

SAMPLE CONTENT

PERFECT

GEOGRAPHY

STD. VIII

(Eng. Med.)



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Target Publications® Pvt. Ltd.

PERFECT Geography

STD. VIII (English Medium)

Salient Features

- ☞ Written as per the latest textbook.
- ☞ Important geographical terms helps to build powerful concepts.
- ☞ Short overview for a quick glimpse of the chapter.
- ☞ Complete chapter coverage of textual exercise.
- ☞ Variety of additional questions for in-depth practice.
- ☞ Map-based and Graph-based questions for better geographical understanding.
- ☞ In-text questions to dig deeper into the concepts.

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PREFACE

While designing the book, our main intention was to create a book that would act as a single point of reference for students. We wanted this book to provide students, the much needed answers for their textual questions as well as build up their knowledge quotient in the process.

PERFECT Geography: Std. VIII has been prepared as per the latest syllabus which is more child-centric and focuses on active learning along with making the process of education more enjoyable and interesting.

Every chapter in the book begins with Important Geographical Terms that helps to build concepts. A topic wise 'Let's Study' section gives the reader a concise summary of the chapter. It is followed by the **Summative Assessment Section** which is divided into four sections i.e. **Textbook Exercise, Let's Practise, Intext Questions** and **Oral Test**. **Textbook Exercise** covers all the questions given in textbook at the end of the chapter serially. **Let's Practise** section contains additional questions of diverse types to pave the way for a robust concept building. **Intext Questions** section provides answers to all the intext questions such as 'Can you tell?', 'Use your brain power!', 'Try this', etc. covered in the chapter. We have infused the book with a liberal sprinkling of real life examples, pictorial explanations. The chapter ends with 'Formative Assessment' which includes Activities / Projects.

With absolute trust in our work, we hope, our holistic efforts towards making this book an ideal knowledge hub for students pays off.

The journey to create a complete book is strewn with triumphs, failures and near misses. If you think we've nearly missed something or want to applaud us for our triumphs, we'd love to hear from you.

Please write to us at: mail@targetpublications.org

A book affects eternity; one can never tell where its influence stops.

Best of luck to all the aspirants!

Publisher

Edition: Second

Disclaimer

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KEY FEATURES

Important Geographical Terms : At the beginning of each topic important geographical terms that are included in the lesson are given for the student's better understanding.

Let's Study : Concise Summary is given under the title 'Let's Study'. It is presented in the form of points, tables, charts, etc.

Textbook Exercise : All textual questions with answers are provided in this section. The sequence of these questions is according to the textbook, so that students can get all textual questions and answer in one roof.

In-text question : Each and every in-text question is given with its solution as per the textbook.

Let's Practise : Additional questions for practise are given in this section. These questions will help the students to understand the chapter thoroughly and help in concept building.

Format of Answer : The answers are provided in a point-wise format which makes it easy to remember them.

Map-based question : Includes solved map-based questions.

Graph-based question : Solved graph-based questions are provided wherever necessary.

Example-Based Question : Solved example-based questions along with diagrams are given wherever necessary.

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*Note: Textual exercise questions are represented by * mark.*

Page no. **1** to **9** are purposely left blank.
To see complete chapter buy **Target Notes**

Important Geographical Terms

Terms	Explanation
Seismic waves	Seismic wave is wave generated by an impulse such as an earthquake or an explosion.
Mantle	Mantle lies below the crust. It begins at a depth of around 42 km from the earth's surface and extends upto a depth of 2870 km. Out of the total mass of the earth, 84% lies in the mantle. It is divided into two layers, viz. upper mantle and lower mantle.
Magma chamber	Magma chamber is an underground space usually deep below the earth's surface occupied by magma that may come out from it to or towards the surface.
Epicentre	The epicentre of an earthquake is the place on the earth's surface vertically above the point where it starts (focus), and is also the place where the effect of earthquake is felt strongly.
Endogenetic movements	The movements happening within the earth are endogenetic movements.
Solar winds	The flow of charged particles comes out of the higher part of the sun's atmosphere which mainly consists of electrical atoms, very fine particles and alpha particles. Interplanetary magnetic field is a part of the solar winds. There is a change in their density, temperature and velocity with time. These particles are free from the gravitational force of the sun because of extreme energy in them. At a little distance away from the sun (expressed in multiples of radius), the velocity of the solar winds is more than the velocity of sound waves which can be somewhere between 250 to 750 km/ sec.

