Why Is the Moon Banana-Like at Times?

EARTH AND SPACE SCIENCES

Get curious

Video/Slide show

The Secret of the Dark Side of the Moon.

Watch a video that presents photos of the dark side of the Moon, which is invisible from the Earth.

https://youtu.be/kJkVegBsNyE

Having watched the video, discuss the following topics:

What do we know about the Moon?

What helped people see the invisible side of the Moon?

What interesting features did scientists find on the Moon?

What is an orbit?

Observing

The distance between the Moon and the Earth.

What is the distance between the Moon and the Earth?

The students participating in the show stretch a string between the balls that symbolize the Earth and the Moon. The string illustrates the distance between the two.

After the show, ask your students to draw conclusions concerning the size of both objects and the distance between them.

Get going

Movement game

The rules of the Moon's movement.

How does the moon Move?

Referring to both the video and the show, conduct a movement game in order to understand how the Moon and the Earth rotate and orbit. First, the students assume the role of the Moon – the moon rotates around its own axis and orbits the earth. Next, the students are divided into moons and earths in pairs – the moons orbit the earths.

Experiment

Moon phases observed from the Earth.

The students work in teams of four. This experiment will help them understand why the moon looks slightly different each day as we observe it from the earth. While carrying out the experiment, use the animation that shows moon phases.

Conclusions

Identifying which moon phase will appear next.

Summarize the experiment by determining all the correct names of moon phases.

You can ask your students:

How to identify which phase will appear soon?

Provide your students with a short mnemonic that helps identify the current moon phase correctly. It is based on the likeness of the letters DOC to the shapes of the moon in three subsequent phases, namely: First Quarter, Full Moon and Last Quarter.

You can also play a short song for your students.

https://youtu.be/xBc8QHSsFqE

Get practicing

Analyzing

Moon Phases Calendar

Display the moon phases calendar to your students.

http://www.moonconnection.com/moon_phases_calendar.phtml

The students fill out their worksheets.