

CLASS 6

CHAPTER 3 : MOTIONS OF THE EARTH

I. Multiple Choice Questions :

1. a, 2. a, 3. d, 4. e, 5. a

II. Fill in the blanks:

1. summers, 2. September 23, 3. summer, 4. Perihelion, 5. tilt

III. Mark the statements as True or False (F);

1. F, 2. T, 3. F, 4. F, 5. T

IV. Answer in brief:

1. The earth's path around the sun is called its orbit.
2. The rotation of the earth on its axis causes day and night.
3. The earth's distance from the sun varies throughout the year. The point closest to the sun on the earth's orbital path is called the Perihelion, while the point farthest away from the sun is called the Aphelion.
4. Equinox means equal night, since days and night at this time are of equal duration eg. twelve hours,
5. Rotation is the movement of earth on its axis, and Revolution is the movement of earth around the sun.

V. Answer the following questions :

1. On June 21, the Earth's North Pole is tilted directly towards the sun, so the mid-day sun is directly overhead at the Tropic of Cancer, This longest day and shortest night which occurs on 21st June in the Northern Hemisphere is called summer solstice.

2. The tilt in the earth's axis is responsible for creating difference of seasons in the hemispheres, Around the June Solstice, the Northern Hemisphere is tilted towards the sun, therefore experiencing summer. The Southern Hemisphere on the other hand, is tilted away from the sun and thus, experiences winter. The opposite occurs around the December Solstice, when the Southern Hemisphere is tilted towards the sun, while the Northern Hemisphere is tilted away from the sun.

3. September 23 is the autumnal equinox for the Northern Hemisphere. The sun rays fall equally on both the hemispheres and warm them in equal way. It is neither very hot nor very cold in both the hemispheres,

4. Rotation Movement of earth on its axis. The Earth takes 24 hours to complete one rotation about its own axis. It causes day and night. Revolution Movement of earth around the sun. The Earth takes 365.25 days to complete one revolution of the sun. It causes change in seasons

5. The circle that divides day from night on the globe is known as circle of illumination. Here, the portion of the earth that receives sunlight experiences day, while the portion that remains dark experiences night. During rotation, only one side of earth faces the sun at a given time. The fine line where the dark and the lighter sides meet forms a circle and hence the name, circle of illumination.

CHAPTER 4: MAPS

I. Multiple Choice Questions :

1. d, 2. d, 3. b, 4. a, 5. a

II. Fill in the blanks:

1. north, 2. 1 km, 3. lower elevations, 4. symbols, 5. title

III. Match the following :

1. iii, 2. v, 3. iv, 4. i, 5. ii

IV. Answer in brief:

1. A map is a representation or a drawing of the earth's surface or a part of it, drawn or printed on a flat surface, according to a scale.

2. We can find directions in the following ways :

(i) By facing the rising sun

(ii) With the help of magnetic compass

3. A Large Scale Map provides detailed information of a small area.

4. A map has three essential components, namely distance, direction and symbols.

5. Scale is a very important part of a map as it indicates the relationship between a certain distance on the map and the actual distance on the ground.

V. Answer the following questions :

1. Symbols are used to represent different features on a map. Symbols give more information in a limited space, make maps both easy to draw and easy to read, and help one find his way in an unknown area. Maps use a universal language that everyone can follow. The universal symbols used in maps are referred to as conventional symbols. According to an international agreement, symbols follow a common colour code. Each map has a "scale" that indicates the relationship between a certain distance on the map and the actual distance on the ground. For example, the distance between our school and our home is 10 km. If we show this 10 km. distance by 2 cm on a map, it means, 1 cm on the map will show 5 km. on the ground. The scale of our drawing will be 1cm= 5 km.

3. The following differences illustrate how maps are more useful than a globe :

A globe can be used to get a broad-level picture of the world, while a map provides more specific information about different places. A globe is made of hard material and cannot be folded. This makes it difficult to be carried around, unlike maps, which are drawn on paper and can be easily folded and carried around.

4. A thematic map is used to show a specific theme or topic related to an area. It could portray virtually any kind of information i.e. average rainfall distribution, infant mortality rates, population density, membership of political organizations, etc.

5. A sketch is a rapidly executed freehand drawing that is not usually intended as a finished work. A sketch may serve a number of purposes: it might record something that the artist sees or it might record or develop an idea for later use. On the other hand, the drawing of a small area on a large scale is called a plan. Sometimes we may want to know the length and breadth of a particular area or a room, which can't be shown on a map. For this purpose, we can refer drawings drawn to scale called a plan.

CHAPTER 5 : MAJOR DOMAINS OF THE EARTH

I. Multiple Choice Questions :

1. d, 2. c, 3. a, 4. a, 5. c

II. Fill in the blanks :

1. lithosphere,

2. Mariana trench,

3. Bering Strait,

4. White,

5. Nitrogen

III. Match the following :

1. b, 2. e, 3. d, 4. c, 5. a

IV. Answer in brief :

1. The major domains of the earth are lithosphere, hydrosphere and atmosphere.

2. The word lithosphere is derived from the Greek word (lithos meaning rock). The rigid part of the earth is called the lithosphere. Lithosphere comprises the rocks of the earth's crust and the thin layers of soil that contain nutrients which sustain organisms.

