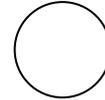


Name _____

Date _____



Phases of the Moon

Reading and Discussion

Have you noticed that the moon keeps changing shape? It starts as a thin crescent which grows bigger every night until it is a bright ball in the sky. What makes it seem to change like this?

Unlike the sun, the moon does not have its own light. The light we see from the moon is **reflected** from the sun.

The sun shines on one side of the moon only. As the moon **orbits** the earth we can see different parts of the sunlit side. We call these changes the **phases** of the moon. The moon takes 27.3 days to go all the way around the earth.

At **new moon**, we cannot see the moon as it is between the sun and the earth which means that the sunlit side is facing away from the earth. When the sun and the moon are on opposite sides of the earth we see a **full moon** because we can see the whole of the sunlit side.

The moon takes two weeks to move halfway around the earth – from new moon to full moon. As the moon appears to grow bigger, we say it is **waxing**. After full moon it starts **waning** until it reaches new moon again.

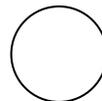
A few days after new moon we see a waxing crescent.



When it is $\frac{1}{4}$ of the way around the earth we can see $\frac{1}{2}$ of the moon. we call this the first quarter.



Halfway around we can see the full moon.



$\frac{3}{4}$ of the way around we see $\frac{1}{2}$ of the moon again. This is the third quarter.



Then we see a waning crescent.



When it gets all the way to the end of the cycle it is new moon again.

Activities

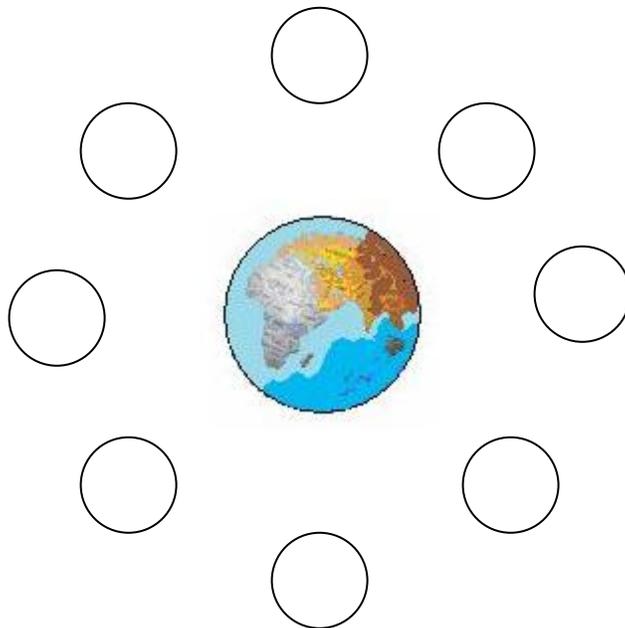
Activity A: What have you learnt?

Fill in the missing words without looking at the reading.

1. The moon's light is from the sun.
2. The sun shines on of the moon.
3. As the moon the earth we can see different parts of the sunlit side.
4. We call the changes we see in the moon the of the moon.
5. At, we cannot see the moon.
6. When the sun and the moon are on opposite sides of the earth we see a
.....
7. As the moon appears to grow bigger, we say it is
8. After full moon, the moon starts until it reaches new moon again.

Activity B: Let's look at the phases.

Can you work out what the moon would look like from earth in these positions? Fill in the part which would be in shadow in black. (Hint: The horns of the crescent always face away from the earth.)



Name _____

Date _____

Answer Sheet

Activity A

1. The moon's light is **reflected** from the sun.
2. The sun shines on **one side** of the moon.
3. As the moon **orbits** the earth we can see different parts of the sunlit side.
4. We call the changes we see in the moon the **phases** of the moon.
5. At **new moon**, we cannot see the moon.
6. When the sun and the moon are on opposite sides of the earth we see a **full moon**.
7. As the moon appears to grow bigger, we say it is **waxing**.
8. After full moon, the moon starts **waning** until it reaches new moon again.

Activity B

