Geography Notes Part 1 & 2

1] The Earth and the Solar System

Sky, It appears that the Sun rises in the east and sets in the west. When the Sun rises, the stars become invisible. But when the Sun sets in the west stars shine are visible.

Among thousands of twinkling stars in the night sky, it is the **moon** that instantly captures our attention. We come to know a lot of amazing information if we observe the moon.

First, the shape of the moon keeps changing everyday. The shape of the moon waxes from the **new moon** to the **full moon** and wanes from the full moon to the new moon.

We can calculate the duration between one new moon to the next new moon or one full moon to the next full moon which as a month, thus appearing in many forms.

The moon appears along with various heavenly bodies everyday.

Besides the stars, planets are also seen in the night sky, **Planets** appear shiny. But they never twinkle like stars.

First, if you closely observe, you will be able to notice that stars twinkle. The planets glow without any flicker.

Secondly planets do not remain in the same position. If you see a planet along with a particular star today, you might find it along with another star later.

Thus the various positions of planets can be seen against the backdrop of stars.

Without the help of the telescope, i.e., with your naked eye, you will be able the five planets namely **Mercury, Venus, Mars, Jupiter and Saturn.**

On the other hand, **Neptune and Uranus** can be seen only through a telescope.

Before sunrise or sunset we can see Mercury and Venus for a few hours. These two planets appear only on the horizon.

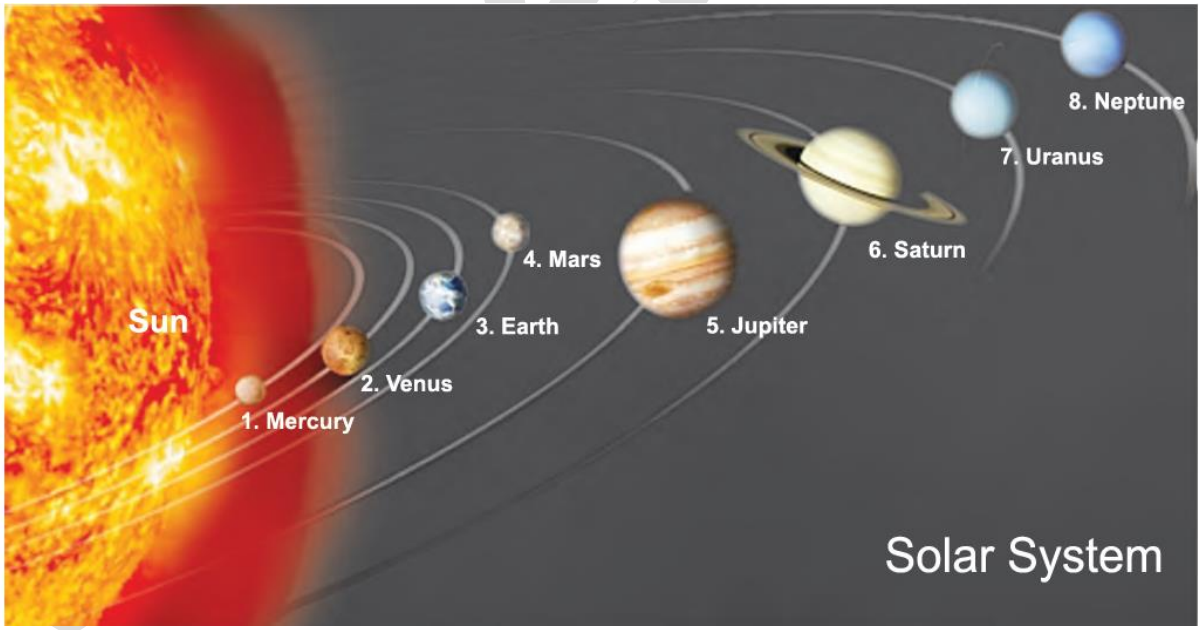
Venus rises a few hours before sunrise and therefore it is nicknamed as the **'Morning Star'.**

Mars, Jupiter and **Saturn** are visible with the naked eye during the night either in the east or overhead or in the west. Thus we can see only five planets with the naked eye.

In Tamil the days of the week are named after these five planets, the **moon** and the **Sun.**

"Seeing is not believing" is a scientific outlook. It appears to us that the Sun and the starts rises in the east and sets in the west.

But in fact it is only the Earth that spins along its axis everyday. It appears to us that all the celestial bodies including the Sun and the starts move from east to west because the Earth spins from the west to the east.



It is not only because of the rotation of the Earth, but also due to the rotation of the moon and other planets, that we are to observe their movements.

The moon revolves around the Earth, similarly the planets revolve around the Sun. Thus it appears that all the planets move with the stars as a backdrop.

The Solar System

Solar family consists of the Sun, its eight planets, the satellites like the moon that revolve around the plants, dwarf planets, thousands of asteroids, meteoroids and comets. This is called the solar system.

