Study Guide Physical Changes

Student Name _____ Test planned for 4/12/18

Parent Signature _____

One additional point will be added for returning the study guide on day of the test with a parent signature.

Remember/Recall What is a physical change? *A physical change happens when you make something different but you don't change what it is made of. The substance is still the same type before and after the change.*

Understand/Skill and Concept:

In your own words, describe how you could separate salt and water from a saltwater mixture.
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Explain how you could separate iron filings from sand.
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Apply/Skill and Concept:

One way to purify water is to boil it, trap the steam, and turn the steam back into water. Why do you think this helps clean the water?

Describe another example of a physical change. *Example: If I fold a piece of paper into a paper airplane, it is a physical change because no new substance is created. It is still paper; I just changed the shape.*
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Analyze/Strategic Thinking:

Which of the following actions does not produce a physical change? Explain your answer. 1. Freezing water 2. Melting silver 3. Boiling water 4. Burning gas logs 5. Breaking a Popsicle stick

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Evaluate/Extended Thinking:

How would you develop a 3D model showing physical changes?

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What would happen if water was left in an open container on a hot, sunny day? Would this be a physical or chemical change? Explain your thinking.

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Create/Extended Thinking:

Show two ways paper can be physically changed.

1._____

2._____

Vocabulary:

1.Change - To make different
2. Manipulation - Moving or changing the position of an object
3. Physical change - To make different without changing what the material is made of, such as cutting, folding, melting
4. Mixture - A combination of two or more substances where each keeps its own properties and can be easily separated
5. Substances - Particular types of matter with specific properties