Name_____ Worksheet 4
Date_____ Grade 5

Mixtures and Solutions (Lesson 4) Guided Notes

(workbook pages 78-85)

Mixtures:

- A _____ has different materials placed together, BUT each material in the mixture keeps its own properties.
    - Example: Fruit salad- you can take each individual fruit out of the mixture and it still has the same property.
- _____ means parts.
    - Sometimes mixtures are not as easy to separate the components.

Solutions:

- A _____ is a mixture in which substances are spread out evenly and do not settle to the bottom of the container.
    - Examples: Salt mixed with water. The salt dissolves in the water.

- A **solute** is the substance that is dissolved in a _____.
    - The salt is the solute in the salt water mixture.
- One way to make a solid dissolve in a liquid faster you can _____ or _____ the solution. Grinding a solid into small pieces may help too.
- Not all solutions are made by dissolving a solid in liquid. Two or more liquids can also make a solution
    - Example: Soybean oil and sunflower oil.
- A gas can also dissolve in a liquid.
    - Example: Water can have dissolved oxygen and carbon dioxide gasses.

Separating Solutions:

- Since a solution is easily mixed and spread out evenly you cannot pick out chunks of one material.

- To separate the parts of a solution, you use

  _____ _____

  of the substances in the solution. You have to cause a

  _____ _____ to one

  or more of its components.

  - Example: You can evaporate the liquid by heating it

Mixtures and Solutions:

- ALL solutions are _____, but not all

  mixtures are solutions.

  - A solution is the same in all _____.

- You can tell the difference by observing the mixture closely.

Mixtures and Solutions Guided Notes

Mixtures:

- A **mixture** has different materials placed together, BUT each material in the mixture keeps its own properties. The parts are easily separated.
    - Example: Fruit salad- you can take each individual fruit out of the mixture and it still has the same property.
- **Component** means parts.
    - Sometimes mixtures are not as easy to separate the components.

Solutions:

- A **solution** is a mixture in which substances are spread out evenly and do not settle to the bottom of the container.
    - Examples: Salt mixed with water. The salt dissolves in the water.
- A **solute** is the substance that is dissolved in a solution.
    - The salt is the solute in the salt water mixture.
- One way to make a solid dissolve in a liquid faster is by stirring or heating the solution. Grinding a solid into small pieces may help too.

- Not all solutions are made by dissolving a solid in liquid. Two or more liquids can also make a solution
    - Example: soybean oil and sunflower oil.
- A gas can also dissolve in a liquid.
    - Example: Water can have dissolved oxygen and carbon dioxide gasses.

Separating Solutions:

- Since a solution is easily mixed and spread out evenly you cannot pick out chunks of one material.
- To separate the parts of a solution, you use physical properties of the substances in the solution. You have to cause a physical change to one or more of its components.
    - Example: You can evaporate the liquid by heating it

Mixtures and Solutions:

- ALL solutions are mixtures, but not all mixtures are solutions.
- You can tell the difference by observing the mixture closely.
    - The solution is the same in all parts.