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| Name: | Class: | Date: |

Science 7 – Unit B: Chemistry

Use your textbook and notebook to help you answer the questions in this review package.

Chapter 6: Matter can be Classified

1. Create a graphic organizer showing the classification of matter using the following terms: compounds, elements, matter, mechanical mixtures, mixtures, pure substances, solutions, and suspensions.
2. Explain the difference between pure substances and mixtures and provide two examples of each.

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1. Explain the difference between elements and compounds and provide two samples of each.

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1. What are the 3 types of mixtures we studied in class? Provide an example of each.

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1. What is an emulsion? Provide one example of an emulsion.

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1. Complete the following chart using the following mixtures: acrylic paint, chicken noodle soup, and fruit punch (which is red but clear).

|  |  |  |
| --- | --- | --- |
| Substance | Mixture type | Reason |
|  |  |  |
|  |  |  |
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1. List and describe the 6 different ways to separate mechanical mixtures. Provide an example of a mixture with two substances you could separate with each method.

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1. Explain the difference between a solute and a solvent

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1. What does it mean if you say that a solid is insoluble in water?

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1. Complete the following table with the following terms: concentrated, dilute, saturated, and supersaturated.

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| Classification | Description of solution |
|  | The solution is so full of solute that no more solid can be dissolved in the liquid. |
|  | The solution is specially prepared so that it can fit more solid in the liquid than normally possible. |
|  | There is very little solid dissolved in the liquid |
|  | There is quite a lot of solid dissolved in the liquid, but the liquid can still hold more. |

1. Identify the following as an acid, a base, or either based on the following characteristics:

|  |  |
| --- | --- |
| Characteristic | Classification |
| Reacts with and breaks down fats and oils |  |
| Can cause serious burns on skin |  |
| Has a pH greater than 7.0 |  |
| Has a pH less than 7.0 |  |
| Feels slippery |  |
| Reacts with and corrodes metals |  |
| Has a sour taste |  |