

Moons

Part II

Purpose

The purpose of these activities is to further examine similarities and differences between the planets Mars and Earth; the moons of these planets are the focus. Students will compare and contrast the moons of Mars and Earth, through research, discussion, and modeling. Part I emphasizes Earth's moon, while Part II focuses on Mars' moons.

Students will be able to

1. Make observations about and discuss the moons of Earth and Mars, specifically noting similarities and differences.
2. Note the significance of the moons' role as planetary satellites.

Important Vocabulary (key terms in bold)

Mars	Earth	moon	satellite
orbit	gravity	tide	eclipse
crater	impact	maria	phase
regolith	Luna	Phobos	Deimos
asteroid			

I See the Moon... (oral communication skills, observation skills)

Students discuss what they know about the Earth's moon, noting some major points they learned from a previous lesson. Using images of the moons of Earth and Mars, the students discuss the visible characteristics of the moons, noting similarities and differences. Can the students tell which moon is which, just by looking at the images? (Make sure they know which is which before proceeding with the rest of the activities.)

After this, students read the brief article, "Scale Model of the Earth, Moon, Mars, Phobos, Deimos" (online at <http://www.astrodigital.org/mars/emscale.html>). Students continue their discussion, using KWL (Known/Want to Know/Learned) charts. Students fill in what they know already about the moons of Earth and Mars in the 'K' column of the chart; then they decide what they want to learn, and write that in the 'W' column. At the end of the lesson, students can complete the chart, recording the newly learned information in the 'L' column of the KWL chart. (Students fill in a chart for the moons of Mars, with the option of also completing a chart for Earth's moon.)

*(** See below for printable activity sheets.)*

Moon Markings (writing skills)

Students write three to five paragraphs, noting what features/facts they found most interesting about their favorite individual moon. Alternatively, students write about *each* moon, noting one thing about each moon that they found interesting.

*(** See below for printable activity sheet.)*

Man in the Moon (writing skills, creative arts skills)

Students write a creative story about one of the moons of Earth or Mars, telling what it might be like to live there, accompanied by a related drawing/painting.

Moon Models (creative arts skills, observation skills)

Students make models of the moons of Earth and Mars. Paper mache, clay, or another medium can be used. Students should model major features, including craters, maria, etc., using images from the opening activity as well as any others available in resources from the library and/or internet. Students can paint the models as necessary.

KWL CHART

Mars' Moons

<i>Know</i>	<i>Want to learn</i>	<i>Learned</i>

KWL CHART

Earth's Moon

<i>Know</i>	<i>Want to learn</i>	<i>Learned</i>

