



Name _____

Date _____

Worksheet 4

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

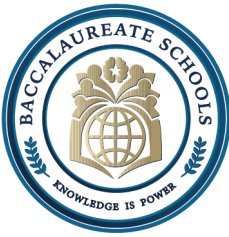
- Example: Soybean oil and sunflower oil.

- 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**.