

Write your notes
about what you are
reading in this space.

Science Shorts -8

Phases of the Moon

What do you see when you look at the Moon? Do you see a man in the moon? Some people think that what they see looks like a man's face. What they are noticing are the light and dark patches of the Moon. Scientists used to think that the dark patches were filled with water and named them seas.

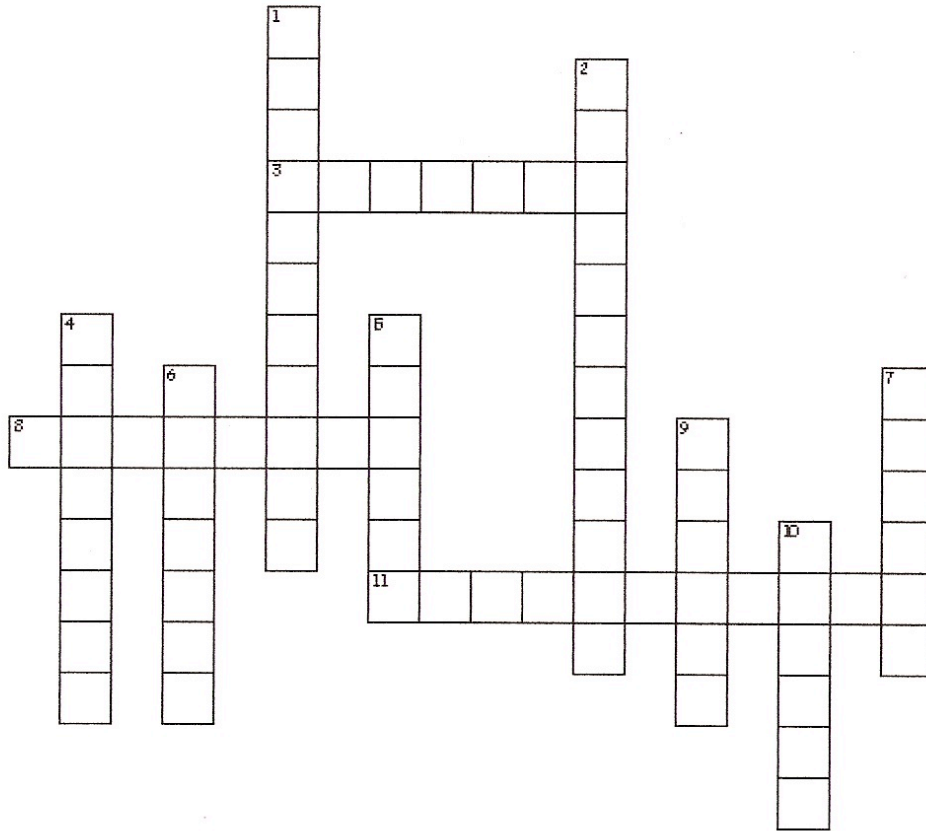
Maybe you have noticed that on some nights there is a full moon and on other nights you can only see a sliver of it. What happened? The different shapes of the Moon are related to the positions of the Moon, the Earth and the Sun. The Moon does not produce any of its own light. What you are really seeing is the reflection of the Sun's light. It takes the Moon 29 ½ days to revolve around the earth. At the same time, the Moon is rotating, or turning around. Throughout the month, you will notice that the portion of the Moon that is lit up changes the shape of the Moon in the sky. These changes are called the Moon's phases.

At the beginning of the Lunar Cycle the moon is between the earth and the sun. This phase is called a new moon. Typically you can not see the moon at this phase because you would have to look directly at the Sun. A few days later, you would see a crescent moon. By the end of the week, you would see half of the Moon's surface lit. This is called a quarter moon. A few days later, you would see an area of the Moon's surface that is larger than half of the moon but less than a full moon. This is called a gibbous moon. Two weeks into the cycle you would see a full moon. A full moon occurs when the Earth is between the moon and the sun. Then the lighted part of the moon begins to get smaller and we have another gibbous moon, quarter moon and crescent moon until it becomes a new moon again.

As the new moon gets bigger we say it is waxing. Waxing means getting bigger. So we have a waxing crescent moon and a waxing gibbous moon. As the full moon gets smaller we say it is waning. Waning means getting smaller. So we have a waning gibbous moon and a waning crescent moon.

The moon's phases take place in a lunar month, which is shorter than a month on our calendar. So every couple of years there will actually be two full moons in one month. This called a blue moon. The moon does not really turn blue. It is just a phrase to describe the second full moon in a month.

Phases of the Moon



Across

3. Takes the moon 29 1/2 days to do this
8. The second full moon in a month
11. The phase that is larger than half the moon

Down

1. This phase has a first and a last
2. The phase that is curved with points.
4. This phase occurs when the Earth is between the moon and the sun
5. Getting smaller
6. The phase you can't see
7. Getting larger
9. Changes in the shape of the moon
10. Takes the moon about a month to do this