Grade VII

Lesson 2. Inside our Earth

Geography

I Multiple choice questions

1. The rock which is made up of molten magma is : [NCERT]

a) Igneous b) Sedimentary c) Metamorphic d) None of these

2. The innermost layer of the earth is : [NCERT]

a) Crust b) Core c) Mantle d) None of these

3. Gold, Petroleum and coal are examples of : [NCERT]

a) Rocks b) Minerals c) Fossils d) None of these

4. The thinnest layer of the earth is : [NCERT]

a) Crust b) Mantle c) Core d) None of these

5. The earth's crust on continental mass is .

a) 32 km b) 33 km c) 34 km d) 35 km

6. What is the radius of the earth?

a) 6,360 km b) 6,366 km c) 6,370 km d) 6,371 km

7. The Taj Mahal is made of

a) Red sandstone b) White marble c) Stapu d) None of these

1. a	2. b	3. b	4. a	5. d	6. d	7. b

II Multiple choice questions

i. Granite is an example of

a) Extrusive igneous rocks b) Intrusive igneous rocks

c) Sedimentary rocks d) Igneous rocks

ii. Sandstone is made from grains of

a) Limestone b) Silicon c) Rock d) Sand

iii. The deepest mine in the world is in

a) South Africa b) India c) Brazil d) Japan

iv. Just beneath the crust lies

a) Core b) Mantle c) Silica d) None of these

v. The Deccan plateau is made up of

a) Granite b) Clay c) Basalt d) Both (a) and (c)

(i) b	ii) d	iii) a	iv) b	v) c

III Multiple choice questions

1. Where is the deepest mine in the world located?

a) South America b) South Africa c) South India d) South Australia

2. The depth of the deepest mine in South Africa is.

a) One km b) two km c) three km d) four km

3. The upper most layer of the earth's surface is called.

a) The crust b) The brust c) The roads d) The forest

4. What is the radius of the earth?

a) 3671 km b) 7163 km c) 6371 km d) 1736 km

5. Any natural mass of mineral matter that makes up the earth's crust is called a

a) Rock b) Road c) Sediment d) None of these

6. The sediments are transported and deposited by

a) Wind b) Water c) Wind and water d) None of these

7. The process of transformation of the rock from one form to another is known as :

a) Road cycle b) Food cycle c) Rock cycle d) All of these

8. Which rock is the molten magma made up of ?

a) Igneous b) Metamorphic c) Sedimentary d) None of these

9. What is the Latin term of Igneous?

a) Ignis b) Sedimentum c) Metamorphose d) None of these

10. Rocks which contain fossils are called

a) Metamorphic rocks b) Igneous rocks

c) Core d) Sedimentary rocks

1. b	2. d	3. a	4. c	5. a	6. c	7. c	8. a	9. a	10. d

IV Multiple choice questions

1. Deepest mine in the world is located at :

a) South America b) South Africa c) South Australia d) South India.

2. Which rocks are known as primary rocks :

a) Igneous rocks b) Sedimentary rocks

c) Metamorphic rocks d) None of these

3. Sandstone is made from grains of :

a) Limestone b) Silicon c) Rocks d) Sand

4. Radius of the earth is :

a) 2,500 km b) 367 km c) 7,163 km d) 6,371 km

5. The Deccan plateau is made up of :

a) Granite b) Clay c) Basalt d) Both (a) and (c)

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

I Fill in the Blanks

1. Sial is composed of _____ and _____

2. Beneath the crust is the _____

3. The crust forms only _____ of the volume of the earth.

4. _____ consists of the mantle and _____ makes the core on the earth.

5. Metamorphic is derived from the _____ word metamorphose.

6. The red fort is made of _____

1. Silica and alumina	2. Mantle	3. 0.5%	4. 16%	5. Greek	6. Red sandstone

II Fill in the Blanks

i. The central core of the earth has very high temperature and _____.

ii. Our earth is constantly undergoing changes _____.

iii. The earth is made up of several _____ Layers with one inside another.

iv. The innermost layer is made up of _____ and _____ and is called nife.

v. Igneous and sedimentary rocks can change into _____ rocks under great _____ and pressure.

i) Pressure	ii) Inside; outside	iii) Concentric	iv) Nickel; Iron	v) Metamorphic ; heat

III Fill in the Blanks

1. Lava is the molten magma from _____ of the earth' s surface.

2. Like a _____, the earth is made up of _____ layers.

3. Crust is about _____ km on the continental mass and _____ km on the ocean floor.

4. Mantle forms about _____ of the earth's volume.

5. Core has a radius of about _____ km and has very high temperature and _____

6. Limestone under excessive heat and pressure changes into _____

1. Interior	2. Onion, Concentric	3. 35 and 5	4. 16%	5. 3500, pressure	6. marble

IV Fill in the Blanks

1. Like an _____, the earth is made up of _____ layers

2.The uppermost layer of the earth's surface is called the _____

3.The central core of earth has very high temperature and _____

4. The deepest mine in the world is in _____

5. Mantle extends up to the depth of _____ km below the _____

6.Any natural mass of mineral matter that makes up the earth's crust is called a _____

7. Our earth is constantly undergoing changes _____ and _____

8. _____ is the thinnest layer of all the layers.

