

Science and Health

MOON REVOLVES AROUND THE EARTH



Australian Government
AusAID



To the Learner

Moon is a heavenly body that outshines twinkling stars at night. Moon is not a planet but a satellite.



Let's Learn This

- + Show through a model that as the Moon travels around the Earth it also makes one complete rotation that makes the moon face the earth all the time
- + Explain that the Moon travels around the Earth once about every $29 \frac{1}{2}$ days



Let's Try This

Choose the letter of the correct answer.

1. How many days does the moon travel around the Earth?
a. $27 \frac{1}{2}$ days b. $29 \frac{1}{2}$ days c. $20 \frac{1}{2}$ days d. $13 \frac{1}{2}$ days
2. What is considered as the satellite of the Earth?
a. ABS-CBN b. Moon c. GMA 7 d. RPN network
3. Which statement about the moon is correct?
a. The moon revolves around the earth at the same time rotates on the axis.
b. The moon rotates around the earth at the same time revolves on its axis.
c. The moon does not rotate nor revolve.
d. The moon revolves only around the sun.

4. Why do we see only one side of the moon?

- a. The moon does not leave its position in space.
- b. The moon rotates twice as it makes one turn around the earth.
- c. The moon revolves around the earth and the sun.
- d. The moon rotates once as it makes one turn around the earth.

5. Why do you think the earth and the moon do not bump with each other as they travel around the sun?

- a. because the moon is smaller than the earth.
- b. because the moon is far away from the earth.
- c. because the earth and the moon have their own orbits and planes.
- d. because the earth rotates faster than the moon.



Let's Study This

Aside from the stars, what other heavenly bodies can you see that shine at night?

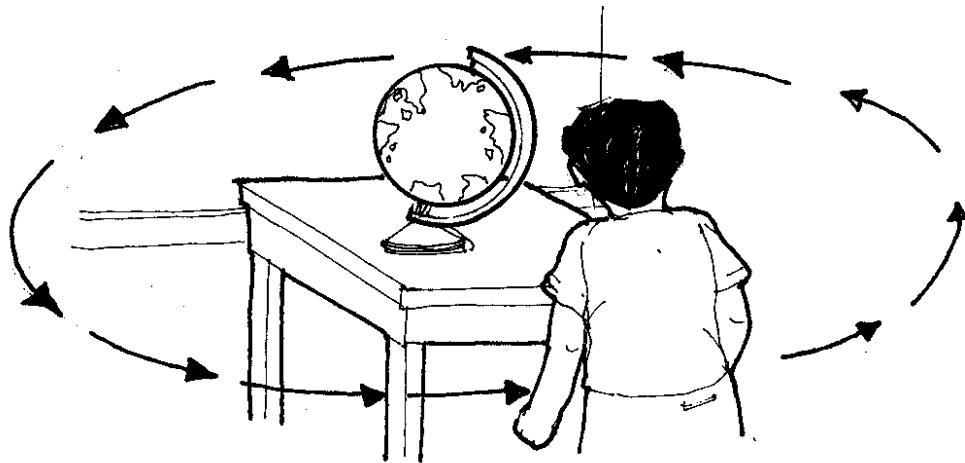


The moon is the satellite. It is a huge, heavy ball of rocks. If you look at the moon through a telescope, you can see its surface made of dead volcanoes and big craters. It seems very beautiful at night but actually it has many craters. Craters are mountains of hard rocks and valleys in the moon's surface.

The moon is not made of gases. It is as hard as the earth. The moon does not produce its own light. It reflects light from the sun and throws back the light to us. It acts as a large mirror in space, reflecting the light of the sun.

Activity 1

- You will need:
 - globe or a big ball
 - table
- Place a globe or a big ball on a table.
- Turn counterclockwise around the table with your face toward the globe.
- Observe the direction of your shoulder pointing the globe as you turn around until you reach the place where you started. Then stop.