We can see the Sun, moon and the five planets that are mentioned above with naked eyes.

With the help of the telescope we can observe othercelestial bodies like **Uranus, Neptune, Comets, Meeoroids, Asteroids, Galaxies, dwarf planets** billions of stars and other gaseous objects.

The Solar system has eight planets. All planets revolve around the Sun.

The Earth is also a planet. Different kinds of life including human beings are found on Earth because the **Earth's atmosphere has oxygen.**

The eight planets have been classified into solid planets and gaseous planets. **Mercury, Venus, Earth and Mars** are called as **Solid planets,** while Jupiter, Saturn, Uranus and Neptune are gaseous planets.

Other than the earth, all other planets have no oxygen and other gases. Hence life does not exist in these planets.

All planets appear to move in an anti-clockwise direction if you take a bird's eye view from the north pole of the Sun. Even through they all revolve in the same direction, the duration of their revolution around the Sun differs from one another.

The planets which revolve around the Sun, do not deviate from their respective paths. All planets revolve around the Sun in an **elliptical path,** approximately at the same plane. The path that the planet takes to revolve around the Sun is called 'Orbit'.

Sun

The **Sun** is the head of the **Solar family.** It is at the centre of the Solar system. It is a large gaseous ball of fire. The gravity of the Sun holds the Solar system together.

The Sun is the source of heat and light for the entire Solar family. The Earth is **approximately 150 million km** away from the Sun.

The Sun is very hot but the Earth receives only moderate heat from the Sun. The Sun is the only celestial body that **emits light** in the Solar system.

The rings of Saturn

The rings of Saturn are visible through a telescope. These rings consist of small stones, dust and ice particles. Through only the rings of Saturn are magnificant, **Jupiter, Uranus** and **Neptune** also have rings.

Dwarf Planets

Pluto, Charon, Ceres, Eris were newly grouped as 'Dwarf Planets' in the yesr 2006. They also revolve around the Sun. They are very small in size. Their size is smaller than that of our moon. Hence they are called Dwarf planets.

No planet has the capacity to emit light because they do not have light of their own. They reflect the light of the Sun.

The time taken for the rotation and revolution of the planets around the Sun.

Planets	Duration of revolution	Distance from the Sun	Duration of Rotation
MERCURY	87.97 days	5.79 Crore Km	58.6 days
VENUS	224.7 days	10.82 Crore Km	(*) 243 days
EARTH	365 ½ days	15 Crore Km	23 hours 56 min
MARS	687 days	22.79 Crore Km	24 hours 37 min
JUPITER	11 years 9 months	77.83 Crore Km	9 hours 55 min
SATURN	29 years 5 months	142.7 Crore Km	10 hours 40 min
URANUS	84 years	287.1 Crore Km	(*) 17 hours 39 min
NEPTUNE	164 years 9 months	449.7 Crore Km	16 hours

Venus and Uranus marked with the (*) sign rotate from east to west. All other planets rotate from the west to the east.

Source- NASA, USA

Asteroids

Thousands of asteroids are found between Mars and Jupiter. Asteroids are clusters of celestial bodies which include tiny stones and big rocks that measure about 300 to 400 km in diametre.

Some of them have Indian names such as **Vynu Pappu** the astronomer, **Sarabai** the Father of Atomic energy and **Ramanujam** the Mathematician.

Moon

The Moon is called by **different names in Tamil.** The Moon is not a planet.

It is a natural satellite of the earth.

The moon oes not revolve around the Sun It revolves around the Earth. Hence it is called a **satellite.**

Planets	No. of Satellites that revolve around the planets
Mercury	0
Venus	0
Earth	1
Mars	2
Jupiter	63
Saturn	60
Uranus	27
Neptune	13

The moon is the satellite of the Earth. With the help of telescope and space research , it has been proved that Mars, Jupiter, Saturn, Uranus and Neptune also have a number of satellites.

The moon is a sphere which measures a quarter of the Earth's diameter. It appears very large to us because it is very close to the Earth. It revolves around the Earth **approximately** at a distance of **3,84,401 Km.**

It takes about **27.3** days for the moon to revolve around the Earth and **27.3** days for the moon to rotate on its axis.

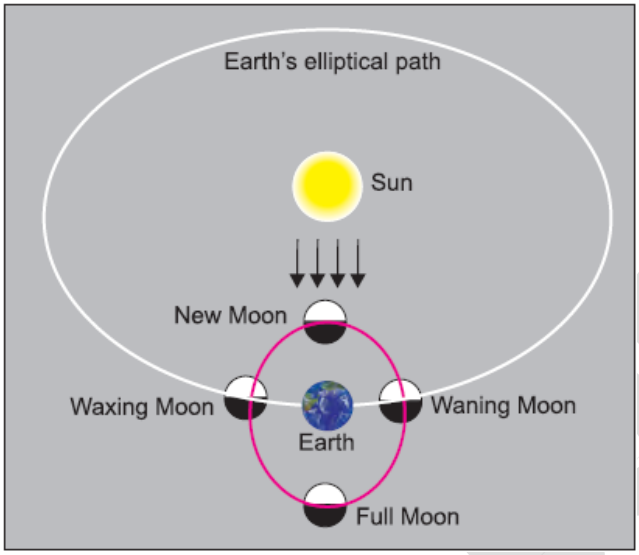
Hence from the Earth we are able to see only one side of the moon. In the year **1959** the satellite **Lunar 3** photographed the other side of the moon.