9. _____ and _____ rocks changes into _____ rocks due to excessive heat and pressure.

10. Fossils are remains of dead _____ and _____

1. Onion, several concentric	2. Crust	3. Pressure	4. South Africa	5. 2900, crust
6. Rock	7. Inside, Outside	8. Crust	9. Igneous, Sedimentary, metamorphic	10. Plants, Animals

I Match the following

Column A	Column B
1. Core	a) Changes into slate
2. Minerals	b) Used for roads and building
3. Rocks	c) Made of Silicon and alumina
4.Clay	d) Have definite chemical composition
5. Sial	e) Innermost layer
6. Pitthoo	f) Granite
7. Grinding	g) Seven stones
8. Sandstone	h) Metamorphic rock
9. State	i) Sedimentary rock

1. e	2. d	3. b	4. a	5. c	6. g	7. f	8. i	9. h

II Match the following

Column A	Column B
1. Red fort of India	a) Primary rocks
2. Taj Mahal of India	b) Red sandstone
3. Remains of dead plants and animals	c) Sediments
4. Igneous rocks	d) White marble
5. Small fragments of rocks	e) Fossils

1) b	2) d	3) e	4) a	5) c

III Match the following

A	Column B
1. Land	a. Lithosphere
2. Animals, Plants	b. Atmosphere
3. Mountain, plateau and plains	c. Abiotic
4. Gases, water vapour, dust	d) Biotic

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

I True or False

1. Lava is fiery red molten magma coming out from the interior of the earth.
2. Deccan plateau is made of basalt rocks.
3. Gitti is called five stones
4. Engineers have dug a hole about 6 km deep to find oil

1. True	2. True	3. True	4. True

II True or False

1. It is not possible to reach to the centre of the earth.
2. Rocks can be of definite shape and size
3. The central core of the earth has low temperature and pressure
4. The radius of the earth is 6371 km
5. When the molten magma cools, it becomes liquid

i) True	ii) False	iii) False	iv) True	v) False

III True or False

1. Landforms are found only over continents.
2. Trade in which goods are exchanged without the use of money is called barter system.
3. Gravitational force of the earth hols the atmosphere around it.
4. No life can exist in biosphere.
5. Abiotic environment consists of living organism

1. False	2. True	3. True	4. False	5. False

Very Short Answer Questions

1. What is the crust?

i) The uppermost layer over the earth's surface is called the crust.

ii) It is the thinnest of all the layers.

iii) It is about 35 km on the continental masses and only 5 km on the ocean floors.

2. What are the main constituents of the continental mass?

The main mineral constituents of the continental mass are silica and alumina. It is thus called sial (si-silica and al-alumina).

3. What are the main constituents of the oceanic crust?

The oceanic crust mainly consists of silica and magnesium. It is therefore called sima. (si- silica and ma –magnesium)

4. What is mantle?

Just below the crust is the mantle which extends up to a depth of 2,900 km below the crust.

5. What is core?

The innermost layer of the earth is core with a radius of 3,500 km. It is mainly made of nickel and iron and is called nife. (ni-nickel and fe – ferrous, i.e. iron) The central core has very high temperature and pressure.

6. What are rocks ? **[NCERT]**

Any natural mass of mineral matter that makes up the earth's crust is called a rock igneous rocks. They are also called primary rocks.

7. Name the three types of rocks. [NCERT]

The three types of rocks are

i) igneous rocks

ii) sedimentary rocks

iii) metamorphic rocks

8. What are igneous rocks?

When the molten magma cools down, it becomes solid. Rocks formed over here are called igneous rocks. They are also called primary rocks.

9. What are sediments?

Rocks roll down, crack and hit each other and are broken into small fragments. These smaller particles are called sediments.

