

Our Earth and its Special Features

Solution 1.a:

The planets which revolve around the Sun are Earth, Mercury, Venus, Mars, Jupiter, Saturn, Uranus and Neptune.

Solution 1.b:

It is also called the moons of the planet.

Solution 1.c:

The Earth and the other seven planets, their satellites, comets and asteroids are included in the Solar System.

Solution 1.d:

The outermost part of the Earth's surface is called the Earth's crust. It is made of soil and hard rock. It extends about 30-70 km under land surface and about 5-6 km below the oceans. It contains minerals of three metals, i.e. aluminium, magnesium and silicon. The Earth's crust forms only 2% of the total volume of the Earth.

Solution 1.e:

Iron and magnesium are found in the mantle in large quantities.

Solution 1.f:

The part of the Earth inside the mantle is called Earth's core. It is very hot and includes almost 16% of the Earth's volume. The core of the Earth is divided into two parts – the part nearer the mantle and the part at the centre of the Earth. The central part is made of iron and nickel and is like a solid ball. It is extremely hot. The part around it is in the liquid state with a temperature of more than 4000°C.

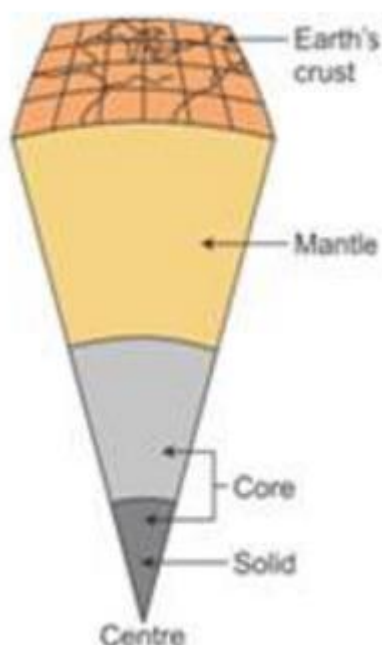
Solution 2:

1. The liquid in the Earth's core has a temperature of about **4000°C**.
2. **Oxygen, water and temperature** are factors necessary for the existence of living things.
3. The **harmful** rays of the Sun are absorbed in the atmosphere.

4. **71%** of the Earth's surface consists of water.
5. We get useful substances like **salt and iodine** from sea water.

Solution 3:

Internal structure of the Earth:



Solution 4:

A	B
(a) Nitrogen (b) Oxygen (c) Carbon dioxide	Production of nitrates Respiration and burning Plants make food

Solution 5.a:

The Earth is the only planet which supports life because the temperature suitable for living things, oxygen and water are found only on the Earth.

Solution 5.b:

Some harmful rays coming from the Sun get absorbed in the atmosphere. Thus, the atmosphere is an important filter which allows only as much amount of light and heat from the Sun to reach the Earth as is necessary for life. Therefore, the atmosphere is called the Earth's protective shell.

Solution 5.c:

In some regions of the Earth, the process of melting of ice and formation of new ice in its place goes on continuously. Thus, the quantity of ice on the Earth remains the same.

Solution 5.d:

Sea water contains a high amount of salts. When a river flows into the sea, the salts which they carry also enter the sea. Sea water evaporates, but the salts remain behind. Thus, sea water is saline or salty.

Solution 5.e:

Owing to the ever-increasing population and industries, the resources are consumed in large amounts and some of these resources are non-renewable. Thus, the Earth's resources are becoming scarce.

Solution 5.f:

The use of natural resources has been in demand for the past few years because of an ever-increasing population and industrial development. Natural resources may get exhausted because of their prolonged and excess use and there might be a shortage of these fuels in the coming years. Therefore, we must use natural resources with great thrift.