Worksheet – Inside Our Earth & Our Changing Earth

Class 7 – Geography

Part A – Inside Our Earth MARKS:20

I. Multiple Choice Questions (1 mark each)

1. Which is the innermost layer of the Earth?

a) Crust

b) Mantle

c) Core ✓

d) Lithosphere

2. The outermost layer of the Earth is called:

a) Mantle

b) Lithosphere

c) Crust ✓

d) Core

3. Which type of rocks are formed from lava?

a) Igneous ✓

b) Sedimentary

c) Metamorphic

d) None of these

II. Short Answer Questions (2 marks each)

1. What is the difference between the continental crust and the oceanic crust?

Continental crust: Made up of silica and alumina (sial).

Oceanic crust: Made up of silica and magnesium (sima).

2. What are metamorphic rocks? Give an example.

Rocks formed when igneous or sedimentary rocks change under heat and pressure.

Example: Limestone → Marble, Coal → Graphite.

3. Describe the three layers of the Earth.

Crust: Outermost, thinnest, made of sial and sima.

Mantle: Beneath crust, extends up to 2900 km, semi-solid.

Core: Innermost, made of nickel and iron (nife), very hot and dense.

4. Explain the rock cycle with an example.

Igneous rocks → broken into sediments → form sedimentary rocks → heat & pressure → metamorphic rocks → melt → magma → igneous rocks again.

III. Short Answer Questions (3 marks each)

1. Distinguish between igneous, sedimentary, and metamorphic rocks with examples.

Igneous: Solidification of lava/magma. Example: Basalt, Granite.

Sedimentary: Formed by deposition of sediments. Example: Sandstone, Limestone.

Metamorphic: Change under heat/pressure. Example: Marble, Slate.

2. Why is the Earth's crust important for us?

Contains minerals, fuels, and natural resources.

Provides soil for agriculture.

Foundation for forests, settlements, and industries.

V. Case-Based Question (3 marks)

The Earth's crust is made up of various types of rocks. Over time, one type of rock changes into another under different natural processes. This continuous process is called the rock cycle. For example, igneous rocks when broken into small fragments form sedimentary rocks. These, under heat and pressure, form metamorphic rocks.

1. What is the rock cycle?

Continuous process where one type of rock changes into another.

2. How are sedimentary rocks formed?

From deposition and compression of sediments.

3. Give one example each of sedimentary and metamorphic rocks.

Sandstone (sedimentary), Marble (metamorphic).

Part B – Our Changing Earth

I. Multiple Choice Questions (1 mark each)

1. Which is the slow movement of lithospheric plates called?

a) Folding

b) Plate tectonics ✓

c) Volcano

d) Earthquake

2. The place inside the Earth where an earthquake originates is called:

a) Epicentre

b) Focus ✓

c) Crust

d) Fault line

3. The wearing away of the Earth's surface is called:

a) Weathering

b) Deposition

c) Erosion ✓

d) Volcano

II. Short Answer Questions (2 marks each)

1. What is a volcano?

A vent in the Earth's crust through which molten magma, ash, and gases erupt.

2. Define erosion and deposition.

Erosion: Wearing away of land by wind, water, or ice.

Deposition: Process by which eroded material is laid down.

3. How are fold mountains formed?

When two plates collide, the crust bends and forms folds.

Example: Himalayas, Alps.

4. Differentiate between focus and epicentre of an earthquake.

Focus: Point inside the Earth where earthquake originates.

Epicentre: Point on the Earth's surface directly above the focus.

III. Short Answer Questions (3 marks each)

1. Explain the work of rivers as an agent of erosion and deposition.

In upper course: Erodes land, forms gorges, waterfalls.

Middle course: Forms meanders, ox-bow lakes.

Lower course: Deposits sediments, forms deltas.

2. How do glaciers and wind shape the landforms?

Glaciers: Erode valleys (U-shaped), form moraines, drumlins.

Wind: Erodes in deserts, forms sand dunes, loess deposits.

V. Case-Based Question (3 marks)

On 26 January 2001, a severe earthquake hit Gujarat. Thousands of people lost their lives and property. The earthquake originated deep in the Earth's crust and the vibrations spread outward, causing massive destruction.

1. What is the point inside the Earth where the earthquake originates called?

Focus.

2. What is the point on the surface above the focus called?

Epicentre.

3. Name two destructive effects of earthquakes.

Collapse of buildings, loss of life and property.