10. What are metamorphic rocks? Give example.

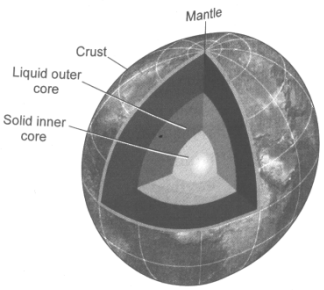
Igneous and sedimentary rocks can change into metamorphic rocks under great heat and pressure. For example, clay changes into slate and limestone into marble.

11. What are minerals ?

The naturally occurring substances which have certain physical properties and definite chemical composition are called minerals .e.g., uranium, gold coal, natural gas.

Short Answer Questions

1. Draw a structure of the interior of the earth.



2. Into how many types are igneous rocks divided?

Igneious rocks are of two types :

i) Extrusive igneous rocks

ii) Intrusive igneous rocks.

3. What are extrusive igneous rocks ? Give an example.

When the molten lava comes on the earth's surface, it rapidly cools down and becomes solid. Rocks formed is such a way on the crust are called extrusive igneous rocks. The example is Basalt rock found in Deccan plateau.

4. What are intrusive igneous rocks? Give an example.

Sometime the molten magma cools down deep inside the earth's crust, leading to the formation of solid rocks. These are called intrusive igneous rocks. For example. granite rocks. These are called intrusive igneous rocks. For example, granite rocks which are used to prepare grinding stone for preparing spice powder.

5. What are sedimentary rocks? Give an example.

i) Sediments formed due to roll down of rocks are transported and deposited by wind, water, etc.

ii) These loose sediments are compressed and hardened to form layers of rocks.

ii) These types o frocks are called sedimentary rocks. For example, sandstone made from grains of sand.

iii) These rocks may even contain fossils of plants, animals and other microorganisms that lived once on them.

6. What are the used of rocks?

Rocks are very useful. The hard rocks are used for making roads, houses and buildings. They are even used for games like pitthoo (Seven stones) , hope scotch (Stapu / Kit kit), etc.

7. What are the uses of minerals?

Minerals are very important to mankind. Some are used as fuels. Some minerals, such as coal, natural gas and petroleum, iron aluminium, gold uranium etc. are also used in industries. Further they are even used in medicines and in making fertilisers.

8. What are fossils?

The remains of the dead plants and animals trapped in the layers of rocks are called fossils.

Long Answer Questions

1. Give a brief description of three layers of the earth.

i) Crust:

a) The upper most layer of the earth's surface is called crust.

b) It is the thinnest of all the layers.

c) It is almost 35 km on the continental masses and 5 km on the ocean floors.

d) The main mineral constituents of the continental masses are silica and aluminium soil.

ii) Mantle :

Just beneath the crust is the mantle which extends up to 2,900 km below the crust.

iii) Core :

a) The innermost layer is the core with a radius of 3,500 km.

b) It is made of nickel and iron, i.e. nife.

2. What is a rock? Classify igneous rocks.

i) Any natural mass of mineral material that makes up the earth's crust is called a rock. The earth's crust is made of various types of rocks. Rocks can be of different sizes, textures, shapes colours, etc.

ii) Extrusive rocks **:** When the molten lava comes on the earth's surface, it rapidly cools down and becomes a solid. They thus, form extrusive igneous rocks; for example, basalt.

Intrusive Igneous rocks **:** Sometimes the molten magma cools down deep inside the earth's crust. Solid rocks so formed are called intrusive igneous rocks.

3. What do you understand by 'Rock cycle'?

i) One type of rocks changes into another type under certain conditions in a cyclic manner.

ii) This process of transformation of the rock from one to another is known as rock cycle.

iii) When the molten magma cools down, it solidifies to become igneous rock.

iv) These igneous rocks break down into small particles that are transported and deposited to form sedimentary rocks.

v) When the igneous and sedimentary rocks are subjected to great heat and pressure, they change into metamorphic rocks.

4. Explain the used of rocks in our lives.

The uses of rocks are :

i) Hard rocks are used for making roads, house and buildings.

ii) Rocks are made of different minerals which are important for mankind; for example, coal petroleum and natural gas.

5. Give reasons ,

a) We cannot go to the centre of the earth.

b) Sedimentary rocks are formed from sediments,

c) Limestone is changed into marble.

a) We cannot go to the centre of the earth because the central core has very high temperature and pressure.

b) Sedimentary rocks are formed from sediments. Rocks roll down, crack and hit each other and are broken down into small fragments. These smaller parts are called sediments. These sediments are compressed and hardened to form layers of rocks. These types of rocks are sedimentary rocks.

c) Limestone is a sedimentary rock which, due to excessive heat and pressure, changes into marble after thousands of years and forms metamorphic rocks.