

Date: 04-08-2020

Day: Tuesday

<https://youtu.be/haP2SOUhXiU>

Lesson#4 Rocks

Topic: Elements, Minerals, Rocks

Objectives. To enable the students to define elements, minerals and rocks.

Important points.

- ❖ In our daily life, we use many natural things which are solid. These are rocks found in the earth.
- ❖ Lithosphere is formed by these elements.

Elements.

- ❖ An element is a simplest form of a matter.
- ❖ All the things found in Earth are made of elements.

Minerals.

- ❖ Minerals are vital resources found in the Earth.
- ❖ Human Beings use these resources for their benefit.
- ❖ These are comprised of different in-organic elements.

Rocks.

- ❖ Rock is a combination of two or more minerals.
- ❖ Lithosphere is formed by different types of rocks.
- ❖ Some of the rocks are hard and some are soft.
- ❖ In some rocks crystals are found and in some fossils of animals and plants.

Types of rocks.

There are three types of rocks.

- 1. Igneous rocks.**
- 2. Sedimentary rocks.**
- 3. Metamorphic rocks.**

Assessment

Answer the following questions.

Q#1. Define a rock.

Answer. Rock is a combination of two or more minerals.

Q#2. Define an element.

Answer. An element is a simplest form of a matter.

Q#3. Define minerals.

Answer. Combination of naturally occurring inorganic elements is known as mineral.

Q#4. How many types of rocks are there? Name them.

Answer.

There are three types of rocks.

- 1. Igneous rocks.**
- 2. Sedimentary rocks.**
- 3. Metamorphic rocks.**

Date: 05-08-2020

Day: Wednesday

<https://youtu.be/M4b16Fgg6vo>

Lesson#4 Rocks

Topic: Types of Rocks.

Objectives. Describe various types of rocks according to their mode of formation.

Important points

I. Igneous rocks.

Interesting Information

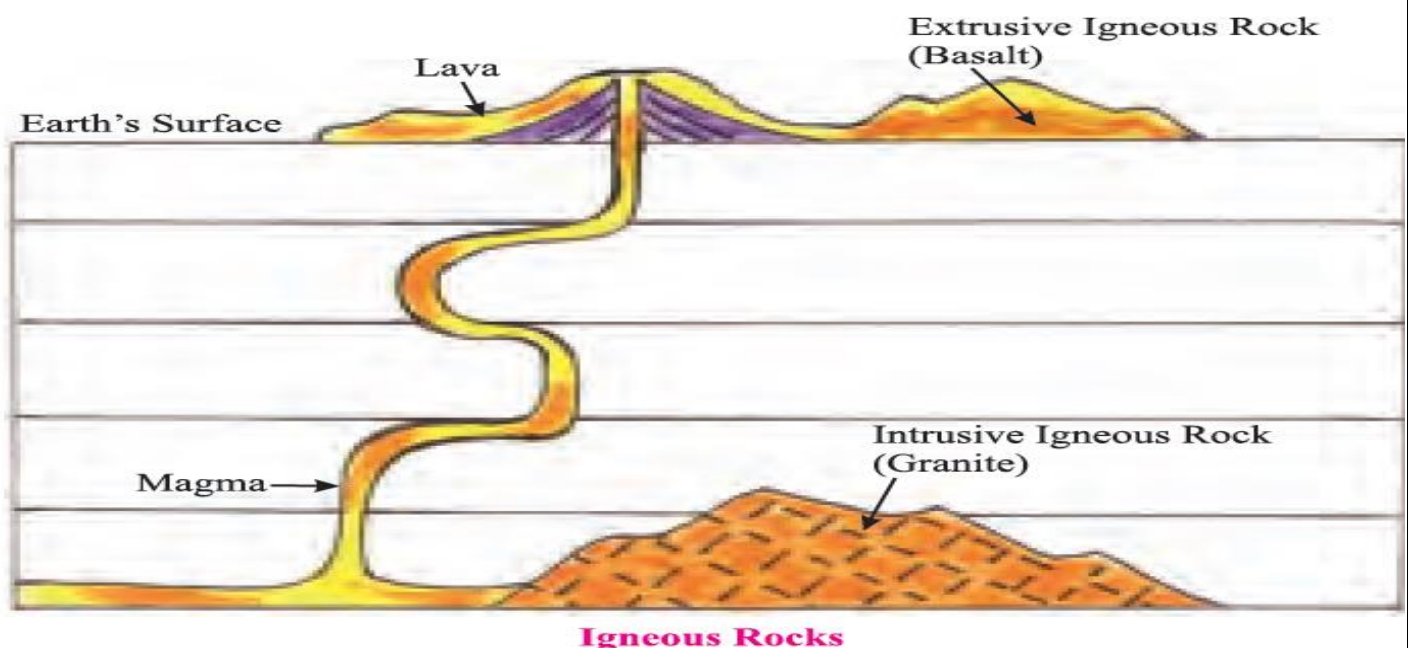
The word Igneous is derived from a latin word 'Ignis' which means 'fire'.

- ❖ As we go in the interior of the earth the temperature increases about 5000°C .
- ❖ Due to this temperature the minerals melt and a thick igneous matter "Magma" is formed.
- ❖ When this magma comes on the surface of the Earth called "Lava".
- ❖ Igneous rocks are formed by this molten matter.

Types of igneous rocks.

According to formation there are two types of igneous rocks.

- I. Intrusive Igneous Rocks
- II. Extrusive Igneous Rocks



Intrusive Igneous Rocks

- ❖ When the molten matter solidifies deep inside the surface of the Earth, the rocks thus formed are called intrusive igneous rocks.
- ❖ They are also called plutonic rocks.
- ❖ Granite, diorite and gabbro are the examples of igneous rocks.



Diorite

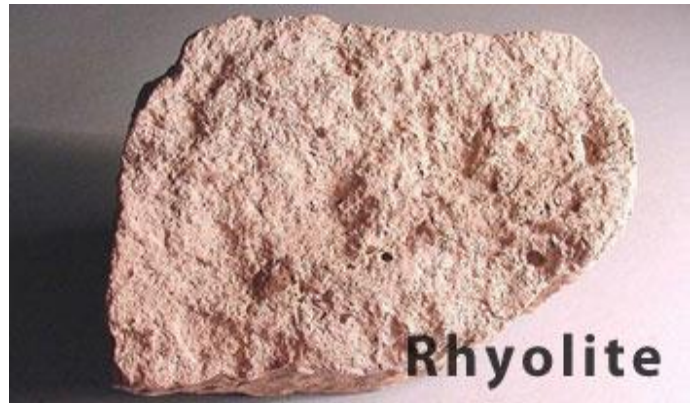


Granite

Extrusive igneous Rocks.



Basalt



Rhyolite

Important points

- ❖ When the molten matter comes on the surface of the Earth and solidifies, the rocks thus formed are called extrusive igneous rocks.

- ❖ When this molten matter comes on the surface of the surface of the Earth, it creates volcanoes or form faults and cracks in the Earth's surface.
- ❖ Basalt and obsidian are the examples of extrusive rocks.
- ❖ On the surface of the Earth the molten matter solidifies quickly, so crystals are not formed and if formed, are too small to be seen.
- ❖ In Pakistan igneous rocks are found in areas of Hazara and Balochistan.