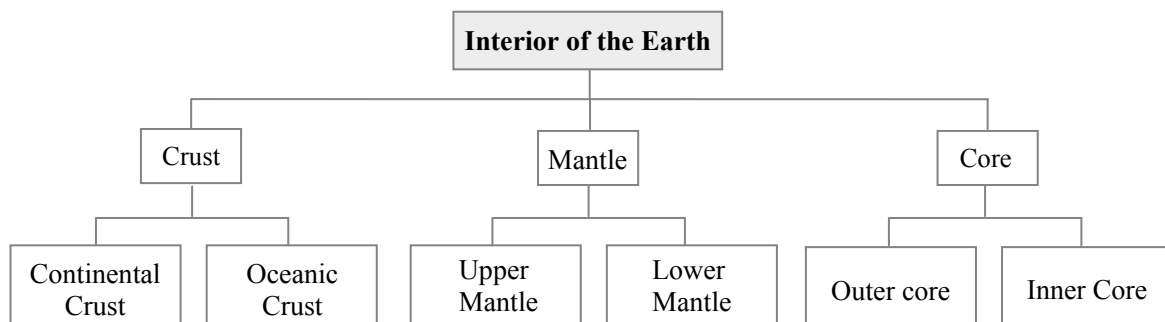
Let's Study

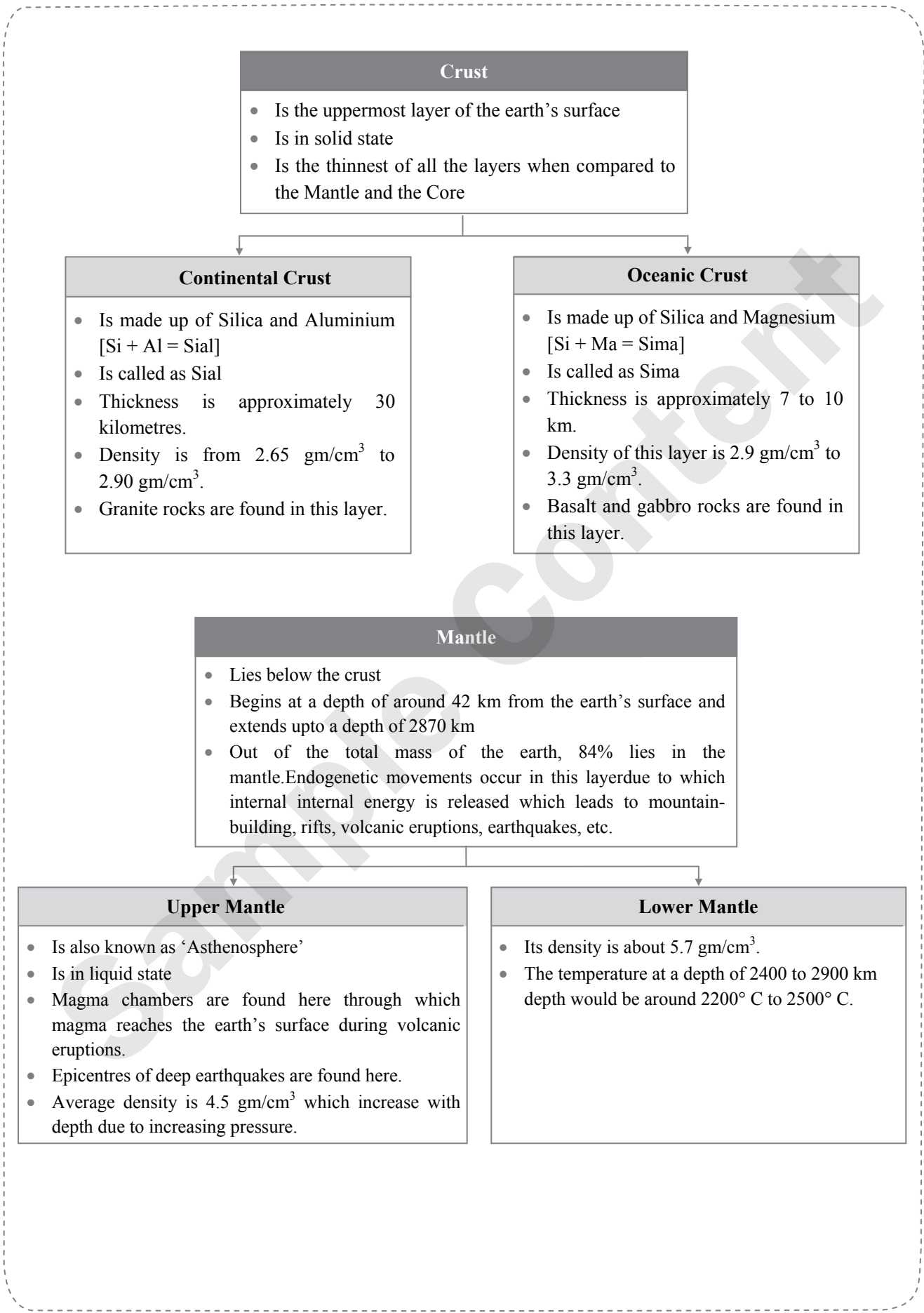
Formation of the Earth:

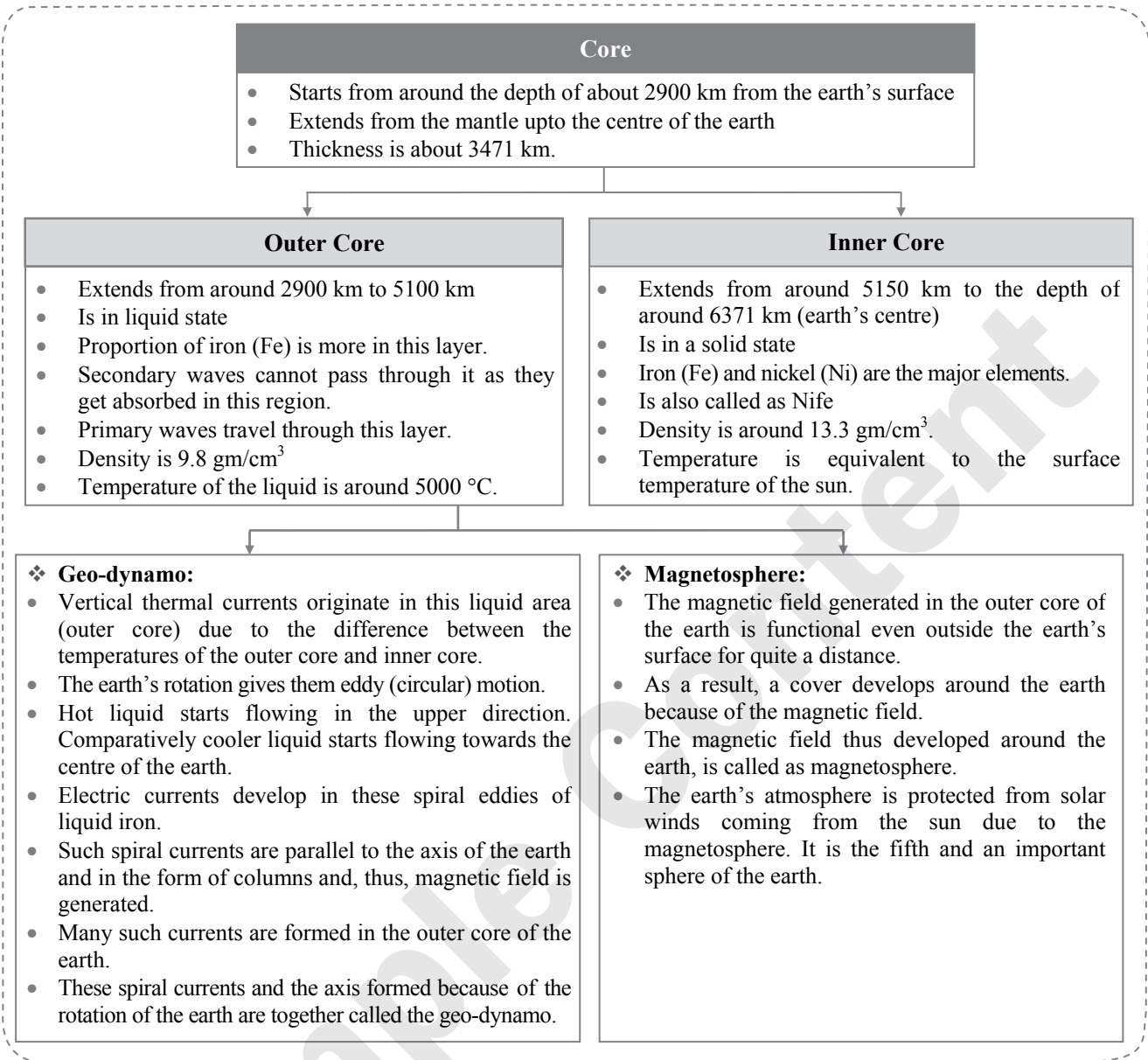
- Earth was formed out of solar system.
- Initially, it was a gaseous hot balloon.
- Due to the process of radiation, it cooled down.
- Cooling took place from the outer surface towards the earth's centre.
- The crust, i.e. the outer layer of the earth became cooler and solid while towards the core, the interior of the earth is in semi-liquid form.

Interior of the Earth:

Is the part of the earth from its surface to its centre







Summative Assessment

Textbook Exercise

Tick ✓ the correct options in the box.

- *1. There are two layers in the crust.
- | | |
|-----------------------------------|-------------------------------------|
| (A) Inner and outer crust | <input type="checkbox"/> |
| (B) Continental and oceanic crust | <input checked="" type="checkbox"/> |
| (C) Surface and oceanic crust | <input type="checkbox"/> |
| (D) Mantle and Core | <input type="checkbox"/> |
- *2. Which element is found in both mantle and crust?
- | | |
|---------------|-------------------------------------|
| (A) Silica | <input checked="" type="checkbox"/> |
| (B) Magnesium | <input type="checkbox"/> |
| (C) Aluminium | <input type="checkbox"/> |
| (D) Iron | <input type="checkbox"/> |