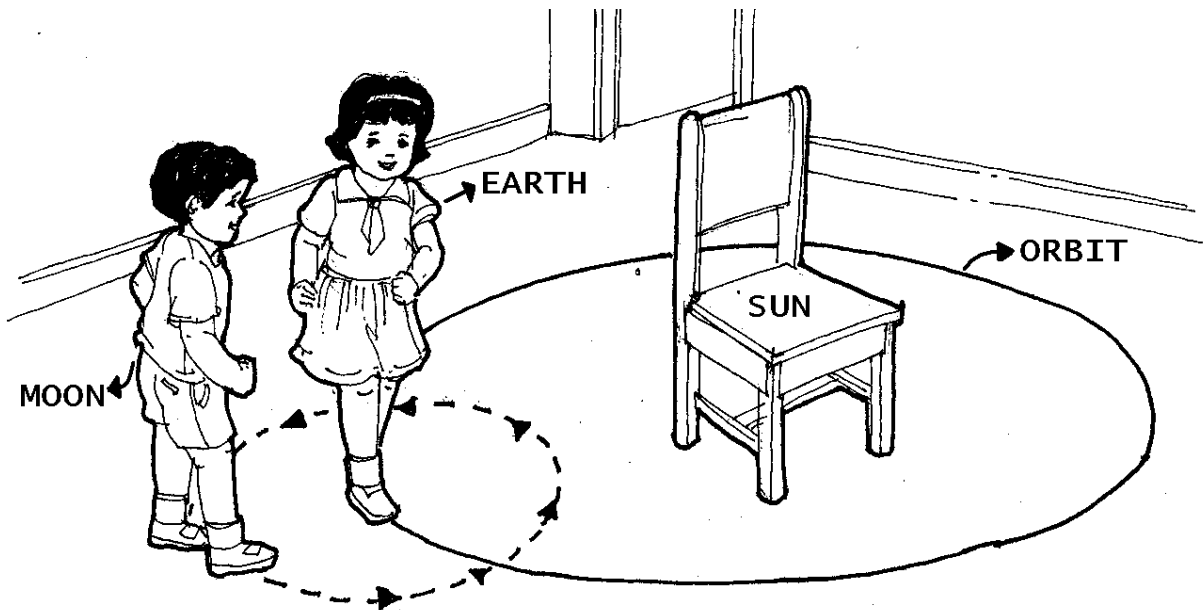
- **Answer these:**
 1. Did you turn away from the globe at anytime as you moved around the table? Why?
 2. Did you also turn around yourself?

ACTIVITY 2

- You will need:
 - chair
 - friend

Do these.

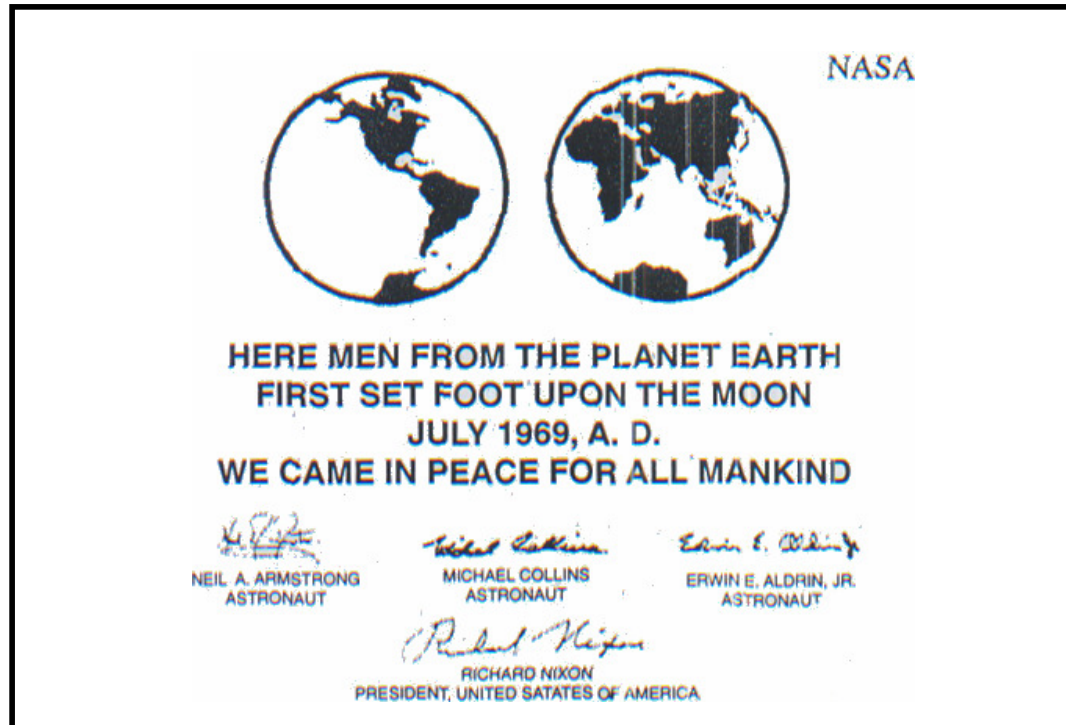
- Place the chair on the center of the room. It will represent the sun.
- Draw a line around the chair. It will represent the orbit.
- Let your friend stand beside you. He will represent the moon.
- As you turn around and move on the orbit, your friend will move around you. Your friend will face towards you as he or she moves.



