



Outer Space:

Is There a Man on the Moon?

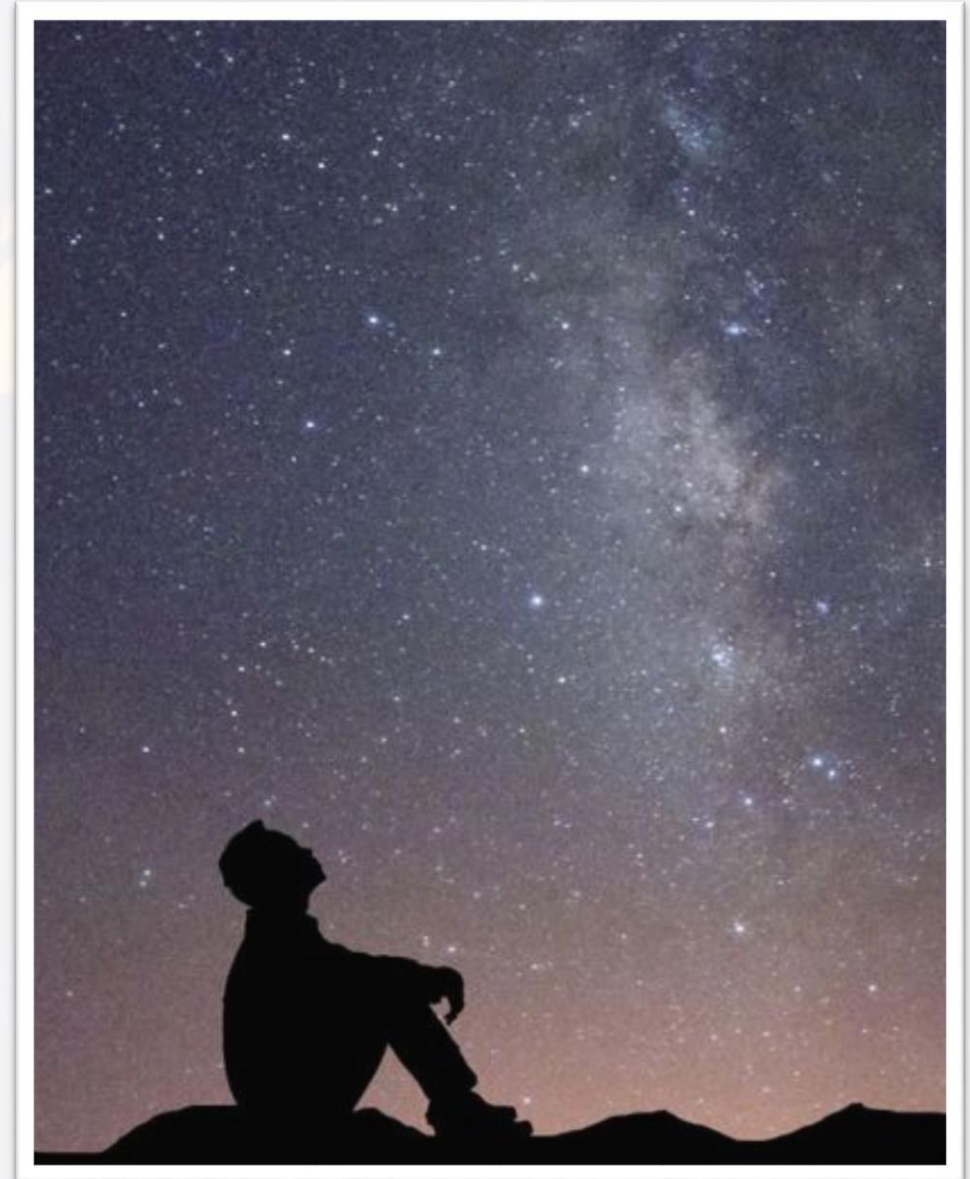
W.A.L.T: understand the relationship between the Moon and the Earth.

What do you already know about the moon? Do you know any facts already?

Think, Pair, Share.



Humans have gazed at the moon for as long as we have had eyes! The glowing rock has been a feature of our night sky for a very long time. It's changing shapes and colours have fascinated scientists, religious leaders and average citizens for all of human history.



Let's see if you can separate these 'Moon Myths' from the 'Moon Science' facts. You can work with a partner if you wish!



Myth or Science?

There is a man who lives on the moon. He was photographed fishing off the edge of the moon.



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Myth or Science?

The moon is perfectly round.