- *3. Which of these minerals are found in the core of the earth?
- | | |
|----------------------|-------------------------------------|
| (A) Iron-magnesium | <input type="checkbox"/> |
| (B) Magnesium-nickel | <input type="checkbox"/> |
| (C) Aluminium- Iron | <input type="checkbox"/> |
| (D) Iron-nickel | <input checked="" type="checkbox"/> |
- *4. The inner core is in which state?
- | | |
|----------------------|-------------------------------------|
| (A) Gaseous | <input type="checkbox"/> |
| (B) Solid state | <input checked="" type="checkbox"/> |
| (C) Semi-solid state | <input type="checkbox"/> |
| (D) Liquid state | <input type="checkbox"/> |
- *5. The outer core is made up of
- | | |
|--------------|-------------------------------------|
| (A) Iron | <input checked="" type="checkbox"/> |
| (B) Gold | <input type="checkbox"/> |
| (C) Hydrogen | <input type="checkbox"/> |
| (D) Oxygen | <input type="checkbox"/> |



- *6. The layer of the earth on which we live.
- (A) Mantle
- (B) Core
- (C) Crust
- (D) Continental crust
- *7. Which seismic waves can travel through liquid medium?
- (A) Primary waves
- (B) Secondary waves
- (C) Surface waves
- (D) Oceanic waves

Tell whether right or wrong. Correct the wrong statement.

- *1. The density of various materials is not the same in the interior of the earth.
- *2. The core of the earth's interior is made up of hard rock.
- *3. Secondary waves cannot pass through outer core.
- *4. Continental crust is made up of silica and magnesium.

Answers:

1. Right
2. Wrong
The core of the earth's interior is made up of Iron and Nickel.
3. Right
4. Wrong
Continental crust is made up of Silica (Si) and Aluminium (Al).
OR
Oceanic crust is made up of Silica (Si) and Magnesium (Ma).

Answer the following.

- *1. **What are the two parts of the crust? What is the basis of classification?**

Ans:

- i. Continental crust and Oceanic crust are the two parts of the crust.
- ii. Continental crust mainly comprises of Silica (Si) and Aluminium (Al) in higher proportion. It is also called as Sial.
- iii. Oceanic crust is composed of Silica (Si) and Magnesium (Ma). It is also called as Sima.
- iv. The crust is classified mainly on the basis of its thickness as well as the composition of minerals.

- *2. **Why is the upper mantle called the asthenosphere?**

Ans:

- i. Mantle lies below the crust.
- ii. The upper portion of the mantle is called as 'asthenosphere'. The word 'astheno' means weak.
- iii. It is in liquid state and it is from this weaker zone that the molten rock materials i.e., 'magma' find their way to the surface during volcanic eruptions.
- iv. Epicenters of deep seated earthquakes are also found here.

Therefore, the upper mantle is called the 'asthenosphere'.

- *3. **Magnetosphere of the earth is a result of rotation. Explain.**

Ans:

- i. The outer core of the earth's interior is in a liquid state and the proportion of iron is more in this layer. Also, the temperature of the outer core is around 5000° C while the temperature of the inner core is similar to the surface temperature of the sun.
- ii. Vertical thermal currents originate in this liquid area (outer core) due to the difference between the temperatures of the outer core and inner core.
- iii. The earth's rotation gives them eddy (circular) motion. Hot liquid starts flowing in the upper direction. Comparatively cooler liquid starts flowing towards the centre of the earth.
- iv. Electric currents develop in these spiral eddies of liquid iron. Such spiral currents are parallel to the axis of the earth and are in the form of columns and, thus, magnetic field is generated.
- v. Many such currents are formed in the outer core of the earth. These spiral currents and the axis formed because of the rotation of the earth are together called the geo-dynamo.
- vi. The magnetic field generated in the outer core of the earth is functional even outside the earth's surface for quite a distance. As a result, a cover develops around the earth because of the magnetic field. The magnetic field thus developed around the earth, is called as magnetosphere.
- vii. The earth's atmosphere is protected from solar winds coming from the sun due to the magnetosphere. It is the fifth and an important sphere of the earth.

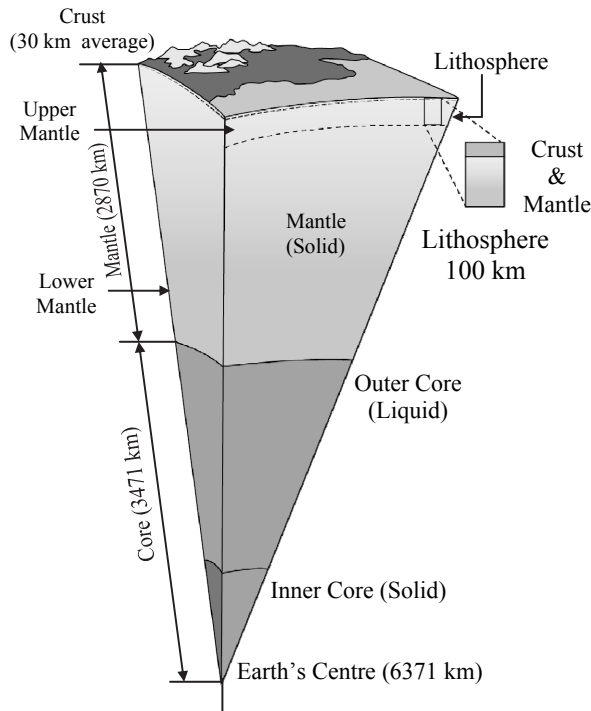
Thus, it can be said that Magnetosphere of the earth is a result of rotation.