The moon revolves continuously around the earth and at the same time, it rotates on its axis. One complete turn of the moon around the earth takes about $29\frac{1}{2}$ days. The moon also revolves around the sun.

Do you know who is the first man who set foot on the moon?

Below is a picture of the plaque which Apollo 11 astronauts left on the moon.



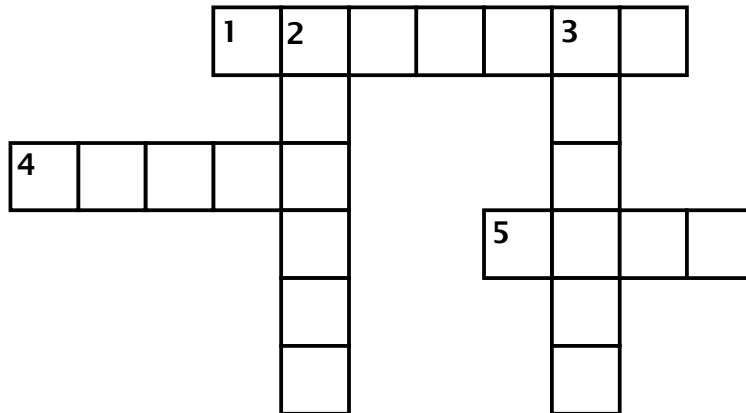
Source: World Book Encyclopedia

The first human beings who set foot on the moon were carried by the U.S.A. Apollo 11 space craft on July 21, 1969. After American astronaut Niel A. Armstrong had walked around for eighteen minutes, Erwin E. Aldrin Jr., joined him. For about two hours, the two explored near the lunar module and set up scientific experiments. After that, they lifted off to the region of the command module Columbia, piloted by astronaut Michael Collins.



Let's Do This

A. Solve the puzzle.



Across:

- 1 They are mountains of hard rocks and valleys on the moon's surface.
- 4 Pathway of the moon
- 5 Satellite of the Earth

Down:

