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| **GRADE LEVEL 4** | | |
| **COURSE / SUBJECT Earth Science** | | |
| **UNIT OF STUDY Earth and the Solar System** | | |
| **THEME / ESSENTIAL QUESTION(S)**  **What is a solar system?**  **How do earth’s rotation and revolution connect to our seasons and day/night cycles?** | | |
| **STANDARDS** | **ENDURING UNDERSTANDINGS *What are the long term, big-ideas of content I want students to understand?*** | **KNOWLEDGE / SKILLS *What do I want Students to Know & Be Able to Do?*** |
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| Standard 13.  Recognize that the earth is part of a system called the “solar system” that includes the sun (a star), planets, and many moons. The earth is the third planet from  the sun in our solar system.  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Standard14.  Recognize that the earth revolves around (orbits) the sun in a year’s time and that the earth rotates on its axis once approximately every 24 hours. Make connections between the rotation of the earth and day/night, and the apparent movement of the sun, moon, and stars across the sky. | What is a sun?  What is a planet?  What is an orbit?  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  What is the difference between rotation and revolution?  What is rotation?  What is a revolution?  What does it mean to orbit? | Students will:  \*Create a model to represent Earth as a part of the “solar  system” that includes the sun, moon, and planets to demonstrate location and orbit. (STEAM lab)  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  \*Design a diagram to represent the effect of both revolution and rotation on the earth. |
| **ASSESSMENT: *How will I know they have learned? What will be the evidence?***  ***\*KWL charts***  ***\*Common unit assessment ( needs to be developed)***  ***\*STEAM Inquiry/design labs ( hands on, investigative, problem solving based labs…minimum of 2 labs)*** | | |
| **TECHNOLOGY & RELATED CONTENT INTEGRATION:**  **Brainpop and Studyjams**  **Foss Kit**  **NOVA labs: http://www.pbs.org/wgbh/nova/labs/lab/sun/** | | |