

## 3th GRADE MINIMUM CONTENTS

### UDI 1: PLANET EARTH, THE SUN & THE MOON (1)

#### ► CELESTIAL BODIES

There are many different types of celestial bodies:

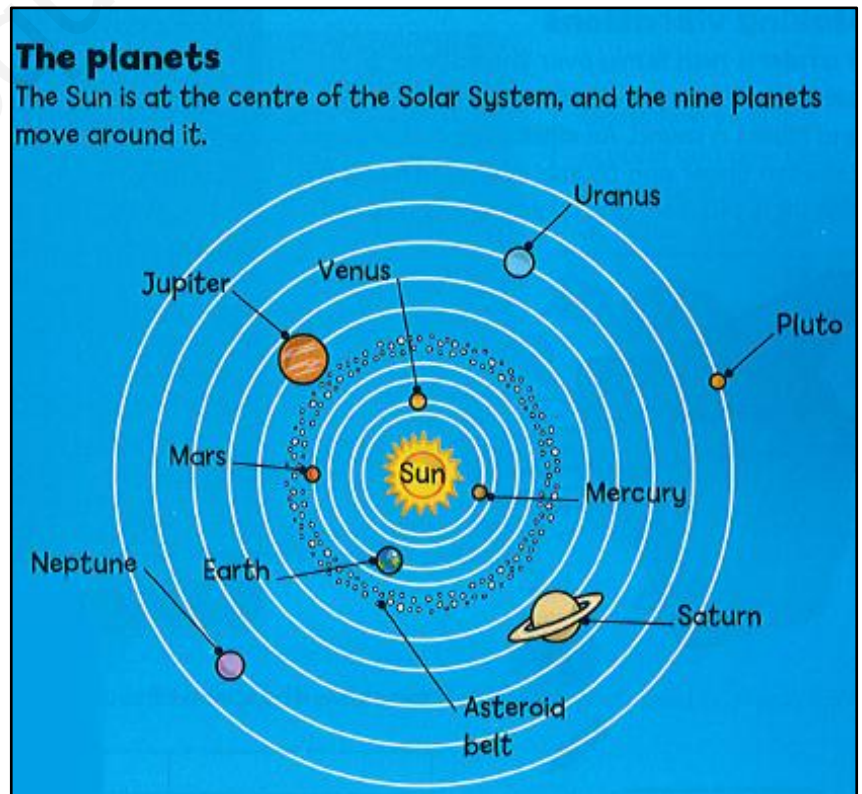
- **Stars** are made of very hot gas. Stars emit heat and light, so we call them **luminous bodies**. The *Sun* is a star.

Planets, satellites, comets and dwarf planets are **non-luminous bodies**; they do not give off heat or light.

- **Planets** are large spherical bodies that orbit the Sun. Some planets, like the *Earth*, are made of rock. Others, like *Jupiter*, are made of gas.
- **Satellites** are celestial bodies that orbit planets. The *Moon* is the Earth's satellite.
- **Comets** are balls of ice and dust that orbit the Sun.
- **Dwarf planets** are like planets, but much smaller. *Pluto* is a dwarf planet.

#### ► THE SOLAR SYSTEM

The **Solar System** is made up of the Sun and all the celestial bodies that orbit the Sun. The Sun is at the centre of the Solar System. The Sun is the only star in the Solar System.

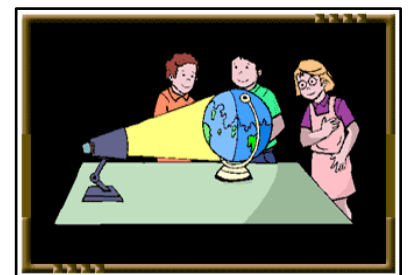
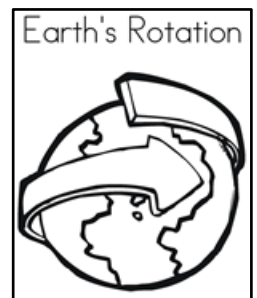


- Eight **planets** orbit the Sun
  - **Inner planets:** Mercury, Venus, Earth and Mars are the closest planets to the Sun. They are made of rock.
  - **Outer planets:** Jupiter, Saturn, Uranus and Neptune are the furthest planets from the Sun. They are made of gas.
- **Satellites** orbit planets. Some planets have lots of satellites and others have one. The *Earth* has one satellite; the **Moon**. *Jupiter* has 63 moons!
- **Asteroids** are pieces of rock left over from the time when the Solar System formed that move in an orbit around the Sun. Asteroids form a ring, or belt, between the orbits of *Mars* and *Jupiter*.
- **Comets** are small celestial bodies that orbit the Sun. When they are close to the Sun, we can see their **bright tails**.