Characteristics of Igneous Rocks

Interesting information.

Continents are formed by granite and ocean floors are formed by basalt rocks.

- Igneous rocks were formed in the beginning, that's why these are called primary rocks.
- Crystals are found in these rocks.
- There are no layers in these rocks.
- These rocks are very hard.
- Fossils of animals are not found in these rocks.

Assessment

Answer the following questions.

Q.1. Define igneous rocks.

Answer. The rocks formed by the molten matter (present in the interior of the Earth) is known as igneous rocks.

Q.2. How many types of rocks are there? Name them.

Answer. There are three types of rocks. Igneous rocks, Sedimentary rocks and Metamorphic rocks.

Q.3. Name types of igneous rocks.

Answer. Intrusive igneous rocks and Extrusive igneous rocks.

Q.4. How are intrusive rocks formed?

Answer. Intrusive rocks are formed by the solidification of molten matter deep inside the surface of the Earth.

Q.5. How are extrusive rocks formed?

Answer. When the molten matter comes on the surface of the Earth and solidifies, rocks formed by this process are called extrusive igneous rocks.

Q.6. In Pakistan, where are igneous rocks found?

Answer. In Pakistan igneous rocks are found in areas of Hazara and Balochistan.

Q.7. Name some types of extrusive rocks.

Answer. Basalt and Obsidians are the examples of these rocks.

Q.8. Write any two characteristics of igneous rocks.

Answer. Crystals are found in these rocks.

There are no layers in these rocks.

Q.9. How are continents and oceans formed?

Answer. Continents are formed by Granite and ocean floors are formed by basalt rocks.

Date: 06-08-2020

Day: Thursday

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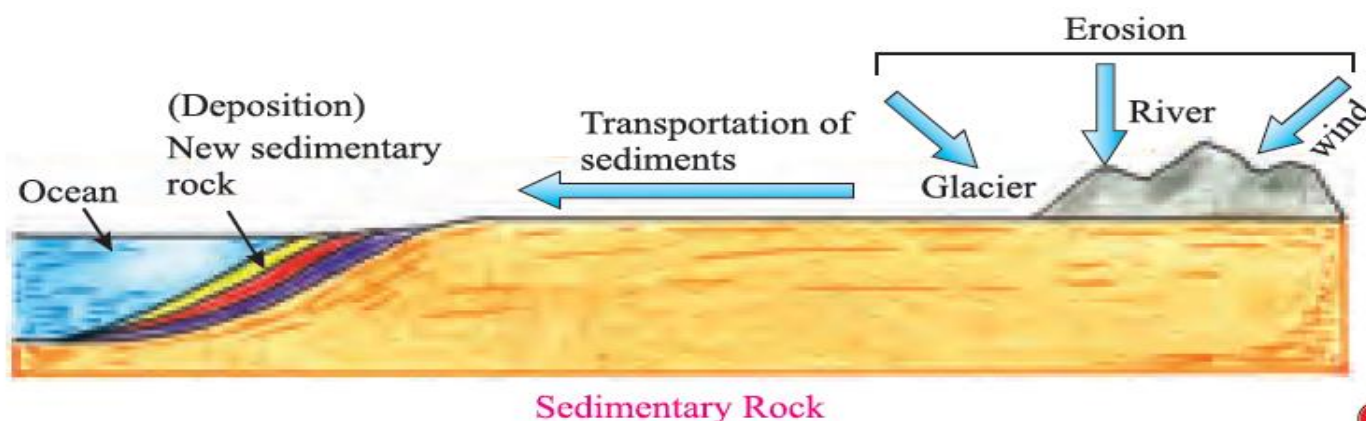
Lesson#4 Rocks

Topic: Types of Rocks (Sedimentary Rocks)

Objectives. Describe sedimentary rocks and their types.

Important points

Sediment means a collection of small particles particularly dirt, that participates from a river or other water body.



The rocks formed near or on the surface of the Earth are weathered and eroded into sediments by solar heat, rain, wind, river or glacier. These sediments are transported to far off places and deposited layer by layer. These layers fix together firmly with the passage of time and a rock is formed which is called sedimentary rock.

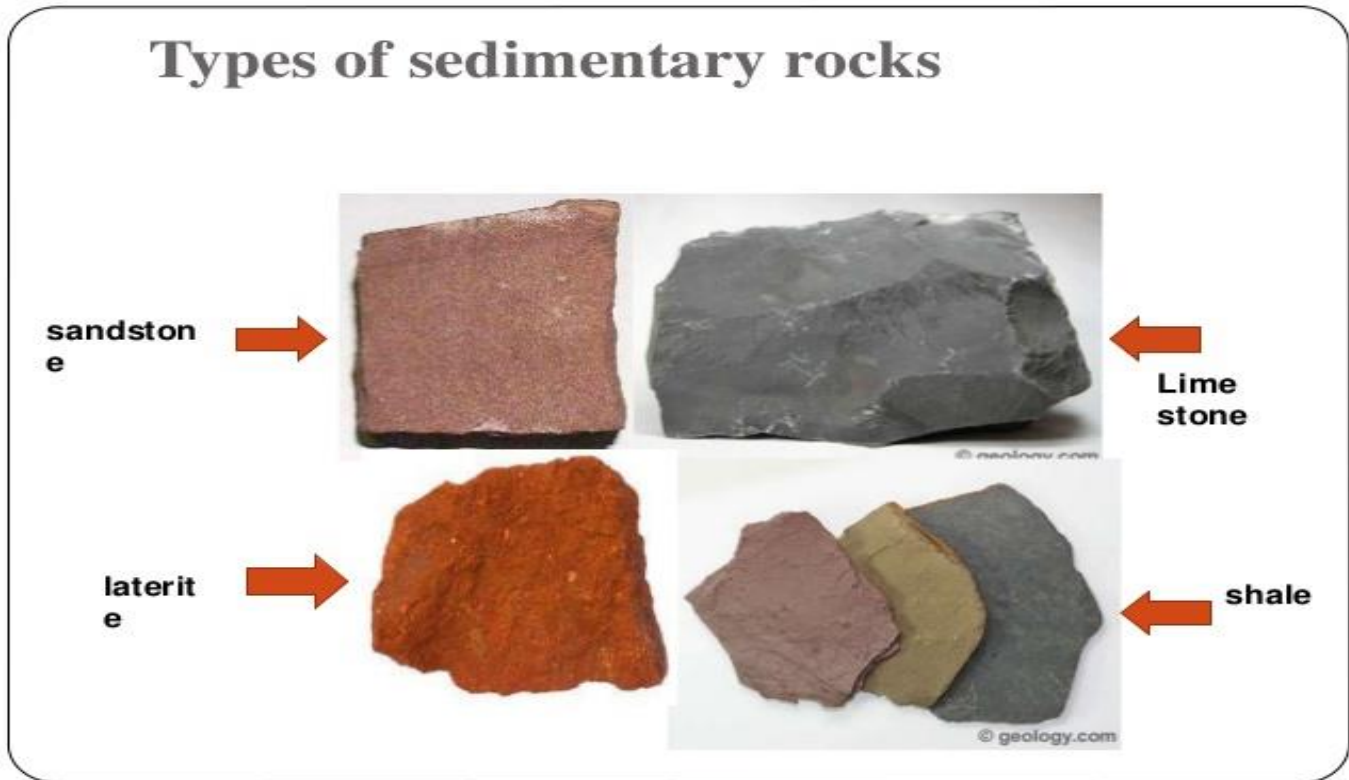
Types of Sedimentary Rocks

According to their formation, there are three types of sedimentary rocks.