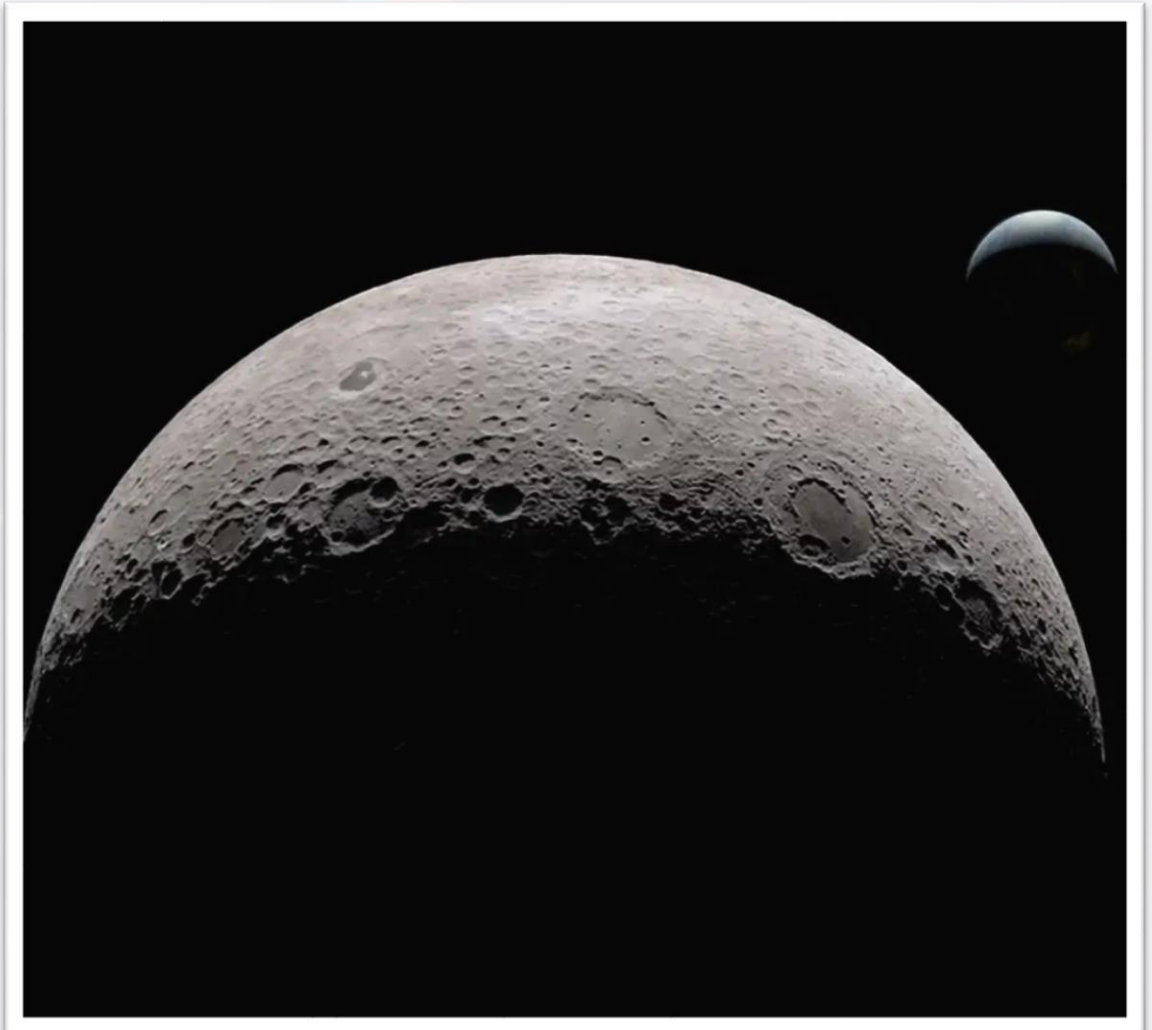
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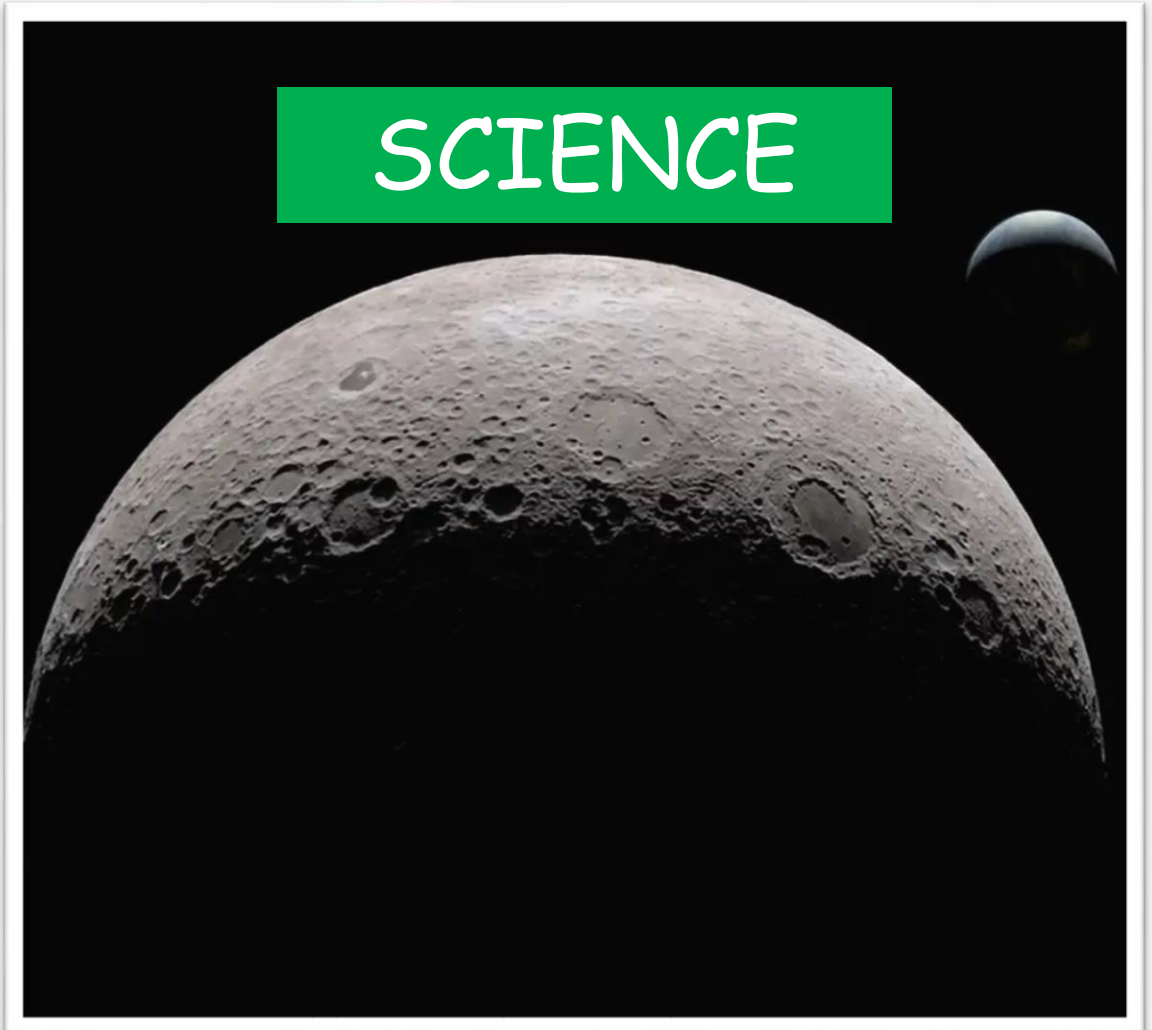
Myth or Science?