Draw neat diagrams, label them and explain.

***1. The interior of the earth**

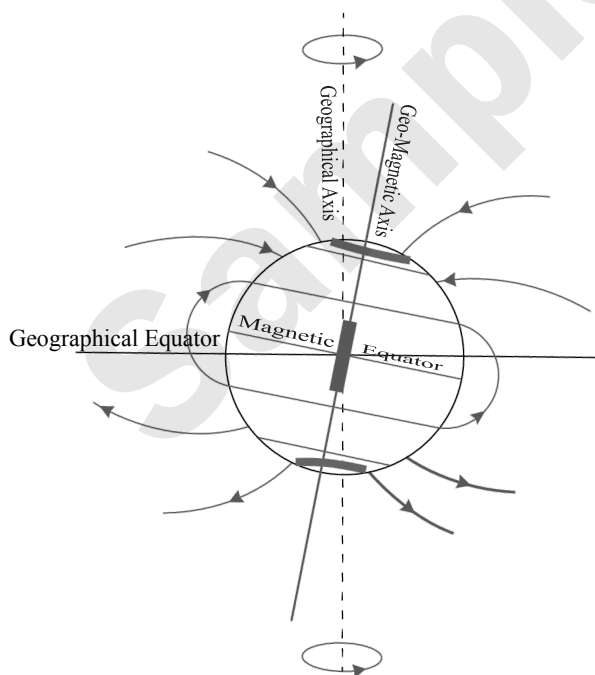
Ans:



(For explanation refer the answer of Give geographical reasons - Q.1.)

***2. Magnetic pole and equator**

Ans:



(For explanation refer the answer of Answer the following - Q.3.)

Give geographical reasons.

***1. There is variety in the interior of the earth.**

Ans:

- i. With respect to two elements, temperature and density, the earth's interior can be divided into crust, mantle and core.
- ii. The crust, the uppermost layer of the earth's surface, is in solid state. It is divided into two sub layers: continental crust (mainly composed of silica and aluminium) and oceanic crust (made up of silica and magnesium). Rocks found in each layer are different.
- iii. Below the crust lies the mantle. It is also divided into two layers: upper and lower mantle. The upper layer is more in liquid state and magma chambers are found here. As we keep going deeper into the earth's surface, the density of the mantle increases.
- iv. From the mantle up to the centre of the earth is the core. It is also divided into outer core and inner core. Scientists believe that outer core could be in liquid or semi-liquid form, because secondary waves cannot pass through it. While passing through this layer, the speed of primary waves reduces. Also, the temperature of this layer is around 5000° C. On the other hand, the inner core is in solid state and has elements like iron and nickel. The temperature of inner core is almost equivalent to the surface temperature of the sun.

Hence, we can say that there is variety in the interior of the earth.

***2. There is correlation between the density of metals and their location in the interior of the earth.**

Ans:

- i. The Inner Core is in a solid state and consists of major elements like Iron (Fe) and Nickel (Ni).
- ii. These metals are heavy. Hence, the density of the core is around 13.3 gm/cm³ which is more compared to the density of the mantle and the crust.
- iii. Moreover, metals like Silica, Aluminium and Magnesium have lower density than Nickel & Iron. Hence, lighter metals are found close to the surface of the earth while heavier metals are found deep in the interior of the earth.

Thus, there is a correlation between the density of metals and their location in the interior of the earth.

***3. Mantle is the centre of earthquake and volcanic eruptions.**

Ans:

- i. Mantle lies below the crust and it is divided into two layers, viz. upper mantle and lower mantle. The upper layer of the mantle is in a liquid state and is called as 'Asthenosphere'. 'Asthenosphere' means 'weak'.



- ii. It is in this layer that magma chambers are found. Through these chambers, magma comes out on the earth's surface during volcanic eruptions.
- iii. Moreover, during endogenetic movements which occur in this layer, internal energy is released. This energy is responsible for earthquake and volcanic eruptions.
- iv. Epicenters of deep seated earthquakes are found in this layer.

Therefore, mantle is the centre of earthquake and volcanic eruptions.

***4. The thickness of the crust below the continents is more as compared to oceans.**

Ans:

- i. Below the continents, the thickness of the crust is from 16 to 45 km.
- ii. It is 40 km under the mountain ranges while it is less than 10 km under the oceans.
- iii. The oceanic crust is approximately 7 to 10 km thick while the thickness of the continental crust is approximately 30 kilometres.
- iv. Moreover, the Continental crust comprises of Silica (Si) and Aluminium (Al) and its density is 2.65 gm/cm^3 to 2.90 gm/cm^3 . While the Oceanic Crust comprises of Silica (Si) and Magnesium (MA) and its density is 2.9 gm/cm^3 to 3.3 gm/cm^3 .

Thus, the thickness of the crust below the continents is less as compared to oceans.