The moon does not have an **atmosphere** like the Earth. Water is not found there in the liquid form. However, moisture is present here.

Landforms such as mountains, plateaus and valleys are also found on the moon.

Craters are another special feature of the moon. This can be viewed through a telescope. These craters are formed due to the meteorites which fall on the surface of the moon. Some of the craters are found due to volcanic eruptions.

Where does the Moon go on a **new moon** day?

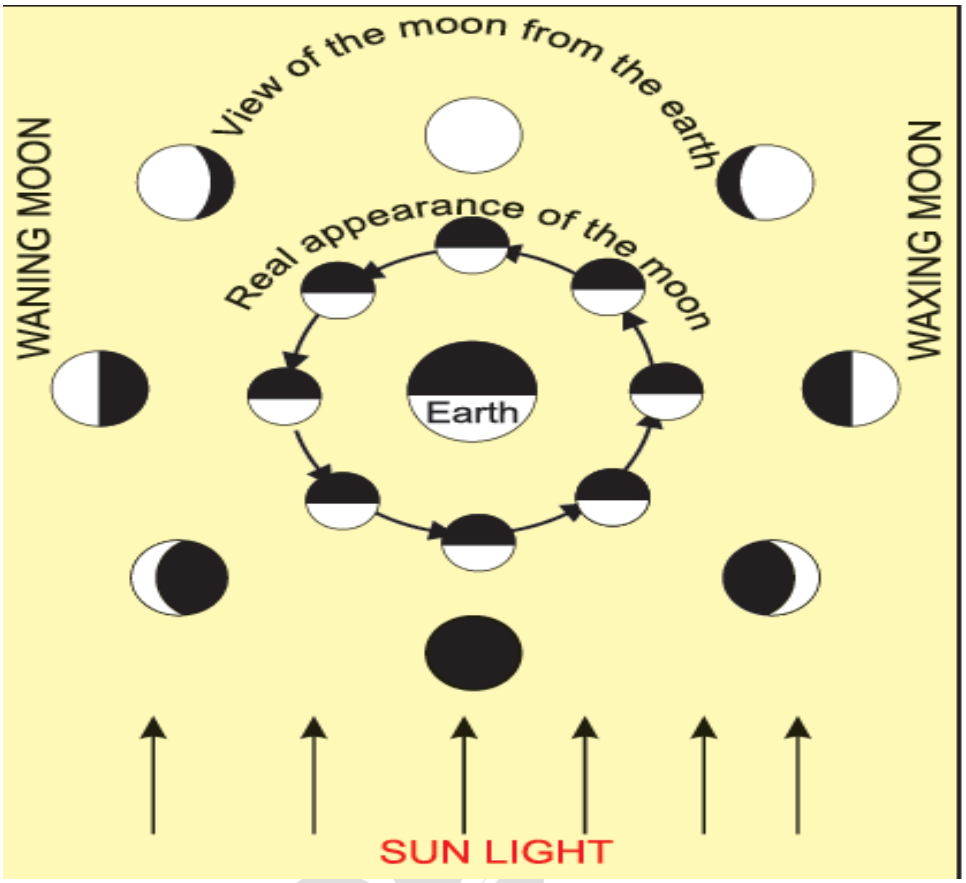


The Sun is the only illuminating celestial body in our solar system. Though the moon shines brightly during the night, it actually reflects the light of the Sun.

Like the Earth, the moon is also almost a sphere. Therefore the side that faces the Sun, shines brightly while the other side is dark.

During the revolution of the moon around the earth, the dark side of the moon that faces the Earth is called the 'new moon'. The side of the moon that shines brightly on the Earth is called 'full moon'.

On a new moon day, the moon comes between the Earth and the Sun and on a full moon day, the moon is opposite to the Sun



When the Sunlight falls on the moon, a day is exactly divided into two eual halves, that is one half is day and the other half is night. The day and night on the moon changes according to the phase of the moon that we view from the Earth.

Meteoroids

The sudden streaks of light seen on a stary night is called as **Meteoroids.** This can be seen when the remains of the rocky parts of the comets strike the Earth's atmosphere and streaks of light are generated. They are not stars that fall down.

What happens when we rub your palms together? Do we feelthe warmth?. The same way, it is generated. When fragments of rocks and comets from space strike the earth's atmosphere, the rocky fragments burn and shrink. This phenomena appears as a bright streak of light.