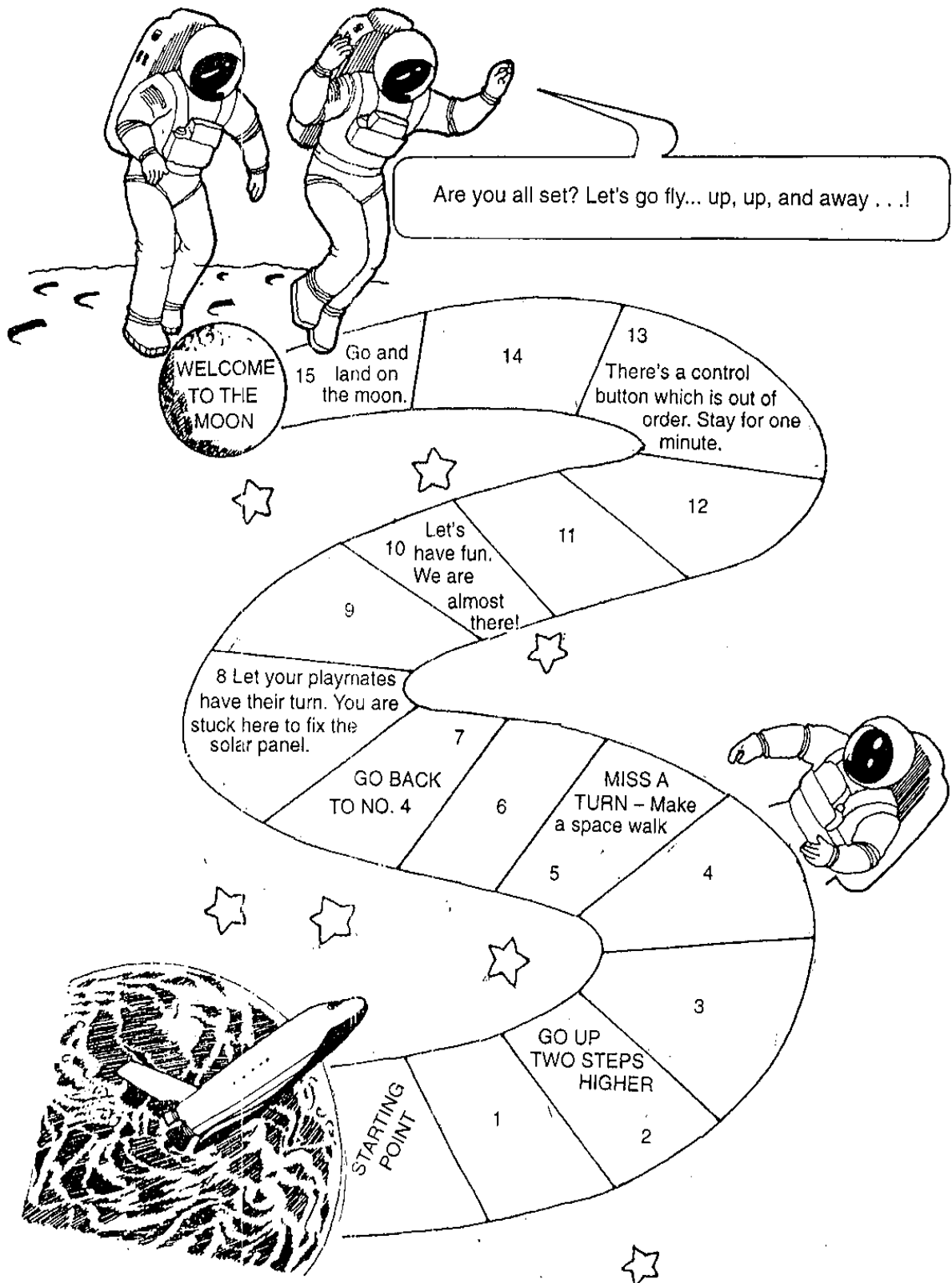
- 2 The turning of the moon on its own.
- 3 The trip of the moon around the earth.

B. Draw a model of the sun, earth and moon and how they revolve with each other inside the box.



Do you want to go to the moon?

Try to play the game with a friend. Copy and draw the path the moon in a big room or outside. After the activity, share your experience with one another.





Let's Remember This

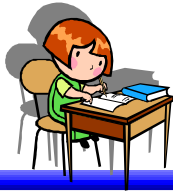
- ✚ The moon is the satellite of the earth.
- ✚ The moon moves around the earth as it moves around the sun.
- ✚ The moon travels around the earth once every 29 ½ days.
- ✚ The first man who set foot on the moon is Niel Armstrong.



Let's Do More

Fill in the blanks.

1. The first astronauts on the moon were carried by the spacecraft _____.
2. The President of America when Apollo 11 landed on the moon was _____.
3. The first man who set foot on the moon was _____.
4. The other astronaut who joined Neil Armstrong after eighteen minutes was _____.
5. Together with Armstrong and Aldrin the other astronaut who piloted Columbia was _____.



Let's Test Ourselves

Choose the letter of the correct answer.

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Science Fact File

We always see the same side of the moon as it rotates around the Earth. However, it wobbles slightly as it orbits the Earth, giving us a glimpse of some of the features around the edges of its hidden side. Because these wobble, we can actually see about 59 percent of the Moon's surface from the Earth.

Source: Encyclopedia of Questions and Answer



Answer Key

Let's Try This

1. b 2. b 3. a 4. d 5. c

Let's Do This

1. craters
2. rotates
3. revolve
4. orbit
5. moon

Let's Do More

1. Apollo 11
2. Pres. Richard Nixon
3. Neil Armstrong
4. Erwin Aldin Jr.
5. Michael Collin

Let's Test Ourselves

1. b 2. b 3. a 4. d 5. c