| Name: |                                                                                      |                                                                            | Period:                                     |  |  |  |  |
|-------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------|--|--|--|--|
|       |                                                                                      | Mixt                                                                       | ures                                        |  |  |  |  |
|       | tures:<br>ne:                                                                        |                                                                            |                                             |  |  |  |  |
|       | ach substance in a mixture has the chemical makeup it had before the mixture courred |                                                                            |                                             |  |  |  |  |
| Sep   | parating Mixtures                                                                    |                                                                            |                                             |  |  |  |  |
|       | •(saltwater)                                                                         | _ is the process wh                                                        | en mixtures are separated by boiling points |  |  |  |  |
|       | •                                                                                    | _ separates mixture                                                        | es based on density                         |  |  |  |  |
|       | <ul><li>Also, using a _</li></ul>                                                    | Iso, using a on metal and nonmetal objects can be used to separate by size |                                             |  |  |  |  |
|       | omponents in a N                                                                     |                                                                            | do not need to be mixed in a                |  |  |  |  |
|       | Mixtures and Con                                                                     |                                                                            | de not need to be mixed in a                |  |  |  |  |
|       |                                                                                      |                                                                            |                                             |  |  |  |  |
|       |                                                                                      |                                                                            |                                             |  |  |  |  |
|       |                                                                                      |                                                                            |                                             |  |  |  |  |
|       |                                                                                      |                                                                            |                                             |  |  |  |  |
|       |                                                                                      |                                                                            |                                             |  |  |  |  |
|       |                                                                                      |                                                                            |                                             |  |  |  |  |