- i. Mechanically formed Rocks
- ii. Chemically formed Rocks
- iii. Organic Rocks

i. Mechanically formed Rocks

Wind, river and glacier erode the rocks in different styles, transport the sediments and deposit them in layered form. The rocks formed by these layers are called mechanically formed rocks.



ii. Chemically formed Rocks

There are different types of dissolved salts in the water found on the surface of the Earth. When this water evaporates, it leaves behind layers of salts. The rocks formed by these layers are called chemically formed rocks.

Rock salt, gypsum and dolomite are examples of chemically formed rocks

In Pakistan, these rocks are found in the areas of Salt Range, Daud Khel, Dera Ghazi Khan and Dadu.

Important information.

In Pakistan, these rocks are found in Northern areas and Pothwar

iii. Organic Rocks

Organic rocks are formed by the fossils of animals and plants. Calcium and carbon are abundantly found in these rocks.

- These rocks are formed on the ocean floor as well as on land.
- If the fossils of animals are found in abundance then these rocks are called calcareous rocks. Calcium is abundantly found in these rocks.
- Limestone and corals are examples of calcareous rocks.

In Pakistan, these rocks are found in areas of Salt Range and Hazara.

If the fossils of plants are found in abundance, then these rocks are called carbonaceous rocks. Carbon is abundantly found in these rocks.

Peat (Raw coal) is a carbonaceous rock.

In Pakistan, these rocks are found in areas of Salt Range, north west Balochistan and southern Sindh.

Characteristics of Sedimentary Rocks.

- The outer surface of the Earth is formed mostly of sedimentary rocks.
- These rocks are identified easily because of their layered form.
- These rocks are mostly used in construction works.
- Fossils of animals and plants are found in these rocks.
- These rocks are comparatively less hard.

Assessment

Answer the following questions.

Q.1. How many types of sedimentary rocks are there?

Answer. There are three types of sedimentary rocks.

- I. Mechanically formed Rocks
 - II. Chemically formed Rocks
 - III. Organic Rocks
-
-

Q.2. Name some examples of sedimentary rocks.

Answer. Sandstone, Shale and Conglomerate.

Q.3. How are organic rocks formed?

Answer. Organic rocks are formed by the fossils of animals and plants.

Q.4. Where are chemically rocks found in Pakistan?

Answer. These rocks are found in the areas of Salt Range, Daud Khel, Dera Ghazi Khan and Dadu.

Q.5. Which rocks are called carbonaceous rocks?

Answer. The rocks which have abundant of fossil fuels are called carbonaceous rocks.

Date: 07-08-2020

Day: Friday

<https://youtu.be/2kCUm7QzIWk>

Lesson#4 Rocks

Topic: Types of Rocks (Metamorphic Rocks)

Objectives. Describe the metamorphic rocks and their types.

Important points

- The rocks formed on the surface of the Earth are weathered and eroded, while the rocks buried under the surface of the Earth are changed. These changed rocks are called Metamorphic rocks.
- Pressure and Temperature are the two main reasons of this change.
- On this base there are two types of metamorphic rocks.
 - I. Rocks formed by thermal metamorphism
 - II. Rocks formed by regional metamorphism

1. Rocks formed by thermal metamorphism.

- The molten matter moves beneath the earth. When it passes through a rock, changes its composition and structure and form a new rock which is called thermal metamorphism.
- Marble and sand stone are the examples of metamorphic rocks.

2. Rocks formed by regional metamorphism.

- the internal forces of the Earth cause a rock

to sink inside the Earth. The rock becomes hard and

compact due to pressure and weight. This process is called regional metamorphism.

- Shale and Slate are the examples of these rocks.
- In Pakistan, slate rocks are found in the areas of Abbottabad and Kund.

Interesting information

Lime stone is used commonly in the houses while marble is used in construction for durability and beauty.

Characteristics of metamorphic Rocks.

- These rocks are formed by the alteration of pre-existing rocks.
- These are more smooth and shiny.
- These rocks are more hard and compact.
- Fossils of animals and plants are not found in these rocks.

Assessment

Q.1. How are metamorphic rocks formed?

Answer. Metamorphic rocks are formed by the alteration of pre-existing rocks.

Q.2. How many types of metamorphic rocks are there?

Answer. There are two types of Metamorphic rocks.

Q.3. Where are thermal metamorphic rocks found?

Answer. Metamorphic rocks are found in Mulaghuri and Balochistan.

Q.4. Where are regional metamorphic rocks found?

Answer. Regional metamorphic rocks are found in Abbotabad and Kund.