The moon has a 'dark side'. We are never able to see this side of the moon from earth no matter where we go.



Myth or Science?

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Myth or Science?

The moon makes the tides at the seaside go in and out.



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Myth or Science?

The full moon makes people act in crazy ways. It is also a time when werewolves roam.



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The Moon is a natural satellite of the Earth. There is no air, no water and no life on the moon. It is full of craters! It orbits the earth once every 28 days. This is called the lunar cycle. It appears to change shape in the sky during this time.

Have you ever noticed that the moon is often different shapes different nights?

How does the moon change shape?

Think, Pair, Share.



The simple answer is that it doesn't change shape!

The shape of the moon stays exactly the same. It just looks like the moon is changing shape because of the way the light reflects off it. This changes depending on where the moon is at different times.



Activity Time

Let's try understand how this happens. Your group will be given the materials you need for this experiment. You will need one person to hold the 'sun' still and one person to rotate the 'moon'. See if you can see all of the different phases of the moon!



Light reflects off the moon in different ways depending on where it is! This makes it look like the moon is a different shape in the night sky but now you understand it's just a light trick!



If we look closely at the surface of the moon we notice that there are lots of unusual bumps and holes on it.

How do you think these bumps and holes got there in the first place?
Why don't we have the same on Earth?





The craters on the Moon are created when meteors crash into the surface of the Moon. Unlike Earth, the Moon has no atmosphere. Most meteors that head for earth burn up in our atmosphere before crashing.

Activity Time

Let's see how the surface of the moon was formed with a little experiment.

- 1) Create your moon surface by following the instructions card.
- 2) Crash some meteors into the surface of the moon.
- 3) Draw a picture of what happens.