## ► THE EARTH MOVES

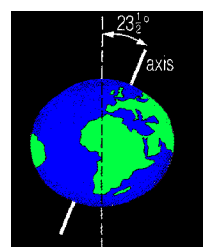
### The Earth rotates

The Sun appears to move quickly across the sky. This movement is not due to the Sun. The Earth rotates on its axis. This movement is called **rotation**. The rotation of the Earth makes the Sun appear to move. The Earth turns round once on its axis every 24 hours, this is a **day**. During that time, all parts of the Earth spend some time facing the Sun. When a part of the Earth is facing the Sun, it is **daytime** there because it receives light from the Sun. It is **night-time** in the part of the Earth that does not receive light.



### The Earth's axis

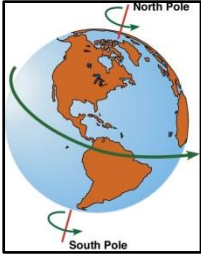
The Earth rotates on a tilted axis. The axis is tilted just over 23 degrees from vertical and keeps pointing in the same direction as the Earth orbits the Sun.



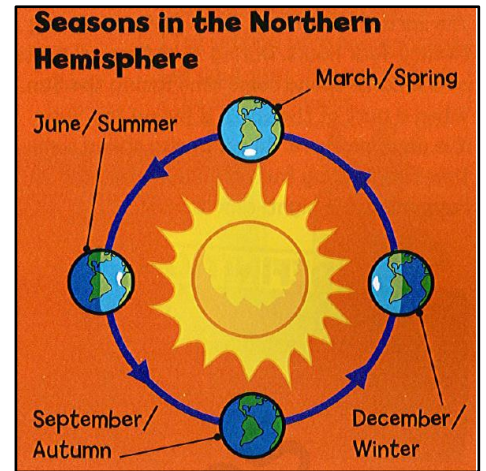
## The Earth orbits the Sun

The Earth moves anticlockwise around the Sun in an elliptical orbit, one complete orbit takes 365 days. This is called an **Earth revolution** or a **year**.

## The hemispheres and the seasons



The way the Earth tilts in space and makes its journey around the Sun produces long periods of certain kinds of weather that are known as seasons. The equator is an invisible line that runs around the middle of the Earth. The half of the Earth above the equator is called the Northern Hemisphere. The half below it is called The Southern Hemisphere. When a hemisphere is angled towards the Sun it is **summer** there, and when it is pointing away it is **Winter**. **Spring** and **Autumn** occur when neither hemisphere is pointing towards the Sun.

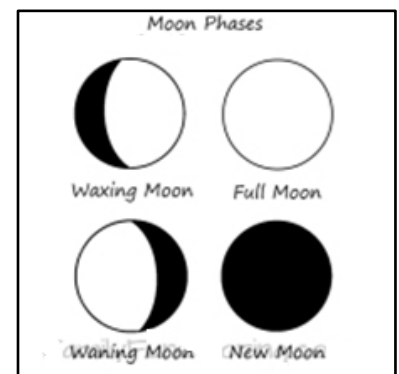
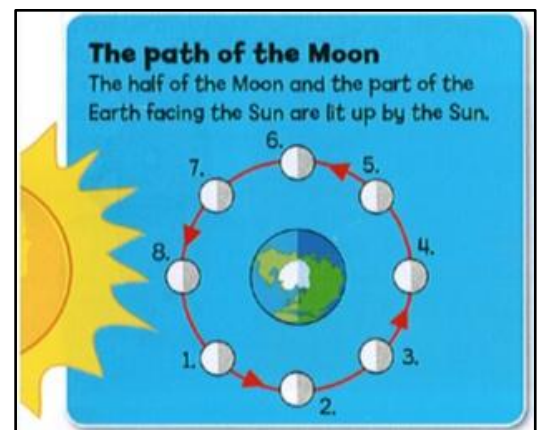


## ► THE MOON MOVES

The Moon moves anticlockwise around the Earth in an almost circular orbit. Each orbit takes 28 days. This is called a **lunar month**.

## The phases of the Moon

As the Moon goes around the Earth the Sun shines on half of the Moon. But from the Earth we can sometimes see only part of the sunlit areas. The sunlit areas seen from the Earth are called the **phases of the Moon**. The four main phases of the Moon are: *Waxing Moon*, *Full Moon*, *Waning Moon*, and *New Moon*.