Comet

It is exciting to see a comet in the night sky. A comet is not a star. It is a rock made of dust and ice. The long tail is seen because, as the comet comes near the Sun, the ice melts and reflects the light of the Sun.

The **tail of the comet is seen in the opposite direction of the Sun.** The tail of the comet appears because minute particles from the Sun strike the gaseous part emitted from the comet.

Universe

Millions of constellations of stars seen in the sky is called a **galaxy.** Thousands of galazies form the Universe. The **Universe** is vast and ever expanding. Research and experiments are still being carried out.

Milky way galaxy is one amoung the many galazies.

Milkyway galaxy

The twinkling stars that are seen on a starry night are actually like the Sun, but are far away.

Many of these stars are hundreds and thousands of times bigger than our Sun.

They are seen only as a small spot of light because they are too far away. Scientists have found that planets revolve around these stars.

Millions of stars, including the Sun and other celestial bodies which can be viewed with our eyes belong to the **Milky way galaxy.**

A white streak of light can be seen on a clear night for few days. Our ancestors called this as the Milky Way galaxy. In India it is we call it as **“Akash Ganga”.**

Milky way galaxy is a dense cluster of stars. They appear as a tiny dot of light because they are far away. We live on the Earth, which is a part of the solar system, present in the Milky way galaxy.

- We live in Tamil Nadu.
- Tamil Nadu is a state in India.
- India is one of the many countries in the world, which is on the earth.

- Earth is a planet in the Solar system.
- Solar system is a member of the Milky Way galaxy.

Our Universe is made of many such galaxy.

Earth is a living planet

Earth is the third planet from the Sun. Mercury and Venus are very hot planets. Mars, Jupiter, Saturn, Uranus and Neptune are very cold because they are far away from the Sun.

Land, water, air and heat are available in the optimum level only on Earth. Therefore, different forms of life exist only on the Earth.

In our Solar system there is life only on Earth. There is no life on other planets. Earth is called a 'living planet' because life is found in abundance only on this planet.

Solar System - Questions

1. How many minutes have taken for the sun light to reach the earth?

a. 8.8 **b. 8.4** c. 9.8 d. 8.0

2. Which is the nearest star to the solar system?

a. AlphaCentrary **b. Proxima Centrary** c. Parnat star d. Ceres

3. What is the reason of planets revolution around the sun?

a. Gravitational force b. Circular force c. Linear force d. Centrifugal force

4. What is the name called by the path way of planet rotating?

a. Orbital b. Round Path c. Both d. Both wrong

5. Which of the following are true?

1. The planets are classified into Solid Planets and Gaseous planets.

2. All planets are rotating around the sun in circular pathway same time.

3. Stars are having the character of glittering individually.

4. No planet has the capacity to emit light.

a. 1 and 2 b. 2 and 3 c. 1,2 and 3 **d. 1,3 and 4**

6. Listen to the following statements:

1. The revolution time of the Mercury Planet around the sun is 87.97 days.

2. The revolution time of the Venus Planet around the sun is 224.7 days.

a. 1 only b. 2 only **c. 1 and 2 only** d. None of the above.

7. Which is the nearest planet to the sun?

a. Earth **b. Mercury** c. Venus d. Jupiter

8. Which of the following is rockplanet?

a. Earth **b. Mercury** c. Venus d. Jupiter

9. Which of the following are Gaseous planets?

a. Venus, Jupiter, Saturn, Uranus

b. Saturn, Uranus, Neptune, Mars

c. Mercury, Venus, Earth, Mars

d. Jupiter, Saturn, Uranus, Neptune.

10. What is mean by solar family?

a. Sun, 8 planets consisted

b. Satellites, Dwarfs consisted

c. Dwarf, Comets, Meteoroids consisted.

d. All

11. Which planet is called as evening star?

a. Saturn **b. Venus** c. Jupiter d. Earth

12. Which planet is called as red planet?

a. Saturn b. Venus **c. Jupiter** d. Earth

13. How many days have been taken for moon to rotate around the earth?

a. 27 **b. 27.3** c. 27.5 d. 28

14. Which planet is called as blue planet?

a. Mars b. Mercury **c. Earth** d. Jupiter

15. 3rd Planet from Sun is

a. Mars **b. Earth** c. Jupiter d. Venus

16. How much time is taken for earth to revolve around the sun?

a. 364.24 days **b. 365.24 days** c. 365 days d. 366 days

17. Shape of Earth is

a. Sphere **b. Elliptical sphere** c. Square d. Circle

18. Which of the following planet doesn't have natural satellite?

a. Pluto b. Earth c. Jupiter **d. Venus**

19. Which of the following planet has the most number of natural satellites?

a. Jupiter b. Saturn c. Uranus d. Mars

20. In Which year the dwarf planets are grouped?

a. 2004 b. 2008 **c. 2006** d. 2007

21. Which of the following are correct statements?

1. Mars, Jupiter, Venus, Saturn, Uranus, Neptune has many satellites.

2. There is no atmosphere and air moisturizer like Earth.

a. 1 only b. 2 only c. 1 and 2 only **d. None of the above.**

22. Which of the following are correct statements?

1. The full moon is while moon in between Earth and Sun.

2. The new moon is while Earth in between Sun and Moon.

a. 1 only b. 2 only c. 1 and 2 only **d. None of the above.**

23. Which of the following are correct statements?

1. There are dust, ice particles, small miniature rocks makes the ring around Saturn.

2. Mercury, Jupiter, Uranus, Neptune planets have rings around it.

a. 1 only b. 2 only c. 1 and 2 only d. None of the above.

