Name:_____

8th Grade Quick Card Review Guide

Directions: The purpose of this assignment is to review for the 8th grade EOG in a way that will allow you to also research information about Edisto Island, SC, which is where we will visit for our 8th Grade End of Year Field Study. You will create one Quick Card from each major cycle of study last year. The first one will include all concepts from Chemistry.

Front Left Flap	Front Right Flap
<u>Atomic Structure:</u> ☐ What are protons, neutrons and electrons ☐ Where are protons, neutrons and electrons located within an atom? ☐ How can you determine the number of protons, neutrons and electrons by looking at the Periodic Table? ☐ Drawing of the atom you built with the atomic model for shelfwork. ☐ Bohr Model drawing of one of the following elements that make up the chemical composition of sea water: oxygen, chlorine, sodium, magnesium, sulfur or carbon (other major elements in sea water are hydrogen, potassium, bromine and calcium-too big or too small to draw though) ☐ Lewis Dot diagram of the element you chose to draw a Bohr Model of from above.	<u>Periodic Table:</u> ☐ Get a copy of the periodic table from the SW binder and glue it on the front right flap. ☐ Explain how the periodic table is organized. Include the following (include labels as well as explanations): -Families (how are elements grouped to make families?) -Groups (how are elements grouped to make groups?) -Periods (how are elements grouped to make periods?) -Metals, nonmetals and metalloids (how are metals, nonmetals and metalloids arranged?) ☐ Label the following on your periodic table: 1. Group Numbers 2. Number of Valence Electrons in Each Group 3. Metals, Nonmetals and Metalloids 4. Noble Gases ☐ Give an example of a solid, liquid and gas that exist at Edisto. ☐ Sodium Chloride (Na + Cl) is the compound that makes up table salt. These elements are also in ocean water, but are dissolved in the water. Explain why Na and Cl will easily bond with one another. Use group numbers and valence electrons in your explanation.

Inside Left Flap #1	Inside Middle Flap #2
<u>Physical and Chemical Properties:</u> ☐ How are physical properties best observed? ☐ Explain why melting and boiling points are physical properties. ☐ Describe 3 examples of physical properties. ☐ Describe 3 examples of the physical properties of one of the following: sand, ocean water or sea shells. ☐ Explain why chemical properties are not easy to observe. ☐ Describe 3 examples of physical properties. ☐ Describe 3 examples of the physical properties of one of the following: sand, ocean water or sea shells.	<u>Physical and Chemical Changes:</u> ☐ Explain how physical and chemical changes differ. ☐ Why is beach erosion an example of a physical change? ☐ Watch the video "Changes-a Science Rap" and discuss 3 physical and 3 chemical changes that occur at the beach. <u>https://www.youtube.com/watch?v=Fj1IdOdmOjY</u> OR http://bit.ly/2DmeFB2 ☐ Give 2 more of your own examples of physical and chemical changes you will see while away on our trip at Edisto Island, SC.
Inside Middle Flap #3	Inside Right Flap #4
<u>Elements, Compounds and Mixtures:</u> ☐ Describe the difference between elements, compounds and mixtures (use words as well as a diagram). ☐ Give an example of an element, a compound, a molecule and a mixture that you will find at the beach. ☐ Describe the difference between pure substances and mixtures. ☐ Why are mixtures an example of a physical change? ☐ Give an example of a pure substance and a mixture you will find at the beach. ☐ Describe a homogenous and a heterogeneous mixture you will find at the beach.	<u>Law of Conservation of Mass:</u> ☐ Explain what the following statement means, "matter does not ever get created or destroyed, but it DOES change form." ☐ Water evaporates from the surface of the ocean. Where does the water go? How is this an example of the Law of Conservation of Mass? ☐ Seashells are chemically changed by the elements and compounds in ocean water. The following is an example of a chemical reaction that takes place: $CO_2 + H_2O \rightarrow H_2CO_3$ ☐ Identify the product as well as the reactant in the above chemical equation. ☐ Explain why the following equation is balanced. ☐ Write an equation using the elements above that is NOT balanced.

Back Cover: Chemistry Output

- ☐ This is your chance to bring it all together with your creative touch!!!
- ☐ Take information from each flap and create an image, a comic strip, a poem or anything else you can think of that can fit on the back cover-be sure it is aesthetically pleasing and that it is your best work.
- ☐ Include the following:

1. Atomic Structure
2. Periodic Table
3. Physical and Chemical Properties
4. Physical and Chemical Changes
5. Elements, Compounds and Mixtures
6. Law of Conservation of Mass