***5. Earth is protected because of the magnetosphere.**

Ans:

- i. Magnetosphere is a cover which has been developed around the earth because of the magnetic field generated in the outer core.
- ii. The solar winds, containing charged particles, which come out of the higher part of the sun's atmosphere are free from the gravitational force of the sun because of the extreme energy in them. Due to this, the solar winds blow with great velocity. Their velocity is more than the velocity of the sound waves. It is approximately between 250 km/sec to 750 km/sec. and can erode the earth's atmosphere.
- iii. However, the earth's atmosphere is protected from the solar winds because of the magnetosphere.

In-text Questions

Let's Recall.

1. In the previous classes, you have been introduced to rock types, volcanoes and earthquakes. Answer the following questions on the basis of that.

i. When earthquake occurs, what happens exactly?

Ans: When earthquake occurs following things take place –

- a. Cracks or fractures develop on the ground.
- b. Landslides take place which leads to sliding of rocks.
- c. Sometimes the groundwater changes its course. For e.g. Wells may get water or may dry up.
- d. Some areas get uplifted while some subside.
- e. Tsunamis are generated in oceans. In the coastal areas these waves can cause great loss of life and property.
- f. In snow-covered areas, avalanches may occur.
- g. Buildings collapse and there is loss of life & property.
- h. Transportation routes are badly affected.
- i. Communication system is disrupted.

ii. How are igneous rocks formed?

Ans: When the molten material, known as magma within the crust and lava on the surface, cools down, it solidifies giving rise to igneous rocks.

iii. What is a volcano?

Ans: Due to the very high temperature in the interior of the earth, the material in this part is in the molten state which sometimes gets released through the faults in the crust. This is called as a volcano.

iv. Which materials come out during a volcanic eruption?

Ans: Lava, gases, steam, dust, ashes, etc. come out during volcanic eruption.

v. In which state of matter are these materials?

Ans: These materials are in solid, semi liquid and gaseous state.

vi. Are these materials cool or hot? Why?

Ans: These materials are very hot because the temperature of the earth's interior is very high.

Try this.

1. When the milk was kept for boiling, in which state was it?

Ans: When the milk was kept for boiling, it was in liquid state.

2. When the milk was boiling, what did you observe?

Ans: When the milk was boiling, I observed that after it came to boil, steam started coming out from it. After some time, a thick layer of cream developed over the milk.

3. What had accumulated over the lid of the vessel?

Ans: Water droplets had accumulated over the lid of the vessel.



4. Tell whether the matter accumulated on the milk is liquid or solid?

Ans: The matter accumulated on the milk is in solid state.

5. Was it cooler or hotter than the milk below?

Ans: The temperature of the cream was cooler than the milk.

6. On which other substances can similar experiments be carried out?

Ans: Similar experiments can be carried out while preparing *dal*. After the *dal* is fully prepared, when left for some time, a thin layer develops on it. This layer is comparatively less hot than the *dal* which is in liquid state.

Think about it.

1. Can we dig deep from one side of the earth and come out from the other side? Write your imaginations in your notebooks and discuss in class.

[Note: Students may attempt the above activity on their own.]

Try this.

- Take clay balls of 3 colors- red, yellow and blue. (As available in the market)
- Make the red ball bigger.
- Roll out the yellow colour ball. You will get a flat *roti*-like structure. Place the red colour ball inside the yellow one like you fill *puran* in a *puranpoli*. Give it the shape of a sphere.
- Now roll out the blue ball and fill the yellow one in it as done earlier. Make a sphere out of this too.
- Show the continents in yellow on this sphere like a globe. Now your globe made from clay is ready.
- To see the interior of the earth, cut the sphere exactly in half. You can see various layers of colors inside like the layers of the earth's interior. Name these layers.

[Note: Students may attempt the above activity on their own.]

Use your brain power.

1. As you go in the interior of the earth, guess what changes will you notice in your weight? Try to find out the reason behind it.

Ans: As I go in the interior of the earth, I will notice that the weight decreases. This is because the gravitational force increases at certain depth from the surface and then reduces according to the depth. At the centre, it is zero.

Always remember.

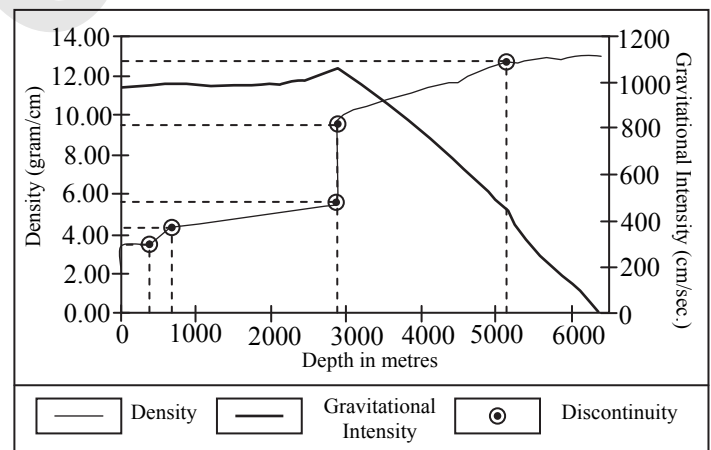
1. Observe the velocity curves of the given seismic waves in figures A and B.