Date: 08-08-2020

Day: Saturday

<https://youtu.be/EGK1KkLjdQY>

<https://youtu.be/jP1qbwSGmNs>

Lesson#4 Rocks

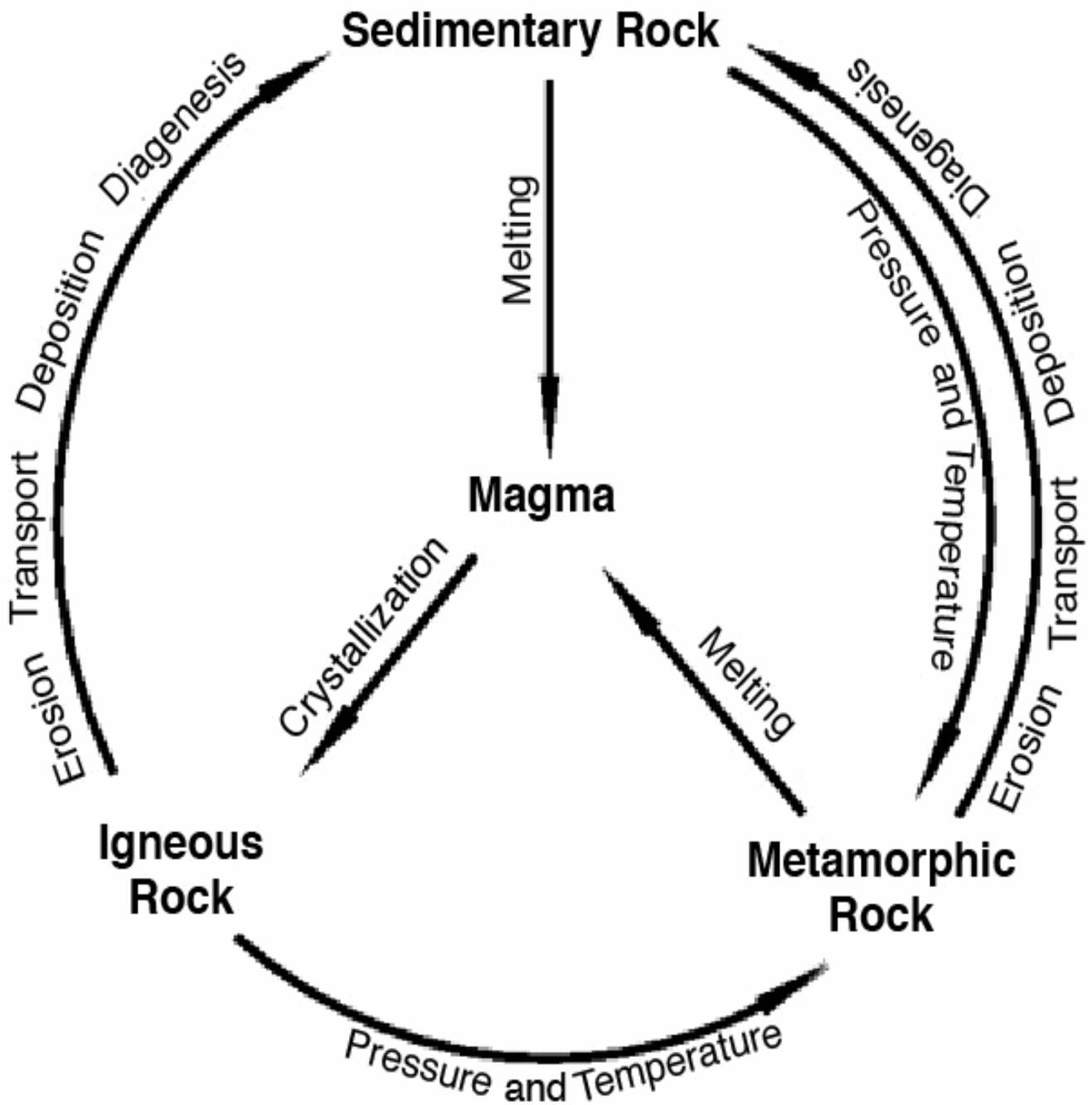
Topic: Activity

Objectives. To know about formation of rocks.

Activity

Complete rock cycle with the help of given picture.

Rock Cycle



The Rock Cycle

Fill in the blanks to complete the rock cycle using these words:

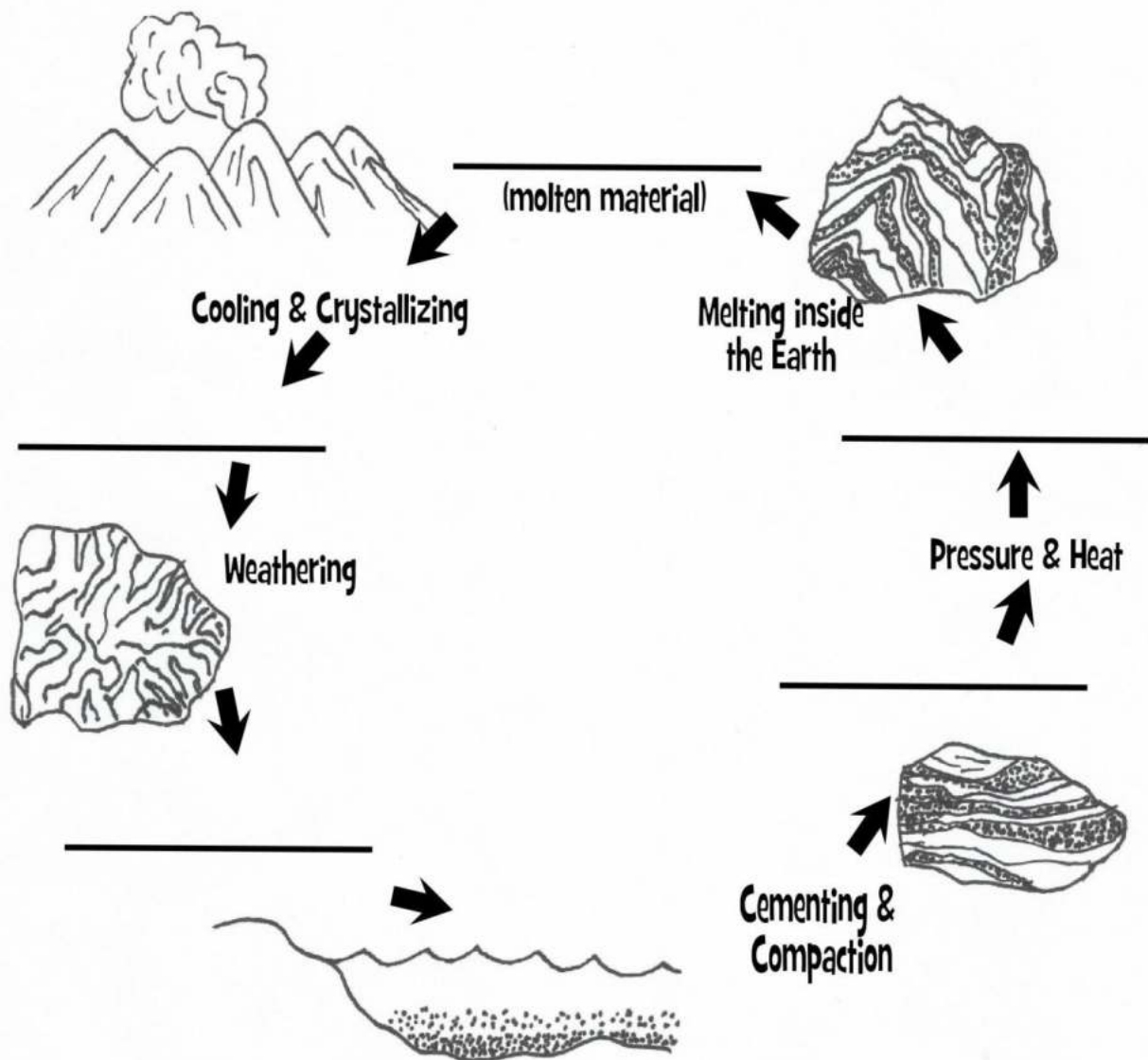
metamorphic rock

igneous rock

sedimentary rock

magma

sediment



Date: 10-08-2020

Day: Monday

<https://youtu.be/jP1qbwSGmNs>

Lesson#4 Rocks

Topic: Fact sheet

Objectives. To get the information about rocks.

Activity Fill this fact sheet with the help of all above mentioned material.



