

Science 7 Unit 1: Matter Quiz

Outline SOLUTIONS

Be able to discuss 3 parts of the 5-parts particle theory of matter.

- 1) All matter is made up of very tiny particles
- 2) Particles are always moving
- 3) There are spaces between particles.
- 4) Particles are attracted to each other
- 5) The particles of a pure substance are identical to the particles of the same pure substance no matter where it is located on earth.

Know the 3 states of matter and how their particles behave

- 1) Solid → Particles are very close together and the particles vibrate
- 2) Liquid → Particles have some space between and they move freely by sliding by each other
- 3) Gas → Particles are VERY far apart and move far apart from each other

Know examples of Plasma

- 1) Lightning
- 2) Northern Lights

Know the definition of Heterogeneous and Homogeneous mixtures and be able to give one example of each.

- 1) Heterogeneous mixtures are made up of parts that can be seen Ex) Salad
- 2) Homogeneous mixtures where every part of the mixture is the same. EX) The first drink of milk is the same as the last drink of milk.

We watched a video on Pasteurization of Apple juice, why is this important?

Pasteurization is heating a liquid at high temperature to kill harmful bacterial. It is important that it kills the bacteria that could make someone sick or die.

Know the diagram of the earth with the solutions around it.

2/3 of earth is covered in salt water

Earth is surrounded by gas such as oxygen

Earth's soil contains metals such as copper and sterling silver

What is a pure substance found on earth and why is it hard for scientists to determine if something is a pure substance.

A pure substance is a material made up of one kind of tiny particle and different from all OTHER pure substances.

It is difficult for scientists to determine if a substance is pure since they must compare those substances to others that are like it all over the world, and the world is HUGE.

Know the difference of solute and solvent.

Solute - is the substance that dissolves in a solvent to form a solution (ex. the salt in water)

Solvent - is the substance that dissolves a solute to form a solution (Ex. usually water)

Know definitions of soluble and insoluble

Soluble - means able to be dissolved in a particular solvent

Insoluble - means not able to be dissolved in a particular solvent