| The inability to dissolve and form a mixture is called  Solvent: Substance in which the solute is Water is the universal solvent.  Alloys: Solid solutions of or non metals dissolved in metals.  Bronze is Copper + Tin Steel is Iron + Carbon  Particles in Solutions:  Never Cannot be removed by Don't scatter  Concentrations:  Measure the amount of dissolved in a  Units include g/mL  Concentrated or Diluted:     contains large amounts of solute     contains smaller amount of solute  Solubility: The ability of the solute to dissolve in a solvent at a certain  May change with  Dissolving gases in liquids: Gases are more soluble in liquids at temperatures                                                                                                                                                                          | Solution: Mixture that appears to be a                                             |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------|
| Dissolve: Process in which particles of substances and spread throughout the mixture  Solute: Substance that is and  Examples include and  The ability to dissolve is  The inability to dissolve and form a mixture is called  Solvent: Substance in which the solute is, Water is the universal solvent.  Alloys: Solid solutions of or non metals dissolved in metals.  Bronze is Copper + Tin Steel is Iron + Carbon  Particles in Solutions:  Never, Cannot be removed by, Don't scatter  Concentrations:  Measure the amount of, dissolved in a  Units include g/mL.  Concentrated or Diluted:, contains large amounts of solute, contains smaller amount of solute  Solubility:  The ability of the solute to dissolve in a solvent at a certain, May change with  Dissolving gases in liquids:  Gases are more soluble in liquids at, temperatures |                                                                                    |                    |
| the mixture  Solute: Substance that is and  Examples include and  The ability to dissolve is The inability to dissolve and form a mixture is called  Solvent: Substance in which the solute is Water is the universal solvent.  Alloys: Solid solutions of or non metals dissolved in metals.  Bronze is Copper + Tin Steel is Iron + Carbon  Particles in Solutions:  Never  Cannot be removed by  Don't scatter  Concentrations:  Measure the amount of dissolved in a  Units include g/mL  Concentrated or Diluted: contains large amounts of solute contains smaller amount of solute  Solubility:  The ability of the solute to dissolve in a solvent at a certain  May change with  Dissolving gases in liquids:  Gases are more soluble in liquids at temperatures                                                                                 | Particles of two or more substances that are distributed                           | _ among each other |
| Examples include and  The ability to dissolve is  The inability to dissolve and form a mixture is called  Solvent: Substance in which the solute is Water is the universal solvent.  Alloys: Solid solutions of or non metals dissolved in metals.  Bronze is Copper + Tin Steel is Iron + Carbon  Particles in Solutions:  Never  Cannot be removed by  Don't scatter  Concentrations:  Measure the amount of dissolved in a  Units include g/mL.  Concentrated or Diluted: contains large amounts of solute  contains smaller amount of solute  Solubility:  The ability of the solute to dissolve in a solvent at a certain  May change with  Dissolving gases in liquids:  Gases are more soluble in liquids at temperatures                                                                                                                          |                                                                                    | throughou          |
| The inability to dissolve and form a mixture is called  Solvent: Substance in which the solute is Water is the universal solvent.  Alloys: Solid solutions of or non metals dissolved in metals.  Bronze is Copper + Tin Steel is Iron + Carbon  Particles in Solutions:  Never Cannot be removed by Don't scatter  Concentrations:  Measure the amount of dissolved in a  Units include g/mL  Concentrated or Diluted:     contains large amounts of solute     contains smaller amount of solute  Solubility: The ability of the solute to dissolve in a solvent at a certain  May change with  Dissolving gases in liquids: Gases are more soluble in liquids at temperatures                                                                                                                                                                          | Solute: Substance that is  • Examples include and                                  |                    |
| Alloys: Solid solutions of or non metals dissolved in metals.  • Bronze is Copper + Tin • Steel is Iron + Carbon  Particles in Solutions:  • Never • Cannot be removed by • Don't scatter  Concentrations:  Measure the amount of dissolved in a  Units include g/mL  Concentrated or Diluted: contains large amounts of solute contains smaller amount of solute  Solubility:  The ability of the solute to dissolve in a solvent at a certain  • May change with  Dissolving gases in liquids:  • Gases are more soluble in liquids at temperatures                                                                                                                                                                                                                                                                                                     | The ability to dissolve is  The inability to dissolve and form a mixture is called |                    |
| Bronze is Copper + Tin Steel is Iron + Carbon  Particles in Solutions:  Never Cannot be removed by Don't scatter  Concentrations:  Measure the amount of dissolved in a  Units include g/mL  Concentrated or Diluted:     contains large amounts of solute     contains smaller amount of solute  Solubility: The ability of the solute to dissolve in a solvent at a certain  May change with  Dissolving gases in liquids: Gases are more soluble in liquids at temperatures                                                                                                                                                                                                                                                                                                                                                                            | <b>Solvent</b> : Substance in which the solute is Water is the univers             | sal solvent.       |
| <ul> <li>Never</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Bronze is Copper + Tin                                                             |                    |
| Measure the amount of dissolved in a Units include g/mL  Concentrated or Diluted: contains large amounts of solute contains smaller amount of solute  Solubility: The ability of the solute to dissolve in a solvent at a certain  • May change with  Dissolving gases in liquids:  • Gases are more soluble in liquids at temperatures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul><li>Never</li><li>Cannot be removed by</li></ul>                               |                    |
| contains large amounts of solute contains smaller amount of solute  Solubility: The ability of the solute to dissolve in a solvent at a certain  • May change with  Dissolving gases in liquids: • Gases are more soluble in liquids at temperatures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Measure the amount of dissolved in a                                               |                    |
| The ability of the solute to dissolve in a solvent at a certain  • May change with  Dissolving gases in liquids:  • Gases are more soluble in liquids at temperatures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | contains large amounts of solute                                                   |                    |
| Gases are more soluble in liquids at temperatures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The ability of the solute to dissolve in a solvent at a certain                    | _·                 |
| SOME ICORE ITE PUINNICE WHEN STORES IN PLACES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    |                    |

|               | Does the mixture appear to be a single substance? (yes or no) | Can it Scatter light? (yes or no) | Can it be filtered? (yes or no) | Can the particles settle out? (yes or no) | Examples |
|---------------|---------------------------------------------------------------|-----------------------------------|---------------------------------|-------------------------------------------|----------|
| Suspension    |                                                               |                                   |                                 |                                           |          |
| Colloid       |                                                               |                                   |                                 |                                           |          |
| Homogenous is | s a substance tha                                             | at appears to be                  | as                              | ubstance such a                           | ns       |
| Heterogeneous | s is a substance t                                            | that appears to b                 | е                               | _ substances su                           | ch as    |

**Dissolving Solids faster in Liquids**