Types of rocks



What type of rock is it?	How does this rock formed?	What are the characteristics of this type of rock?	Where can you find this type of rock?	Examples.
Igneous	The rocks formed by the molten matter (present in the interior of the Earth) is known as igneous rocks.	Crystals are found in these rocks. There are no layers in these rocks. These rocks are hard.	Igneous rocks are found in areas of Hazara and Balochistan.	Basalt and Obsidian are the examples.
Metamorphic	Metamorphic rocks are formed by the alteration of pre-existing rocks.	These rocks are smooth and shiny. These rocks are more hard and compact. Fossils of animals and plants are not found in these rocks.	Abbotabad and Kund	Shale turns into Slate Slate further transform into Schist.
Sedimentary	Sedimentary rocks are formed by the deposition of sediments in a layered form.	Easily identified because of its shape. Fossils of animals and plants are found. Are less hard. Used in construction works.	Salt range, North west, Balochistan and Southern Sindh.	Conglomerate, Sandstone, Shale, Rock salt and Gypsum

Activity Fill this fact sheet with the help of all above mentioned material.



Types of rocks



What type of rock is it?	How does this rock formed?	What are the characteristics of this type of rock?	Where can you find this type of rock?	Examples.
Igneous				
Metamorphic				
Sedimentary				

Date: 11-08-2020

Day: Tuesday

https://youtu.be/QsIBrE8HM_Y

Lesson#4 Rocks

Topic: MCQ, S

Objectives. To solve the exercise.

1. Tick (✓) the correct answer:

i. Simplest form of matter is called:

- | | |
|------------|------------|
| a. Mineral | b. Rock |
| c. Element | d. Crystal |

ii. Combination of two or more minerals is called:

- | | |
|------------|------------|
| a. Crystal | b. Fossil |
| c. Rock | d. Element |

iii. Molten matter which comes out on the surface of Earth is called:

- | | |
|------------|--------------|
| a. Magma | b. Lava |
| c. Granite | d. Rock salt |

iv. One of these is an igneous rock:

- | | |
|--------------|-----------|
| a. Limestone | b. Marble |
| c. Dolomite | d. Basalt |

v. One of these is a chemically formed sedimentary rock:

- | | |
|--------------|--------------|
| a. Rock salt | b. Sandstone |
| c. Slate | d. Gabbro |

vi. One of these is a metamorphic rock:

- | | |
|--------------|-------------|
| a. Sandstone | b. Obsidian |
| c. Marble | d. Granite |

vii. Found in Igneous rocks:

- | | |
|------------|-------------|
| a. Fossils | b. Crystals |
| c. Calcium | d. Carbon |

viii. The rocks in which fossils of animals are abundantly found:

- | | |
|----------------------------|-----------------------|
| a. Calcareous rocks | b. Carbonaceous rocks |
| c. Chemically formed rocks | d. Igneous rocks |

ix. Found in sedimentary rocks:

- | | |
|-------------|------------------|
| a. Fossils | b. Crystals |
| c. Diamonds | d. Molten matter |

x. After metamorphism, limestone becomes:

- | | |
|-----------|--------------|
| a. Slate | b. Marble |
| c. Schist | d. Quartzite |

Date: 12-08-2020

Day: Wednesday

<https://youtu.be/ushjMN6OxWI>

Lesson#4 Rocks

Topic: Short Questions

Objectives. To comprehend the lesson.

1. Give short answers.

I. How sedimentary rock is formed?

Answer. Sedimentary rocks are formed by the deposition of sediments in a layered form.

II. What is meant by intrusive igneous rock?

Answer. The molten matter solidifies deep inside the surface of the Earth, the rocks thus formed are called intrusive igneous rocks.

III. How metamorphic rock is formed?

Answer. Metamorphic rocks are formed by the alteration of pre-existing rocks.

IV. What is meant by minerals?

Answer. Minerals are solid substances that are present in nature and can be made of one element or more elements combined together .

V. Give three examples of igneous, sedimentary and metamorphic rocks each.

Answer. Igneous rocks. Sedimentary rocks. Metamorphic rocks

Basalt granite diorite conglomerate sandstone shale marble quartzite schist

Date: 15-08-2020

Day: Saturday

<https://youtu.be/Nvh-zB8asKM>

Lesson#4 Rocks

Topic: Long Question#2

Objectives. To comprehend the lesson.

Q# 2. Write a detailed note on Sedimentary rocks.

Answer. The rocks formed near or on the surface of the Earth are weathered and eroded into sediments. These sediments are transported to far off places and deposited into layers. These layers form a rock which is called sedimentary rock.

Types of sedimentary rocks.

According to formation there are three types of sedimentary rocks.

I. Mechanically formed rocks

Wind, river and glacier erode the rocks in different styles, transport the sediments and deposit them in layered form. These rocks are called mechanically formed rocks e.g Sandstone, Shale and conglomerate.

II. Chemically formed rocks

Different types of dissolved salts in the water are found on the surface of the earth. When this water evaporates, it leaves behind layers of salts. These layered rocks are called chemically formed rocks e.g. Rock salt, gypsum and dolomite.

III. Organic rocks

Rocks formed by fossils of animals are called organic rocks. These rocks are formed on the ocean floors as well as on land. The rocks enriched with fossils of animals are called calcareous rocks. The rocks enriched with fossils of plants are called carbonaceous rocks.

Date: 17-08-2020

Day: Monday

<https://youtu.be/iLHDk7c7Fmk>

Lesson#4 Rocks

Topic: Long Question#3

Objectives. To comprehend the lesson.

Q#3. Classify rocks and write a detailed note on metamorphic rocks.

Answer. Rock is a combination of two or more minerals. Lithosphere is formed by different types of rocks. Some are soft like shale and some are hard like diamond. Some rocks are based on crystals and some are on fossil fuels. These different characteristics are dependent upon the way of formation of these rocks.

There are three types of rocks.

- 1. Igneous rocks**
- 2. Sedimentary rocks**
- 3. Metamorphic rocks**

Metamorphic rocks

The rocks formed by the alteration of preexisting rocks are known as metamorphic rocks.

There are two main reasons of this change.

- 1. Temperature**
- 2. Pressure**

On the basis of these reasons there are two types of metamorphic rocks.

Rocks formed by Thermal Metamorphism

The molten matter (magma) moves beneath the earth. When it moves inside the earth, passes near or over a rock, a new rock is formed. This process is called thermal metamorphism e.g. limestone and quartzite.

Rocks formed by regional metamorphism.

Date: 18-08-2020

Day: Tuesday

<https://youtu.be/RgqpRNctHaY>

Lesson#5: Major Land Features

Topic: Introduction pg#59-60

Objectives. To introduce about different types of landforms.

- ❖ **The surface of our Earth is not homogeneous.**
- ❖ **Elevated portions are called mountains.**
- ❖ **Table land like features are called Plateaus.**
- ❖ **Vast stretches of flat land are called plains.**
- ❖ **Sea floor is comprised of uneven surface.**

Landforms are formed by two forces.

- I. Internal forces of the Earth**
- II. External forces of the Earth**

1. Internal forces of the earth

- ❖ **There are forces inside the Earth which push the Earth upwards and downwards and create new landforms.**
- ❖ **Continents and mountains are formed by these forces.**
- ❖ **The molten matter inside the Earth comes on the surface and solidifies and creates volcanoes and plateaus.**

2. External Forces of the Earth

- ❖ **When a part of the Earth is uplifted by the internal forces, different features are carved on it.**
- ❖ **Dissected coast lines, valleys, lakes, waterfalls, plateaus and plains are formed by this process.**

Assessment.