24. Listen to the following statements:

Assertion : The fulfilled sunlight cant reflected by the moon because doesn't has the area

Reason: Moon light is comfortable.

a. Both [A] and [R] true, and [R] is correct explanation for [A]
b. Both [A] and [R] true, and [R] is not correct explanation for [A]
c. [A] is true but [R] is false
d. [A] is false but [R] is true

25. Match the following

Set I	Set II
a. Asteroids	1. Glacier
b. Comet	2. Ray
c. Seres	3. Large Planet
d. Jupiter	4. Dwarf planet

	a	b	c	d
a.	3	4	1	2
b.	3	4	2	1
c.	**2**	**1**	**4**	**3**
d.	1	2	3	4

26. Which of the following are correct statements?

1. When comet gets close to the sun, frozen gases are evaporated

2. The tail of the comet will always be in the direction of the sun.

a. 1 only b. 2 only c. 1 and 2 only d. None of the above.

27. A white streak of light can be seen on a clear night for few days. In India it is we call it as "Akash Ganga" . Our ancestors called this as

a. Milk Way Galaxy b. Universe c. Star d. Galaxy

28. What is the distance between Sun and Earth approximately

a. 15 crore K.M b. 1.5 crore K.M c. 5 crore K.M d. 51 crore K.M

29. In our Solar family Which spatial object is self-reflecting?

a. Sun b. Earth c. Venus d. Uranus

30. In Which year the Comet will appear visible?

a. 2022 **b. 2062** c. 2072 d. 2092

31. How the particles left by the comets in the night sky are called friction in the earth's atmosphere?

a. Asteroids **b. Shooting star** c. Stars d. Loop Light cover

32. What is the name called if the rocks are attracted by the Earth's gravitational force and fall in the Earth?

a. Asteroids b. Shooting star c. Stars d. Meteorites.

33. Pluto, Ceres, Airis, Makemake, Havemie are

a. Planets **b. Dwarf planets** c. Starry d. Shooting stars.

34. Pluto discovered in

a. 2004 **b. 1930** c. 2008 d. 1925

35. What is the name called if an Asteroid half burnt and fall in the Earth's surface?

a. Asteroids b. Shooting star c. Stars **d. Meteorites.**

2] Rotation and Revolution of the Earth

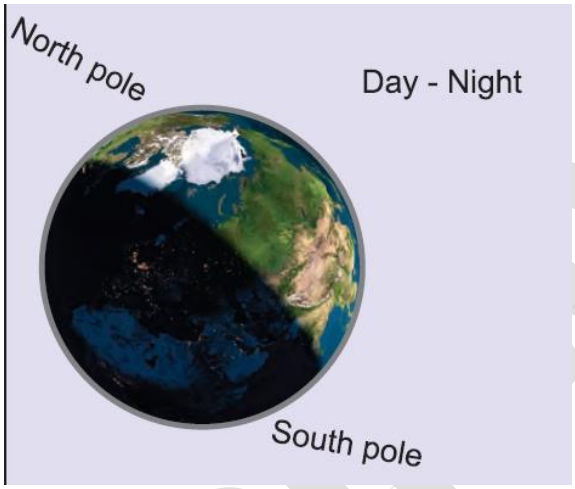
The Earth is always in motion. It has many movements. **Rotation** on its own axis and **Revolution** around the Sun are the two important movements of the earth.

Rotation

The Earth takes **approximately 23 hours and 56 minutes** for one rotation on its axis. This movement is called rotation. It causes day and night.

All parts of the Earth **do not experience day and night at the same time.** The part of the Earth's surface which faces the Sun experiences day. The part of the Earth's surface which does not face the Sun experiences night.

So when it is **day time in India, America** which is on the other side of the Earth experiences **night**



In ancient times, it was believed that day and night was caused due to the rotation of the Sun around the earth.