Ans:

- The curve drawn with the dots in figure 'A' shows the average velocity of the seismic waves.
- The velocity of the secondary waves is between 4 to 5 km/sec at the depth of approximately 400 kms. At approximately 800 kms, the velocity of the waves is 6 km/sec. Thus, the velocity of the secondary waves goes on increasing but they seem to have ended around the depth of 2900 km.
- The velocity of the primary waves goes on increasing continuously. In the crust, its velocity is around 8km/sec and when it reaches the upper part of the mantle, its velocity is around 11 km/sec. It continues increasing in the lower mantle. At 2900 km, the velocity of the primary waves is around 12 km/sec and when it enters the core; its velocity reduces to 8 km/sec.

2. Observe these figures minutely, find various discontinuities in the density curve and show them on the figure.

Ans:



Think about it.

1. Imagine the earth's interior and write 10-12 sentences on it.

Ans: **Earth's interior**

The Earth is made up of several concentric layers. The outer layer is the crust. Crust is divided into continental crust and oceanic crust. Below the crust is the mantle. It is divided into two parts the upper mantle and lower mantle. As the pressure increases towards the interior of the earth, the density also increases. Below the mantle is the core. It consists of heavy metals



having high density. It is the innermost part of the earth and is divided into outer core and inner core. The temperature in the inner core is equal to the surface temperature of the Sun.

[Note: Students may write their own answer as it is based on their imagination.]

Find out.

1. What is World Earth Day? Why is it celebrated?

Ans:

- i. Gaylord Nelson, a U.S. senator, founded Earth Day. He asked Denis Hayes, a college student, to organize the first Earth Day events. About 20 million Americans celebrated the first Earth Day in 1970. The day made more Americans aware of the damage that people had done to the environment. Later, in 1990, Hayes organised the first International Earth Day. Since then, 22nd April is celebrated as World Earth Day.
- ii. It is celebrated to make people aware about a large number of issues which require attention, such as pollution of the ocean, debris left over on land, climate change, conservation of the Earth's ecosystems, energy conservation, soil corruption, corrosion, overpopulation, nuclear issues, the depletion of the ozone layer, the depletion of the Earth's natural resources, the introduction of wastes & toxicants into the wilderness & the seas, nanotechnology, and the deforestation of rain forests.

[Source: <https://www.britannica.com/topic/Earth-Day>
<https://www.conserve-energy-future.com/what-is-earth-day-and-earth-day-activities.php>]

Let's Practice!

Choose the correct alternative.

1. Granite rocks are mostly found in _____.
(A) Sima (B) Core
(C) Mantle (D) Sial
2. Magma chambers are found in _____.
(A) lower mantle (B) upper mantle
(C) core (D) crust

Tell whether right or wrong. Correct the wrong statement.

1. The outermost layer of the Earth is called core.
2. The Mantle lies below the crust.
3. The thickness of the core is about 3471 km.

Answers:

1. Wrong
The outermost layer of the Earth is called crust.
2. Right
3. Right

Match the following.

1.

	Column 'A'		Column 'B'
i.	Crust	a.	Nife
ii.	Continental crust	b.	Sima
iii.	Oceanic crust	c.	geo-dynamo
iv.	Inner core	d.	Sial
		e.	thinnest layer

Ans: (i – e), (ii – d), (iii – b), (iv – a)

Answer in one sentence.

1. Which elements are considered while dividing the interior of the earth into different layers?

Ans: While going from the earth's surface towards the core, major changes occur in temperature, density, gravitational force and pressure; these elements are considered while dividing the interior of the earth into different layers.

2. What is a crust?

Ans: The uppermost layer of the earth's surface which is solid state is called as crust.

3. Which is the thinnest of all the layers of the interior of the earth?

Ans: When compared with mantle and the core, the crust is the thinnest of all the layers.

4. From where does mantle begin?

Ans: Mantle begins at a depth of around 42 km from the earth's surface.

5. In which layer of the earth are epicenters of deep seated earthquakes usually found?

Ans: Epicenters of deep seated earthquakes are usually found in the asthenosphere which lies in the upper layer of the mantle.

6. What happens due to endogenetic movements?

Ans: Mountain-building, rift formation, volcanic eruptions, earthquakes etc., are caused due to the internal energy released because of endogenetic movements.

7. What is a Core?

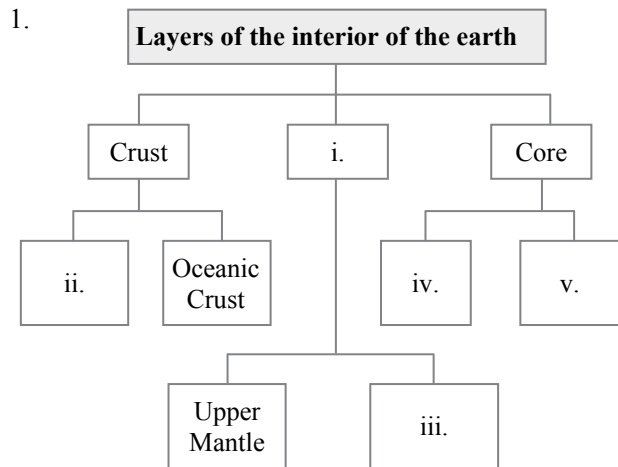
Ans: The part of the earth's interior which extends from the mantle upto the centre of the earth is known as the Core.