Answer the following questions.

Q.1. What are mountains?

Answer. Elevated landforms are called mountains.

Q.2. Define Plateaus.

Answer. Table land like features are called plateaus.

Q.3. Define plains.

Answer. Vast stretches of flat land are called plains.

Q.4. How landforms are formed?

Answer. Landforms are formed by two forces

- I. Internal Forces of the Earth**
 - II. External forces of the Earth**
-
-
-

Q.5. Define the formation of new landforms.

Answer. There are forces inside the Earth which push the Earth upwards and downwards and create new landforms.

Date: 19-08-2020

Day: Wednesday

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Lesson#5: Major Land Features

Topic: Mountains pg.# 60-62

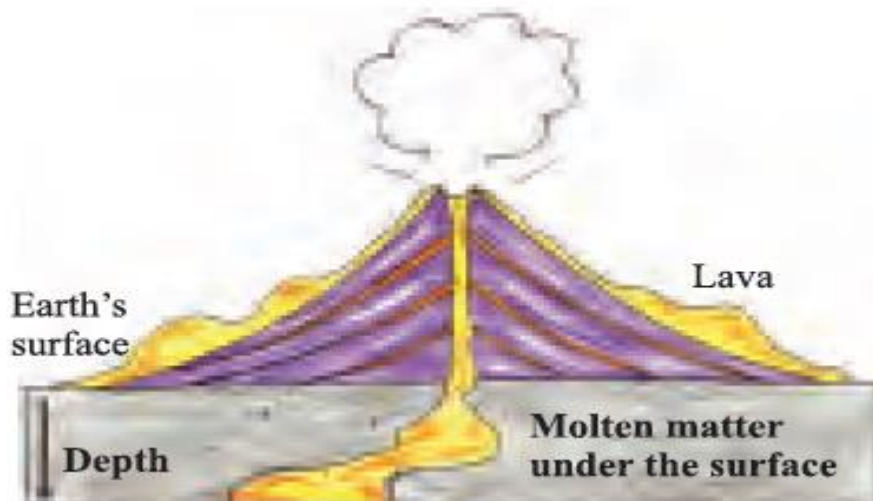
Objectives. To describe types of mountains according to their mode of formation.

- ❖ Mountain is a major landform, high from surroundings and has a sloping surface.
- ❖ Its base is broad as compared to its top.
- ❖ The oldest mountains on the Earth came into being 400 million years ago called Caledonian mountains.

Types of Mountains.

There are three types of mountains.

1. Volcanoes.

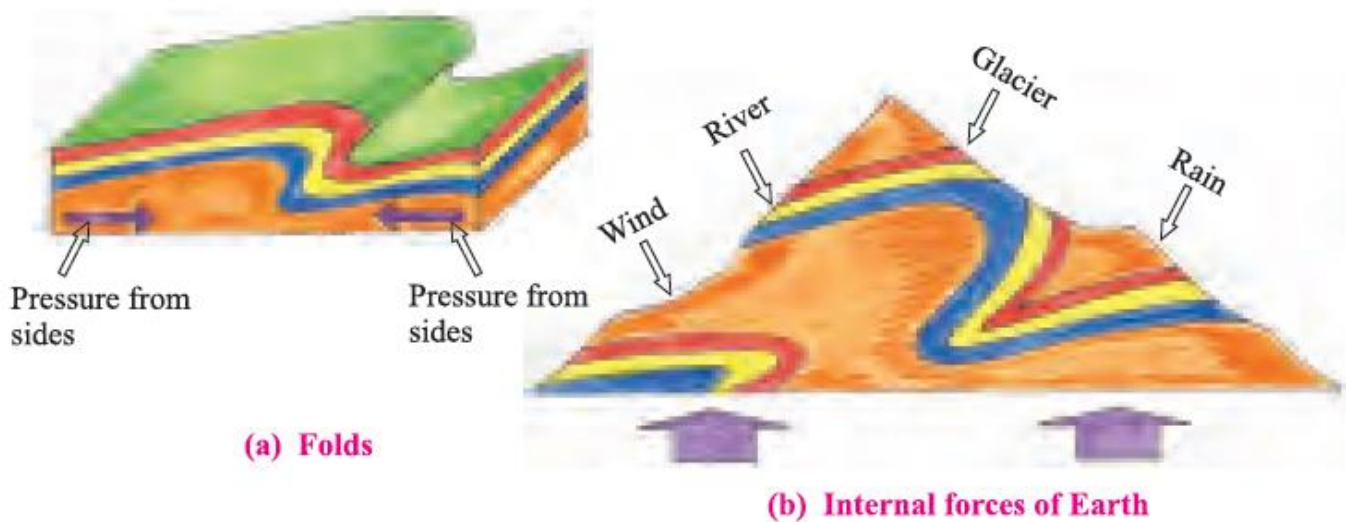


- ✚ The molten matter inside the Earth moves, comes on the surface of the Earth and solidifies.
- ✚ It forms a rock or a mountain which is called volcano.
- ✚ It has a narrow passage called Vent. Lava comes out from this Vent.
- ✚ Fuji Yama, Krakatoa, Mayon, Etna and Cotopaxi are volcanoes.

2. Fold Mountains



- ✚ During the mountain building processes, the internal forces put pressure on the rocks from the sides, folds occurred in these rocks.
- ✚ These are called fold mountains.
- ✚ Himalayas, Alps, Rockies are the ranges of fold mountains.



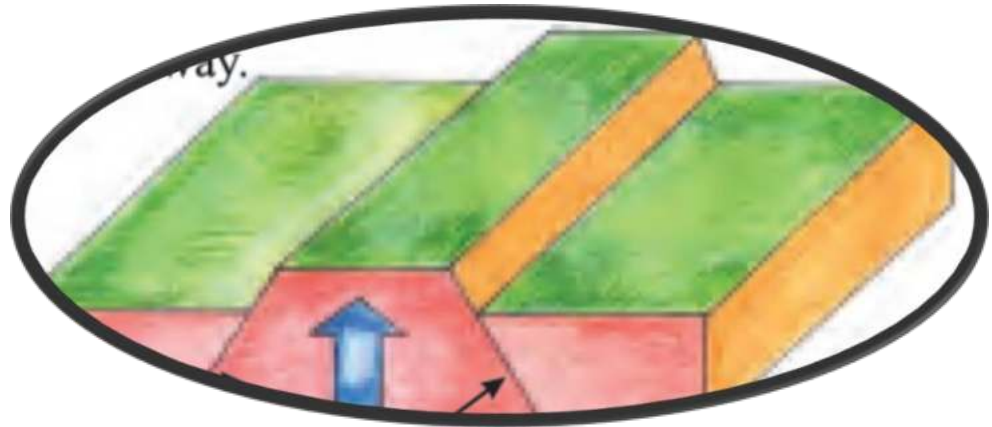
(a) Folds

(b) Internal forces of Earth

The largest range of volcanoes stretch around the Pacific Ocean. This is called "Ring of fire"

3. Block Mountains

- ✚ Unequal stresses and earthquakes create faults on the surface of the Earth.
- ✚ Sometimes the internal forces uplift a part of the Earth between these faults which becomes higher from the surroundings and called Block mountain.
- ✚ Harz in Germany and Bihar mountains in India are block mountains.



