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| **Learning Goal #1: Plate Tectonics:**  What evidence did Alfred Wegener use to prove that the continents were once connected? |
| This describes when the mantle by the core is heated, becomes less dense and rises. As it rises, it cools and becomes less dense. These are the main force driving plate tectonics. |
| What would happen to convection currents if the core was no longer extremely hot? |
| Redraw the arrows and identify the boundary as divergent, convergent, or transform. |
| When the ocean crust separates Some geologists describe plate tectonics as the recycling of the Earth’s crust. Do you agree with this statement? Why? |
| **Learning Goal#2: Minerals**  What is the definition of a mineral? |
| To test for a mystery mineral, scientists look at the color and luster. How are color and luster different? |
| A geologists scratches a mineral with a penny and their fingernail. What physical property are they testing for? |
| A mystery mineral can be scratched by calcite but not scratched by talc. What is the hardness of this mineral?  oh''s scale for minerals |
| Beyonce’s necklace is made from gold, a metallic mineral. Her necklace a mineral? Why or why not? |
| **Learning Goal #3 Igneous Rock**  Complete the sentence. Igneous rock is formed from cooling \_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ below the surface. On the inside, define extrusive rock and intrusive rock. |
| Obsidian is very smooth igneous rock. It looks like black glass. Is this intrusive or extrusive? Explain your thinking. |
| LAB CONNECTON: Compare the cooling speed of intrusive rock with large crystals and extrusive rock with small crystals. |
| **Learning Goal #4 Weathering and Erosion**  Give two examples of chemical weathering. |
| Give two examples of mechanical weathering. |
| How is erosion different from weathering? |
| During class, we dissolved a marshmallow in water and broke a cheerio into pieces in water. Which one represented chemical weathering? Why? |
| What does pH measure? If a substance has a pH of 4, is it an acid or base? If a substance has a pH of 12, is it an acid of base? |
| Describe the pH of a common household item from our lab. |
| What happens to the oceans as they absorb more and more CO2(carbon dioxide)? |
| Limestone is a rock formed from the mineral calcite. What will happen to a limestone statue if it comes into contact with acid rain? |

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| **Learning Goals** | **Text Book Pages…** | **Binder Notes…** |
| **PLATE TECTONICS:**   * I can explain Alfred Wegener’s evidence for continental drift and Pangaea * I can describe how the theory of plate tectonics helps explain how the Earth’s surface changes | Chapter 5: p122 - 155  p156 review page and practice |  |
| **MINERALS:**   * I can identify the characteristics of a mineral * I can describe the physical properties of minerals (hardness, streak, luster, color…) * I can describe how minerals form * I can explain the causes for violence in the Congo and evaluate solutions to help stop blood minerals | Chapter 3 p64 – 87  P88 review page and practice | #9 Minerals  #10 How Minerals Form  #11 Blood Minerals |
| **IGNEOUS ROCK:**   * I can explain the steps for how igneous rock forms * I can explain the difference between extrusive and intrusive igneous rock | P 98 - 101 | #12 Ready to Rock |
| **WEATHERING AND EROSION:**   * I can explain the difference between chemical and mechanical weathering * I can differentiate between erosion and weathering * I can describe the pH scale and explain how pH helps us understand chemical weathering * I can explain the process of ocean acidification and its impacts. | P 238 - 245 | #14Weathering and Erosion |