8. From where does the core starts?

Ans: The core starts from around the depth of about 2900 km from the earth's surface.



Complete the flowchart.



Answers:

- i. Mantle
- ii. Continental Crust
- iii. Lower Mantle
- iv. Outer Core
- v. Inner Core

Answer in brief.

1. How was the earth formed?

Ans:

- i. According to the scientists, earth was formed out of the solar system itself.
- ii. Initially, it was in a gaseous state.
- iii. Later, due to earth's rotation, it cooled down. However, the process of cooling took place from the outer surface towards the earth's centre.
- iv. Hence, the crust, i.e. the outer layer of the earth became cooler and solid while towards the core, the interior of the earth is in semi-liquid form. Moreover, as one moves from the surface towards the core, heat increases.

2. Through which methods did the scientists estimate the interior of the earth?

Ans: As it was not possible to observe the interior of the earth directly, scientists used various methods to estimate it –

- i. They tried to understand the temperature, density, gravitational force and pressure in order to study the interior of the earth.
- ii. They also studied the materials which came out of the volcanic eruptions.
- iii. Moreover, during earthquakes, seismic waves are generated. These waves travel through the interior of the earth. Geologists study the direction and velocity of these waves to estimate the interior of the earth.
- iv. In addition, efforts have also been made to dig deep bore holes in the interior to know more about it.

3. State two evidences which prove that the earth's interior is hot.

Ans:

- i. When one goes deep into a mine, an increase in temperature can be felt.
- ii. Similarly, the magma coming out of volcanoes from the earth's interior is hot.

These two evidences prove that the earth's interior is hot.

4. What change in temperature can be seen as one move from the surface of the earth towards the core?

Ans:

- i. As one moves from the surface of the earth towards the core, the temperature increases.
- ii. After that, the rate of increase in temperature reduces and again increases in the core.
- iii. The temperature in the centre of the earth is around 5500 °C to 6000 °C.

5. Write about the temperature and the density of the mantle.

Ans:

- i. Mantle extends upto the depth of 2870 km.
- ii. It is estimated that the temperature at the depth of 2400 km to 2900 km would be around 2200 °C to 2500 °C.
- iii. The average density of this layer is 4.5 gm/cm³. However, due to an increase in pressure, the density increases with an increase in depth.
- iv. The density of the lower mantle is about 5.7 gm/cm³.

6. On what basis have the scientists inferred that the outer core is in a semi-liquid state or liquid state?

Ans:

- i. The layer below the mantle is the core of the earth.
- ii. This layer is divided into two sub-layers: inner core and outer core.
- iii. The secondary seismic waves disappear at the boundary between the mantle and the outer core.
- iv. These waves cannot pass through the core.

On this basis, the scientists have inferred that the outer core is in a semi-liquid state or liquid state.

Differentiate between.

1. Continental Crust and Oceanic Crust

Ans:

	Continental Crust	Oceanic Crust
i.	It is mainly composed of Silica (Si) and	It is mainly composed of Silica (Si) and



	Aluminium (Al).	Magnesium (Ma).
ii.	This layer is called as Sial.	This layer is called as Sima.
iii.	The thickness of this layer is approximately 30 kilometres.	The thickness of this layer is approximately between 7 and 10 kilometres.
iv.	The density of this crust is from 2.65 gm/cm ³ to 2.90gm/cm ³ .	The density of this crust is from 2.9 gm/cm ³ to 3.3gm/cm ³ .
v.	Granite rocks are mainly found in this layer.	Basalt rocks and gabbro rocks are mainly found in this layer.

2. Outer Core and Inner Core

Ans:

	Outer Core	Inner Core
i.	Outer Core extends around 2900km from the earth's surface to	Inner Core extends from around 5150km to the depth of

	5100 km.	around 6371 km.
ii.	It is in liquid state.	It is in solid state.
iii.	The density of the outer core is 9.8 gm/cm ³ .	The density of the inner core is 13.3 gm/cm ³ .
iv.	The temperature of the liquid outer core is around 5000° C.	The temperature of the inner core is almost similar to the surface temperature of the sun.

Oral Work

1. What is the oceanic crust made of?

Ans: The oceanic crust is made up of Silica (Si) and Magnesium (Ma).

2. Which layer lies below the crust?

Ans: The Mantle lies below the crust.

3. Which waves cannot pass through the core?

Ans: Secondary waves cannot pass through the core.

Formative Assessment

Activity / Project

*1. Prepare a model of the earth's interior.

[Note: Students may attempt the above activity on their own.]



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