Assessment

Q.1. Define a mountain.

Answer. A mountain is a major landform which is clearly high from the surrounding areas and has a sloping surface.

Q.2. Name types of mountains.

Answer. There are three three types of mountains.

- I. Volcanoes
- II. Fold Mountains
- III. Block Mountains

Do you know?

Sometimes a part of the Earth sinks between two faults. It is called a Rift Valley. There is a rift valley in East Africa which is about 3000 kilometres long.

Q.3. Give some examples of volcanoes.

Answer. Fuji Yama, Krakatoa, Mayon, Etna and Cotopaxi .

Q.4. When oldest mountains on the Earth came into being?

Answer. The oldest mountains on the Earth came into being about 400 million years ago.

Q.5. What are world's oldest mountains called?

Answer. They are called Caledonian mountains.

Q.6. What is meant by "Ring of Fire"?

Answer. The largest range of volcanoes stretch around the Pacific Ocean. This is called "Ring of Fire".

Q.7. Define "Rift Valley".

Answer. Sometimes a part of the Earth sinks between two faults. This is called a Rift Valley.

Date: 20-08-2020

Day: Thursday

<https://youtu.be/FL6hbWATq9s>

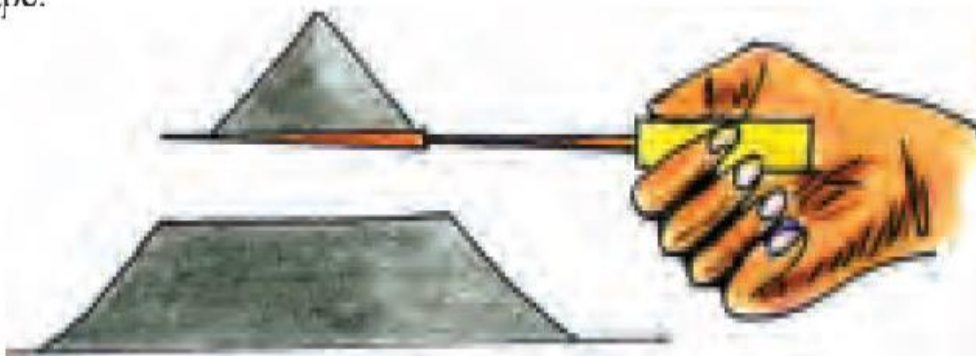
Lesson#5 Major Land features

Topic: Types of plateaus pg. #63-64

Objectives. To describe types of plateaus according to their mode of formation.

Types of Plateaus

Diagram.



✚ Plateau is a landform which is high from the surrounding surface but has a flat and dissected top like a plain.

Types of plateaus.

According to location and formation there are three types of plateaus.

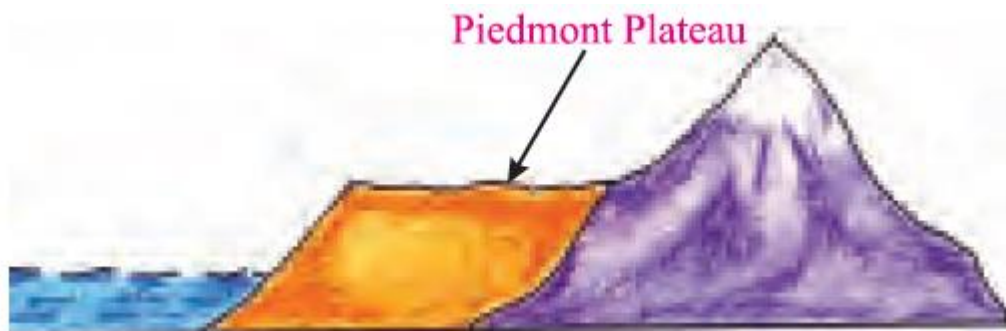
1. Intermontane Plateaus.

- The plateau which is situated between high mountain is called intermontane plateau. Tibet and Bolivia are the intermontane plateaus.



2. Piedmont plateaus

- The plateau which is situated in the foothills of mountains is called piedmont plateau.
- On the other side, there is a plain or a sea.
- Patagonia and Colorado are the examples of these plateaus.



3. Continental plateaus.

- The plateau which is surrounded by a sea or a plain is called continental plateau.
- Saudi Arabia, Spain and Greenland are the continental plateaus.



Assessment

Answer the following questions.

Q.1. write names of three types of plateaus.

Answer. There are three types of plateaus.

- I. Intermontane plateaus**
 - II. Piedmont plateaus**
 - III. Continental plateaus**
-
-
-
-

Q.2. Define intermontane plateau.

Answer. The plateau which is situated between high mountain is called intermontane plateau.

Q.3. Define Piedmont plateau.

Answer. The plateau which is situated in the foothills of mountains is called piedmont plateau.

Q.4. Define Continental plateau.

Answer. The plateau which is surrounded by a sea or a plain is called continental plateau.

Q.5. Give two examples of each plateaus.

Answer. intermontane plateau. (Tibet and Bolivia)

Piedmontane plateau. (Patagonia and Colorado)

Continental plateau. (Saudi Arabia and Greenland)

Date: 21-08-2020

Day: Friday

<https://youtu.be/d7SgFXAjVEk>

Lesson#5 Major Land Features

Topic: Plains pg.# 64-66

Objectives. To describe the types of plains according to their mode of formation.

Plains

Vast stretches of flat above the sea level are called plains.

Types of plains

Plains are classified into two major types.

- I. Erosional plains**
- II. Depositional plains**

1. Erosional plains

- **When a landform appears on the surface of the Earth, the external forces tend to reduce its height by erosion.**
- **These types of plains are called erosional plains.**
- **There are three types of erosional plains.**

Do you know?

Plains spread over one fourth of the surface of Earth. About 80% of world population lives in plains.

I. Karst plains

Some plains in the world are formed of lime stone. These were once highlands which became lowlands due to the solution of limestone in water. Rain water, surface water and underground water tend to dissolve limestone. These plains are called Karst plains.



I. Eolian plains



In areas where amount of rainfall is very low, wind has converted the exposed rocks into flat lands by erosion. These are called Eolian plains.

1. Glacial plains.



In the ancient times Canada, Finland, Sweden and Russian Federation were converted with continental glaciers. These huge ice sheets converted these areas into flat lands by erosion. These are called glacial plains.

2. Depositional plains.

Most plains of the world are formed by the deposition of sediments transported by rivers, wind and glaciers. These are called depositional plains.

There are three types of depositional plains.

I. Flood plains



When rivers are flooded, the water comes out of the river banks and spread over vast areas. When the water returns, it leaves behind layers of fine sand and clay. These are called flood plains.

II. Coastal plains



Rivers before entering the sea tend to deposit the layers of fine sand on the beach. Sea waves also sand on the beach. These are called coastal plains.

III. Loess plains



Some plains of the world have been formed by very fine sand deposited by wind. These are called loess plains. The largest loess plain is situated in China.

Assessment

Answer the following questions.

