounded by electrons in energy levels.
22. Sublimation – process by which a solid slowly changes to a gas without first entering a liquid state.
23. Mass number – combined number of protons and neutrons in the nucleus of an atom.
24. Glass – solid that consists of densely packed atoms with a random arrangement and lacks crystals or has crystals that are not visible.
25. Chemical bond – force that holds the atoms of elements together in a compound.
26. Metallic bond – positive ions of metal held together by the negative electrons between them; allows metals to conduct electricity.