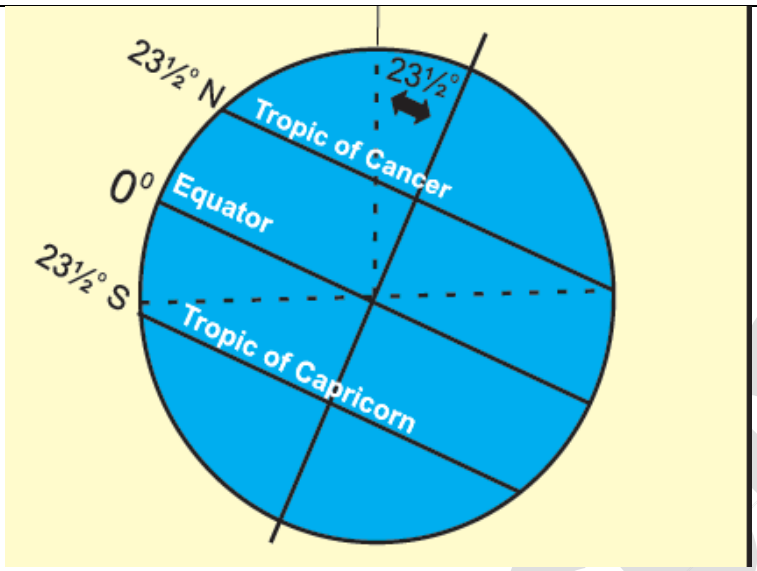
Aryabhatta was an ancient Indian astronomer. He explained scientifically that the Earth rotates on its own axis.

When we travel on a boat down the river the banks of the river appear to move in the opposite direction.

Similarly he said that the Sun remains in the same position, but because the Earth rotates on its own axis, it appears that the Sun moves around the Earth.

In olden days, Sunrise is marked as the beginning of a day. At present a day begins at 12 midnight.

The earth not only rotates on its axis but it also revolves around the Sun in an elliptical orbit.



The Earth is inclined at an angle of 23 ½^0 from its vertical axis. This inclination causes seasonal changes. (See the picture)

Leap Year

(A year with an extra day)

The Earth does not exactly take 365 days to complete one revolution around the Sun. It takes approximately 365 ¼ days to complete one revolution.

For the sake of convenience we consider only 365 days for one year. The remaining ¼ day is added as one whole day to every fourth year. When this is added to the fourth year that year has one extra day which is called as leap year. During a leap year the extra day is added to the month of February. So in a leap year the month of February has 29 days. i.e. Divide any given year by four. If you get a remainder is zero then it is a leap year.

When we divide year 2000, the remainder is zero. Thus 2000 A.D. was a leap year.

Revolution of the Earth

Day and Night are the systematic changes that takes place everyday.

Similarly there are seasonal changes every year. The four seasons are **Spring, Summer, Autumn and Winter.**

The path which the Earth takes to revolve around the Sun is elliptical in shape.

Hence at one position the Earth is close to the Sun and at another position it is far away from the Sun.

Generally during July the Earth is far away from the Sun. In January it is very close to the Sun.

If seasons are caused because of this, then it should be winter in July and summer in January.

During December Tamil Nadu which is in the northern hemisphere experience serve winter whereas Australia which is in the southern hemisphere has summer.

When **we sweat out** during April and May due to summer, **Australia shivers with cold.**

Therefore it is clear that the **seasons are not the same everywhere** on the earth. If it is summer in the northern hemisphere, it is winter in the southern hemisphere and if it is winter in northern hemisphere, it is summer in the southern hemisphere. Hence there is **reversal of seasons.** We cannot say that the seasons are caused by the earth's elliptical orbit.

Then why do seasonal changes occur?

Seasons are caused because the earth's axis is inclined.

