**Sixth Grade**

**Choice Board**

Let’s play Tic Tac Toe! Look at the science and STEM activities below and choose three activities in a straight line (across, up and down, or diagonally) to complete a Tic Tac Toe. If you have any questions about these tasks or need any help at all, please contact me via email **(Insert teacher email)**

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| **Rock Hunt**:Collect several different rocks. Sort them into groups based on the information you know about rock formation. With your rock samples, construct an explanation of how rocks are classified by formation and how rocks change through geologic processes in the rock cycle.S6E5c | **The Night Sky:**Over the course of 7 -10 days, observe the night sky. Keep a journal of what you see and how constellations, moon and planets seem to change in the sky. Once you have data, develop a model to demonstrate phases of the moon in relation to relative position of the earth, sun and moon.S6E2a | **Solar System History:**Determine the parts that represent the universe. Using your pieces, ask questions about how the solar system formed. Show the geocentric and heliocentric models of the solar system. Using the pieces, develop a model to represent the position of the solar system in the Milky Way galaxy and in the known universe.S6E1 a, b |
| **Oceanography 101:**Using maps and graphs, found on the internet, to identify and communicate the composition, location and subsurface topography of the world’s oceans.S6E3c | **Soil Detectives:**Collect soil from various locations to include twigs, rocks, etc. Only a small amount from a couple of locations will work. Pour into a plastic bottle. Add water to cover plus about an inch. Shake and allow to settle. What evidence can you provide that soil is composed of layers?S6E5h | **Climate Changes:**Go to [climate.gov](https://climate.gov/) to find tables, graphs and maps of global and regional temperatures. Make an argument evaluating the rise in global temperatures over the past century.S6E6c |
| **Energy Transfer:**Create an experiment to carry out an investigation to demonstrate how energy from the sun transfers heat to air, land and water at different rates (conduction, convection, and radiation).S6E4b | **Water Cycle:**Explain the distribution of the water on earth including a diagram/illustration of the role of the sun’s energy in atmospheric conditions that lead to the cycling of water. S6E3 a, b | **Interior of Earth:**Make a model of the interior of the Earth. Compare and contrast crust, mantle, inner and outer core, including temperature, density, thickness and composition.S6E5a |