



Teacher's Notes: The Moon

Learning Objectives:

The students will be able to describe why the Moon has craters.

The students will be able to describe what the Moon moves around.

The students will be able to identify full moon, crescent moon, new moon.

Activities

1. Moon phases demonstration using a foam ball with a pencil stuck in it to demonstrate the Moon, a lamp without a shade to represent the Sun. See the following video directions. <https://www.youtube.com/watch?v=wz01pTvuMa0>
2. Demonstrate the rotation of the Moon around Earth using an inflatable Earth or a globe and a white ball or a foam ball with a pencil in it to represent the Moon.
3. Moon with craters craft using clay and marbles to create the craters. Stick a small flag into the clay before it dries. <https://www.thingstoshareandremember.com/craters-space/>
4. Use the technology printable to have the students find images related to the unit. Students can copy and paste images onto a Word document or PowerPoint and write words or sentences underneath each picture.

General Tips: The goal is to build background knowledge while leading an engaging discussion on any and all information that can be talked about on a given page. The items that you choose to bring up or focus on should be modified for the students you are working with. For example, if you have a student who can point to something in the picture, answer yes/no questions be sure to incorporate a lot more of that as you go through the book. On the same token, be sure to ask a lot of comprehension questions and critical thinking questions at the level appropriate for students. There is something for everyone.

Page 1: The Moon is in the sky. You can see the Moon best at night. **Point:** Moon, sky, mountain, trees

WH Questions: Where can you see the Moon? **Yes/No:** Can you touch the Moon? Is the Moon in the sky? Can you see the Moon during the day? Can you see the Moon at night? **Opinions/Experiences:**

What else can see you in the sky besides the Moon? **Peer to Peer Interaction:** After you read Page 1, ask students, "What can you see in the sky at night?" The answer is the main idea card "the Moon."

Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 2: Did you know that there are volcanoes on the Moon? There are volcanoes on Earth and on the Moon. There are some other planets that have volcanoes too. **Point:** volcanoes, Moon. **WH Questions:** What is something that is on the Moon? **Yes/No:** Are there volcanoes on the Moon? Do we have volcanoes on Earth? **Peer to Peer Interaction:** After you read Page 2, ask students, “What is one thing on the Moon?” The answer is the main idea card “volcanoes.” Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 3: Meteorites are rocks that move across the night sky. A lot of meteorites are moving around in space and some even crash into the Moon. When meteorites hit the Moon, they make craters. A crater is like a big dent in the ground. There are a lot of craters on the Moon. **Point:** crater, Moon **WH Questions:** What do meteorites make when they hit the Moon? **Yes/No:** Is a meteorite a rock? Can a meteorite hit the Moon? Is a crater like a big dent? Are craters caused by meteorites? Does Earth have craters? Does the Moon have craters? **Opinion/Experiences:** What else can get dents on it? What flying objects can cause a dent in a car? **Peer to Peer Interaction:** After you read Page 3, ask students, “What do meteorites make when they hit the Moon?” The answer is the main idea card “craters.” Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 4: The Moon moves around Earth. It takes one month for the Moon to make one full circle around Earth. Most months have 30 days. **Point:** Earth, Moon, circle/arrows **WH Questions:** What does the Moon move around? How long does it take the Moon to move around Earth? **Yes/No:** Does it take a year for the Moon to move around Earth? Does it take one month for the Moon to move around Earth? Does the Moon go around the Earth in May? June? October? Yes, every month it goes around! **Sharing Opinion/Experiences:** Do you think one month is a long time? What month is your birthday? **Peer to Peer Interaction:** After you read Page 4, ask students, “How long does it take for the moon to go around the Earth?” The answer is the main idea card “month.” Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 5: The Sun shines on the Moon. The amount of light that shines on the Moon changes as the Moon moves around Earth. That makes the Moon look different on some days. Sometimes the light makes the Moon look like a big circle. Sometimes the light makes the Moon look like half a circle. Sometimes the light makes the Moon look like a banana. There are names for the different ways that the Moon looks each month. Have students view the following video about the how the moon changes. <https://www.youtube.com/watch?v=yXeOyxzYkjo> **Point:** Moon, dark Moon parts, light Moon parts, Earth **WH Questions:** What happens to the light on the Moon as it moves? What changes as the Moon moves? What does the Moon go around? **Yes/No:** Does the light from the Moon stay the same? Does the light from the Moon change? **Sharing Opinion/Experiences:** Have you ever seen a full Moon/full circle? Have you ever seen the Moon look like half a circle? **Peer to Peer Interaction:** After you read Page 5, ask students, “What do we have for the different ways the Moon looks?” The answer is the main idea card “names”. Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 6: The Moon's light changes when it goes around the Earth. When the Sun is behind the Moon, no light shines on the Moon. This means you can't see the Moon at all. This happens at the beginning of a month. **Point:** dark Moon, earth, sun, different Moon phases **WH Questions:** What is it called when the Moon has no light? **Yes/No:** Is there a time when the Moon has no light on it? Can we see the Moon when there is no light shining on it? Is it called a new Moon when there is no light on the Moon? **Opinion/Experiences:** Can you turn the lights off in your bedroom? What happens to the light bulb? Do you think the Moon has a light switch? **Peer to Peer Interaction:** After you read Page 6, ask students, "What do you call a Moon that has no light on it?" The answer is the main idea card "new moon." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 7: Sometimes a little bit of the Sun shines on the Moon. This is called a crescent moon. Crescent is a thin, curved shape. A crescent looks like a banana. When the Moon looks like a banana, it is called a crescent moon. Have students view a time lapse video of a crescent moon. Pause periodically to have students point to the moon. <https://www.youtube.com/watch?v=MAFY2i4v6H8> **Point:** crescent moon, sun, Earth, phases of the Moon **WH Questions:** What is the moon called when there is a little bit of light on it? What is the name of a shape that is thin and curved? What is the Moon called when it is crescent shaped? **Yes/No:** Does the Moon change shapes? Does the light change the shape of the Moon? Is a Moon that is thin and curved called a full moon? Is a Moon that is thin and curved called a crescent moon? **Opinion/Experiences:** What type of food has a crescent shape (Answers: banana, crescent roll, half of a donut)? **Peer to Peer Interaction:** After you read Page 7, ask students, "What is the Moon called when a little bit of light is shining on it?" The answer is the main idea card "crescent moon." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 8: Sometimes the Moon has a lot of light from the Sun shining on it. This makes the Moon look like a big bright circle in the night sky. The Moon looks like a big ball. When the whole Moon has light on it, it is called a full moon. Have students view a full moon time lapse set to music. Pause periodically to have students point to the full moon. Have students view the moon song video. <https://www.youtube.com/watch?v=GvkrC4HSLkM> **Point:** full Moon, sun, Earth, phases of the moon **WH Questions:** What makes the Moon look like a big ball? What is the Moon called when it is shaped like a big bright ball? **Yes/No:** Is there a little bit of light on the Moon when it is a full moon. Does a full moon mean the Moon has a lot of light on it? Does the Moon look like a big circle? Does light make the Moon shine bright? **Opinion/Experiences:** Have you ever seen a full Moon? What color is a full Moon? What is something that you bounce that is shaped like a full Moon? What is something that you eat your meals from that is shaped like a full Moon? **Peer to Peer Interaction:** After you read Page 8, ask students, "What is it called when the Moon has a lot of light on it?" The answer is the main idea card "full moon." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 9: A person who travels into space is called an astronaut. Astronauts have special training. They have to wear special clothing to go into space. Astronauts have been on the Moon. Every country has a flag. A flag tells other countries that we own this land. Our flag is called the American flag. It has red, white and blue stripes. It also has stars on it. Astronauts put an American flag on the Moon. They did this to show that American astronauts were there. **Point:** astronaut, Moon, American flag, space **WH Questions:** Who lands on the Moon? What did the astronauts put on the Moon? **Yes/No:** Do astronauts wear special clothing in outer space? Did firemen put a flag on the Moon? Did astronauts put a flag on the Moon? Did the astronauts put a tree on the Moon? Did the astronauts put a flag on the Moon? **Opinion/Experiences:** Is there an American flag hanging in your classroom? Do you know anyone who dressed up as an astronaut for Halloween? Have you seen any movies about astronauts? **Peer to Peer Interaction:** After you read Page 9, ask students, “Who travels to the Moon?” The answer is the main idea card “astronauts.” Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.