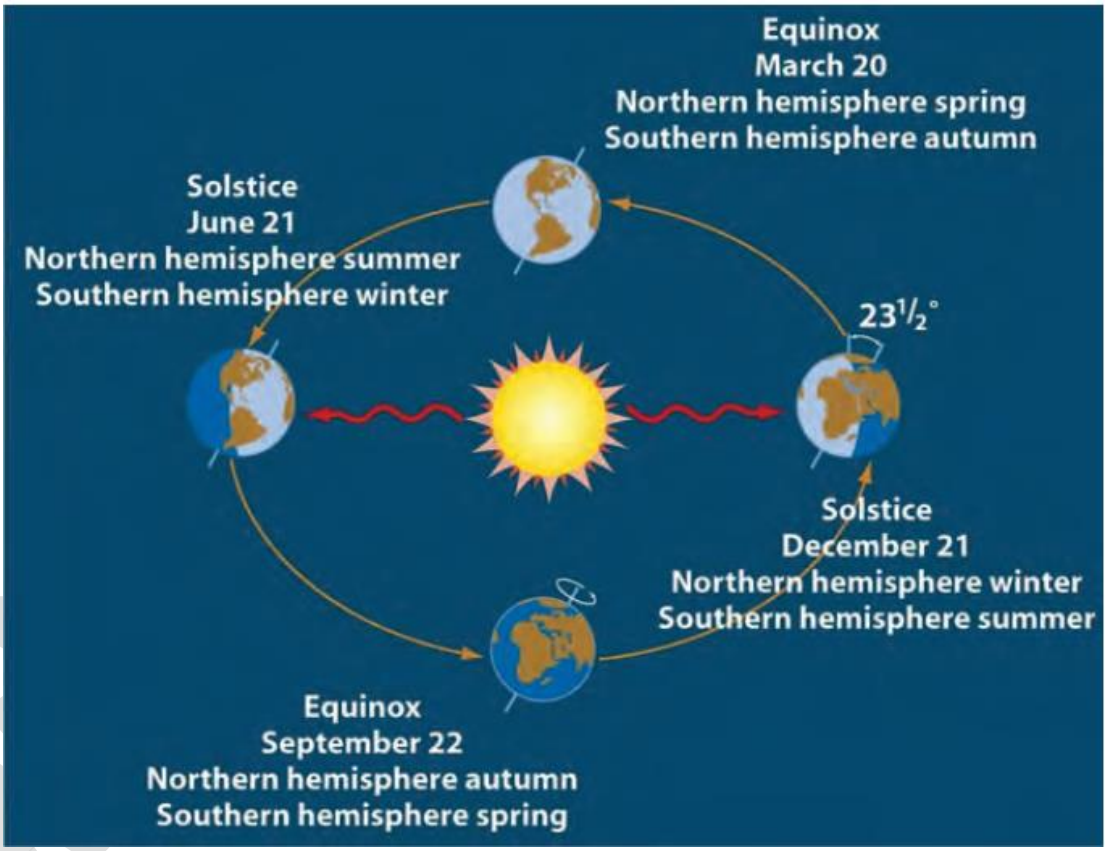
When we are asked where does the Sun rise? Immediately answer that the Sun rises in the east.

But the truth is that Sun does not exactly rise in the east everyday. In Tamil Nadu, during most of the days of the year the Sun rises either in the south eastor north east.

On December 22nd the Sun which rises mostly in the south east, now starts moving towards the north. This is called **Northern movement** (Uthrayan) From then on the point at which the Sun rises moves towards the north east and on June 21st it reaches maximum of its point.

After this the points at which the Sun rises moves towards the south and this is called as **Southern movement** (Dakshinayan). Between these points, on two days the Sun rises exactly in the east.

On March 21st and Sep 23rd the duration of day and night is equal throughout the Earth- i.e. 12 hrs of day and 12 hrs of night. Hence they are called equinoxes. March 21st is referred to as Spring equinox and Sep 23rd as Autumnal equinox.



The northern hemisphere is exposed to the Sun's light during the month of June, for six months, because the earth's axis is inclined.

After six months the southern hemisphere is exposed to the Sun's light during the month of December. The Sun is overhead at the northern hemisphere and is exposed to the Sunlight. Hence the northern hemisphere receives the direct rays of the Sun. It is summer in this region.

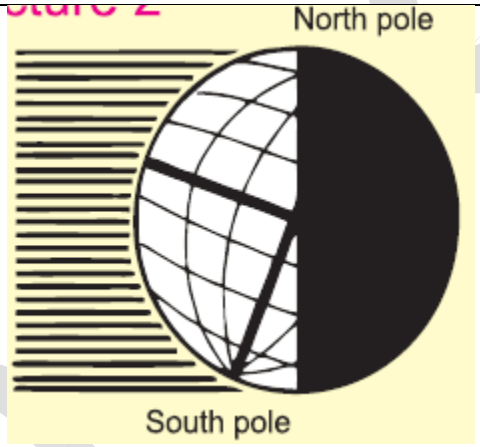
After six months when the southern hemisphere is exposed to the direct rays of the Sun, it is summer in the southern hemisphere.

Summer is usually associated with heat, brightness and longer days.

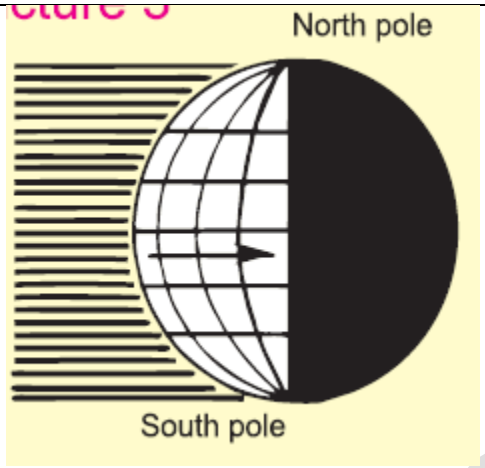
During this time Northern hemisphere receives the slanting rays of the Sun. hence it is winter in the Northern hemisphere.

Winter is associated with cold weather early sunset, shorter days.

In December, India and England celebrate Christmas asa winter festival, whereas in Australia it is summer, so Christmas is celebrated as a summer festival in Australia.



Look at the picture. When the South pole faces the Sun during December, the North pole is completely dark and the South pole has continuous daylight. The inclination of the Earth's axis not only causes seasonal changes but there is something amazing about it. At the poles there are six months of continuous daylight and six months of continuous darkness.



