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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 fromthe 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 “solarsystem” 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/** |