

MS-ESS1-1 Earth’s Place in the Universe

California Alternate Assessment for Science—Item Content Specifications

# MS-ESS1-1 Earth’s Place in the Universe

| California Science Connector | Focal Knowledge, Skills, and Abilities | Essential Understanding |
| --- | --- | --- |
| Use an Earth-Sun-Moon model to show that the Earth-Moon system orbits the Sun once an Earth year and the orbit of the Moon around Earth corresponds to a month. | 1. Ability to use an Earth-Sun-Moon model to show that the Earth-Moon system orbits the Sun once an Earth year.
2. Ability to use an Earth-Sun-Moon model to show that the orbit of the Moon around Earth corresponds to a month.
 | Recognize components of a model of the Earth, Moon, and Sun system. |

## **CA NGSS Performance Expectation**

Students who demonstrate understanding can:

**Develop and use a model of the Earth-Sun-Moon system to describe the cyclic patterns of lunar phases, eclipses of the Sun and Moon, and seasons.** [Clarification Statement: Examples of models can be physical, graphical, or conceptual.]

## **Mastery Statements**

Students will be able to:

* Identify the Moon, Sun, or Earth
* Recognize that Earth orbits the Sun
* Recognize that the Moon orbits Earth
* Recognize that it takes Earth one year to orbit the Sun
* Recognize that it takes the Moon one month to orbit Earth
* Recognize that it takes the Moon one year to orbit the Sun

## **Possible Phenomena or Contexts**

*Note that the list in this section is not exhaustive or prescriptive.*

**Possible contexts include the following:**

* Models used to compare the rates of rotation and revolution of the Moon and Earth
* Models that show the Sun, Earth, and Moon
* Models that diagram the orbital paths of Earth around the Sun and the Moon around Earth

## **Additional Assessment Boundaries**

* Do not label diagrams with the names of the Sun, Moon, and Earth.

## Additional References

California Science Test Item Specification for MS-ESS1-1

<https://www.cde.ca.gov/ta/tg/ca/documents/itemspecs-ms-ess1-1.docx>

Environmental Principles and Concepts <http://californiaeei.org/abouteei/epc/>

The *2016 Science Framework for California Public Schools Kindergarten through Grade Twelve* <https://www.cde.ca.gov/ci/sc/cf/cascienceframework2016.asp>

Appendix 1: Progression of the Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts in Kindergarten through Grade Twelve

<https://www.cde.ca.gov/ci/sc/cf/documents/scifwappendix1.pdf>

Appendix 2: Connections to Environmental Principles and Concepts

<https://www.cde.ca.gov/ci/sc/cf/documents/scifwappendix2.pdf>

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