The Sunlight falls vertically on the earth's axis on March 21st and September 23rd . Hence on these two days, day and night is equal in both the hemisphere. The days are equal to the nights all over the Earth.

According to Tamil tradition there are six seasons, (for every two months there is one season) Ancient Tamil literature speaks about this. The six seasons are Khar, Kulir, Munpani, Pinpani, Ilavenil and Mudhuvenil. But according to the international standard, only four seasons have been recognized. The four seasons are summer, winter, autumn and spring.

Rotation and Revolution of the Earth - Questions

1) The earth is inclined at an angle of

(A) $23\frac{1^o}{2}$

(B) 26^o

(C) $28\frac{1^o}{2}$

(D) 34^o

2) The rotation of earth causes

(A) Day only

(B) Day and Night

(C) Night Only

(D) Seasonal changes

3) Which of the following statements is/are correct ?

1) The earth is inclined at an angle $23\frac{1}{2}^o$ which causes seasonal changes.

2) The earth spins at a speed of 1670km/hr.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

4) Who explains scientifically that the earth rotates on its own axis ?

A) Pope Gregory

B) Aryabhatta

C) Edwin hubble

D) Neil Armstrong

5) Who said that it is not enough to divide the years 1800 , 1900 , 2000 by 4 it should also be divided by 400 ?

(A) Edwin hubble

(B) Aryabhatta

(C) Neil Armstrong

(D) Pope Gregory

6) Which of the following statements is/are correct ?

1) During july the earth is far away from sun and in January it is very close to the sun.

2) The seasons are not same everywhere on the earth.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

7) When will the sunlight falls vertically on the earth axis ?

(A) March 21 and September 23

(B) March 11 and September 20

(C) March 1 and September 3

(D) March 12 and September 30

8) In a leap year February has

(A) 30 days

(B) 28 days

(C) 29 days

(D) 31 days

9) Which of the following statements is/are correct ?

1) Each planet rotates on its axis and also revolves around the sun.

2) Rotation of earth causes the day and night.

3) The seasons are not same everywhere on the earth.

4) During july the earth is far away from the sun and during January the earth is very close to the sun.

(A) 1 and 2

(B) 2 and 3

(C) 1 , 2 and 3

(D) All the above

10) The Prime Meridian divides the globe into Eastern and Western hemispheres at

(A) 0^o

(B) 180^o

(C) 360^o

(D) 90^o

11) Greenwhich meridian passes at

(A) 0^o

(B) 180^o

(C) 360^o

(D) 90^o

12) The longitude divides india at

(A) 82^o

(B) 84^o

(C) $84^o\ 30^{o"}$

(D) $82^o\ 30^{o"}$

13) Which line is used to calculate the timings in the world ?

(A) Latitude

(B) Longitude

(C) Latitude and Longitude

(D) None of these

14) Which of the following statements is/are correct ?

1) During july the earth is far away from sun and in January it is very close to the sun.

2) Each planet rotates on its axis and also revolves around the sun.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

15) The antimeridian is halfway around the world, at

(A) 100^o

(B) 180^o

(C) 0^o

(D) 90^o

16) The line designating the Equator which divides the earth from north to south is

(A) 0^o latitude

(B) 180^o latitude

(C) 360^o latitude

(D) 23^o latitude

17) Totally how many longitudes are there?

(A) 360

(B) 180

(C) 90

(D) 0

18) Which of the following statements is/are correct ?

1) The Tropic of Capricon is located at approximately 23.5 degrees north latitude and The Tropic of Cancer is located at approximately 23.5 degrees south latitude.

2) The Antartic Circle is located at approximately 66.5 degrees north latitude and The Arctic Circle is located at approximately 66.5 degrees south latitude.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

19) Which of the following statements is/are correct ?

1) Latitude is the North/South value of a point on Earth.

2) Longitude is the West/East value of a point on Earth.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

20) Which of the following statements is/are correct ?

1) Earth rotates once in about 24 hours with respect to the Sun.

2) During rotation it takes 4 minutes to cross 1^o longitude.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

21) Which of the following statements is/are correct ?

1) On March 21 and September 23 the duration of day and night is equal.

2) March 21 is called as spring equinox and September 23 is called as autumn equinox.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

22) Which of the following statements is/are correct?

1) All parts of the earth do not experience day and night at the same time.

2) The earth takes approximately 23hrs 56mins for one rotation on its axis.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these

23) Which country is known as land of rising?

(A) Russia

(B) Japan

(C) America

(D) Norway

24) The duration taken by earth to complete one revolution around sun is called as

(A) 1 day

(B) 1 year

(C) Leap year

(D) 4 year

25) Which of the following statements is/are correct ?

1) There are 4 seasons according to the world calendar.

2) There are 6 seasons according to the tamil calendar.

(A) 1 only

(B) 2 only

(C) 1 and 2

(D) None of these