## UDI 1: PLANET EARTH, THE SUN & THE MOON

### ACTIVITIES

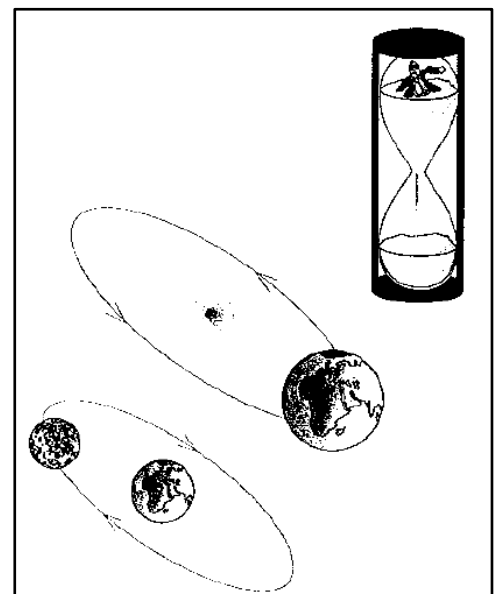
#### 1.- Use the words to complete the sentences

night- summer - 365 days - orbits - seasons - axis - rotate - day - winter

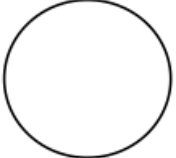
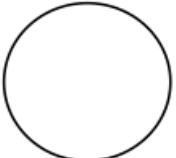
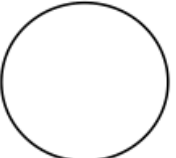
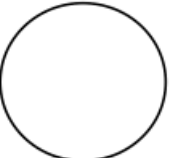
- The Earth rotates on its \_\_\_\_\_.
- The Earth takes 24 hours to \_\_\_\_\_ completely.
- On the part of the Earth facing the Sun, it is \_\_\_\_\_.
- On the part of the Earth facing away from the Sun, it is \_\_\_\_\_.
- The Earth \_\_\_\_\_ the Sun.
- The Earth takes \_\_\_\_\_ to complete its orbit.
- The Earth's movement around the Sun causes the \_\_\_\_\_.
- It is \_\_\_\_\_ on the part of the Earth which receives more sunlight.
- It is \_\_\_\_\_ on the part of the Earth which receives less sunlight.

#### 2.-This question is all about how things move in space. Circle the correct words in the brackets.

- The Sun / Earth orbits around the Sun / Earth once every 265 / 365 days.
- This is called a month / year.
- The Moon takes about 58 / 28 days to orbit the Earth.



3.- Colour the pictures to show the four main phases of the Moon.

 1	 2	 3	 4
New Moon	Waxing Moon	Full Moon	Waning Moon

4.- Read and complete the descriptions. Then, draw the celestial bodies.

<p>A celestial body made of very hot gas that emits heat and light. It is a luminous body. It is a _____.</p>	<p>A celestial body made of ice and dust that orbits the Sun. It is a _____.</p>
<p>A large, spherical celestial body that orbits the Sun. It is a _____.</p>	<p>A celestial body that orbits planets. It is a _____.</p>

5.-Complete your bilingual dictionary.

THE EARTH, THE SUN & THE MOON		
- Celestial bodies: _____	- Turn around: _____	- Go around: _____
- luminous bodies: _____	- Tilt: _____	- Elliptical orbit: _____
-Star: _____	- Tilted axis: _____	- Earth Revolution: _____
- Dwarf planet: _____	- Rotation: _____	- Northern hemisphere: _____
- Satellite: _____	- Spend time: _____	_____
- Orbit: _____ / _____	- Daytime: _____	- Southern hemisphere: _____
- Ice & dust: _____	- Night-time: _____	_____
- Solar System: _____	- Anticlockwise: _____	- Waxing Moon: _____
- Inner planet: _____	_____	_____
- Outer planet: _____	- Angled towards: _____	- Full Moon: _____
Pointing: _____	_____	- Waning Moon: _____
Pointing away from: _____	- Facing: _____	_____
_____	- Facing away from: _____	- New Moon: _____
- Bright tails: _____	_____	- Asteroid: _____
- Rotate: _____	- Move around: _____	- Leave(left) over: _____
	_____	_____

**DEFINITION**

**clockwise** The direction taken by the hands of a clock as they move around a clock face.

**anticlockwise** The opposite direction to that taken by the hands of a clock as they move around a clock face.

**DEFINITION**

**sphere** An object with a surface curved round to make a ball shape.

**orbit** The path taken by one object in space as it moves around another space object.

**elliptical** Shaped like a slightly flattened circle, sometimes called an oval.

**DEFINITION**

**asteroid** A piece of rock left over from the time when the Solar System formed that moves in an orbit around the Sun.