

Chapter 2

Section 1

1. Matter is anything that has mass and takes up space.
2. Substance- is a single kind of matter that is pure, meaning it always has a specific makeup- or composition- and a specific set of properties.
3. Physical property- is a characteristic of a pure substance that can be observed without changing it into another substance.
4. Chemical property- is a characteristic of a pure substance that describes its ability to change into different substance.
5. Element- is a pure substance that cannot be broken down into any other substance by chemical or physical means.
6. Atom- is the basic particle from which all elements are made.
7. Chemical bond- is a force of attraction between two atoms.
8. Molecules- groups of two or more atoms held together by chemical bonds.
9. Compound- is a pure substance made of two or more elements chemically combined in a set ratio.
10. Chemical formula- which shows the elements in the compound and the ratio of atoms.
11. Mixture- is made of two or more substances- elements, compounds, or both – that are together in the same place but are not chemically combined.
12. Heterogeneous mixture- you can see the different parts.
13. Homogeneous mixture- are so evenly mixed that you can't see the different parts.
14. Solution- is an example of homogeneous mixture.

Section 2

1. Physical change- is any change that alters the form or appearance of matter but does not make any substance in the matter into a different substance.
2. Chemical change- is a change in matter that produces one or more new substances.

3. Law of conservation of matter- the fact that matter is not created or destroyed in any chemical or physical change.

Section 3

1. Energy- is the ability to do work or cause change.
2. Temperature- is a measure of the average energy of random motion of particles of matter.
3. Thermal energy- is the total energy of all of the particles in an object.
4. Endothermic change- a change in which energy is taken in.
5. Exothermic change- releases energy.
6. Chemical energy- the energy stored in the chemical bonds between atoms is a form of energy.
7. Electromagnetic energy- a form of energy that travels through space as a wave.
8. Electrical energy- is the energy of electrically charged particles moving from one place atom to another in many chemical changes.
9. Electrodes- two metal strips that are placed in a solution, but they don't touch.