3. The different layers of atmosphere are:

The Troposphere

The Stratosphere

The Mesosphere

The Thermosphere

The Exosphere

4. The continents of Australia and Antarctica lie entirely in the Southern Hemisphere.
5. South America has the world's longest mountain range, the Andes.

V. Answer the following questions :

1. The Biosphere is the narrow zone of contact or combination of the lithosphere, the hydrosphere and the atmosphere that makes life possible. All the living organisms including humans are linked to each other and to the biosphere for survival. Thus biosphere is very important for life on earth and care should be taken to preserve it.
2. Antarctica is located completely in the Southern Hemisphere and the South Pole lies almost at the centre of this continent. It is permanently covered with thick ice sheets, and hence, there are no permanent human settlements here. Absence of vegetation and extreme climate make this land inhabitable.
3. North America is the third largest continent of the world. It is linked to South America by a very narrow strip of land called the Isthmus of Panama. The continent lies completely in the Northern and Western Hemisphere. Three oceans surrounding this continent are Pacific Ocean, Atlantic Ocean and Arctic Ocean.
4. The three domains of the earth work together and create and sustain the biosphere. A classic example of an interaction between domains is that a plant (part of the biosphere), takes carbon dioxide from the atmosphere and water (the hydrosphere) through its roots from underground (lithosphere) to perform photosynthesis, which provides the plant with food and releases oxygen into the atmosphere.
5. The Indian Ocean is the only ocean named after a country, that is, India. The shape of this ocean is almost triangular. In the north it is bounded by Asia, in the west by Africa and in the east by Australia.

CHAPTER 6: MAJOR LANDFORMS OF THE EARTH

I. Multiple Choice Questions :

1. a, 2. a, 3. b, 4. a, 5. a

II. Fill in the blanks:

1. volcanoes,
2. continental plateaus,
3. external processes,
4. intermontane plateaus,
5. mineral deposits

III. Match the following :

1. e, 2. b, 3. a, 4. c, 5. d

IV. Answer in brief:

1. Major landforms on earth are : Mountains, Plateaus and Plains.
2. Block Mountains or Fault Mountains are formed when enormous underground pressure forces a whole rock mass to break away from another.
3. A mountain is any natural elevation of the Earth's surface. It is considerably higher than the surrounding area. A plateau is an elevated flat land. It is a flat-topped tableland standing above the surrounding area.
4. Mountains help us in many ways. About 80 per cent of our planet's fresh water originates in the mountains. Water from the mountains is used for irrigation and also for power generation.
5. Most of the plains are formed by the silt brought down from the hills by rivers and their tributaries.

V. Answer the following questions :

1. A plateau or a tableland is created by geological forces and movement of the earth's plates. It is a raised ground or a highland with relatively flat terrain. Plateaus are formed either when mountains get worn down or when a large portion of flat earth is pushed up from the earth. On the basis of their geographical location and structure of rocks, the plateaus can be classified as :

(a) Intermontane Plateaus

(b) Continental Plateaus

(c) Lava Plateaus

2. Volcanic mountains are formed by volcanoes. Due to high temperature deep inside the earth, rocks turn into a molten magma. When this molten rock material is ejected to the earth's surface during volcanic eruption, it accumulates around the vent and may take the form of a cone. The height of the cone increases with each eruption and it takes the form of a mountain. As these mountains are formed by the accumulation of volcanic material, they are known as volcanic mountains or mountains of accumulation.

3. Plateaus, like mountains, are a great resource to man in a number of ways. Plateaus are rich in mineral deposits. Many mining belts in the world are located in the plateau areas. Many waterfalls are present in plateau areas. For example, the Hundru falls in the Chhotanagpur and jog falls in Karnataka. The lava plateaus are rich in black soil. Black soil is fertile and is good for cultivation. Plateau areas are great tourist attractions.

4. Fold mountains are the most common type of mountain. The world's largest mountain ranges are fold mountains. They are formed when the earth's crust gets uplifted and folded by compressional forces. There are two types of fold mountains: young fold mountains (10 to 25 million years of age, eg Rockies and Himalayas) and old fold mountains (over 200 million years of age, e.g. Urals and Appalachians of the USA)

5. Plains are flat surfaces at low levels, also known as lowlands. Most of the plains are formed by rivers and their tributaries. A lot of flat lands are available in plains. Also, the available land is generally fertile. Hence, plains are the most useful areas for human habitation as well as for cultivation. Transport network can also be easily constructed in plains. Thus, plains are very thickly populated regions of the world. Some of the important plains in the world include: Great Northern Plains of the United States and Indo-Gangetic Plains in India.