Q.1. How much world population lives in the plains?

Answer. About 80% of world population lives in plains.

Q.2. How erosional plains are formed?

Answer. When a landform appears on the surface of the Earth, the external forces tend to reduce its height by erosion. Erosional plains are formed by this process.

Q.3. Name types of erosional plains.

Answer.

- I. Karst plains**
- II. Eolian plains**
- III. Glacial plains**

Q.4. Define depositional plains.

Answer. Most plains of the world are formed by the deposition of sediments transported by rivers, winds and glaciers. These are called depositional plains.

Q.5. Name some depositional plains.

Answer.

- I. Flood plains
- II. Coastal plains
- III. Loess plains

Date: 22-08-2020

Day: Saturday

<https://youtu.be/bJurnO8sOr0>

Lesson#5 Major Land Features

Topic: Activity

Objectives. To list and locate main rivers of the world on a map.

Activity: Identify the following rivers on the map and write, in which continent they are situated?

Ob, Lina, Amur, Hwanghe, Yangtze, Meckong, Ganges, Indus, Tigris, Euphrates, Congo, Nile, Niger, Volga, Danube, Mackenzie, Yukon, Missouri, Mississippi, Amazon, Parana, Murray and Darling.



Continents

Asia

Africa

Europe

North America

South America

Australia

Rivers

Ob, Lena, Amur, Hwanghe, Yangtze,
Meckong, Ganges, Indus, Tigris,
Euphrates,

Congo, Nile, Niger

Volga, Danube

Mackenzie, Yukon, Missouri,
Mississippi

Amazon, Parana

Murray and Darling.

Continents

Rivers

Date: 24-08-2020

Day: Monday

<https://youtu.be/mKIQtz5uuok>

Lesson#5 Major Land Features

Topic: MCQ, S

Objectives. To solve the exercise.

1. Tick the correct(√) the correct answer.

I. One of these is a volcano:

a. Himalayas

b. Harz

c. Krakatoa d. Rockies

II. One of these is a block mountain:

a. Mayon b. Harz

c. Etna d. Rockies

III. One of these is a fold mountain range:

a. Fuji Yama b. Harz

c. Himalayas d. Cotopaxi

IV. The plateau situated between high mountain is called:

a. Intermontane plateau b. Piedmont plateau

c. Continental plateau d. Rift valley

V. The plains formed by the erosion of winds, rivers and glaciers are called:

a. Erosional plains b. Depositional plains

c. Flood plains d. Loess plains

VI. Plains formed of Limestone are called:

a. Loess plains b. Desert plains

c. Karst plains d. Glacial plains

VII. Alps are:

a. Block mountains b. Fold mountains

c. Volcanoes d. Plateaus

VIII. The largest loess plain is situated in:

a. Pakistan b. Afghanistan

c. Germany d. China

Date: 25-08-2020

Day: Tuesday

<https://youtu.be/XBSHEb5DDa0>

Lesson#5 Major Land Features

Topic: Short Questions

Objectives. To solve the exercise.

Give short answers.

Q.1. How landforms are formed?

Answer. Landforms on the Earth are formed by internal and external forces of the Earth.

Q.2. How fold mountains came into being?

Answer. During the mountain building processes, the internal forces put pressure on the rocks from the sides, folds occurred in these rocks. These are called fold mountains.

Q.3. Write names of three types of plateaus.

- I. Intermontane plateaus
 - II. Piedmontane plateaus
 - III. Continental plateaus
-
-
-

Q.4. Write names of two types of erosional and depositional plains each.

Answer. Erosional plains.

- Karst plains

➤ **Glacial plains**

Depositional plains

- **Flood plains**
- **Coastal plains**

Q.5. Write the names of four rivers from different continents.

Answer. Asia	Ob
North America	Mississippi
Europe	Danube
Australia	Murray

Date: 26-08-2020

Day: Wednesday

<https://youtu.be/1MTeh2u Sso>

Lesson#5 Major Land Features

Topic: Long Question#1

Objectives. To solve the exercise.

Q.1. Write the detailed note on the types of mountains.

Answer. There are three types of mountains.

Date: 27-08-2020

Day: Thursday

<https://youtu.be/sQbKSm3NGXQ>

Lesson#5 Major Land Features

Topic: Long Question#2

Objectives. To solve the exercise.

Q.2. How plateau is formed? Also write a note on types of plateaus.

Answer. Plateau is a landform which is high like a mountain but has a flat and dissected top like a plain.

Types of plateaus.

According to location and formation there are three types of plateaus.

I. Intermontane Plateaus.

The plateau which is situated between high mountain is called intermontane plateau.

Tibet and Bolivia are the intermontane plateaus.

Date: 28-08-2020

Day: Friday

<https://youtu.be/TeyYSX3iU3Y>

Lesson#5 Major Land Features

Topic: Long Question#3

Objectives. To solve the exercise.

Q.3. Write a detailed note on the types of plains.

Answer. Plains are classified into two major types.

- I. Erosional plains**
- II. Depositional plains**
 - 1. Erosional plains**

The plains formed by erosion of heat, rain, wind and glacier is called erosional plains.

- I. Karst plains**

Some plains in the world are formed of lime stone solution called Karst plains.

- II. Eolian plains**

In areas where amount of rainfall is very low, wind has converted the exposed rocks into flat lands by erosion. These are called Eolian plains.

III. Glacial plains

Glacial plains are formed by the huge ice sheets.

2. Depositional plains.

The plains formed by the deposition of sediments are called depositional plains.

There are three types of depositional plains.

Flood plains

The plains formed by the layers of fine sand and clay are called flood plains.

Coastal plains

The plains formed by the deposition of the layers of fine sand on the beach are called coastal plains.

Loess plains

Plains formed by the deposition of very fine sand are called loess plains. The largest loess plain is situated in China.

Date: 31-08-2020

Day: Monday

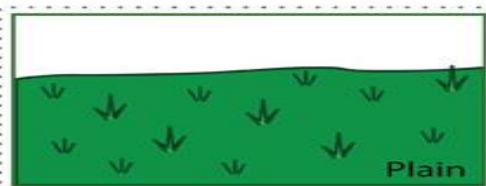
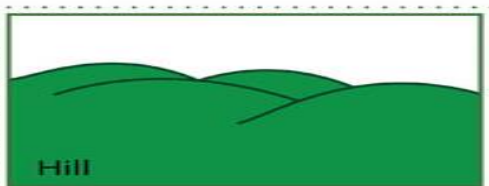
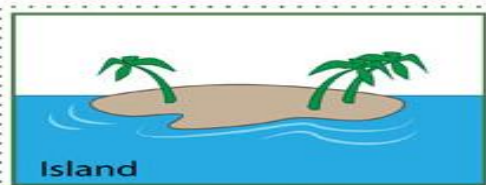
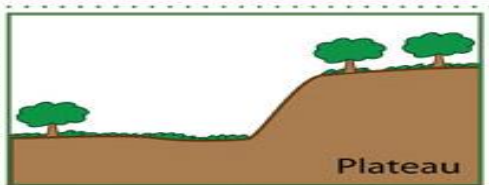
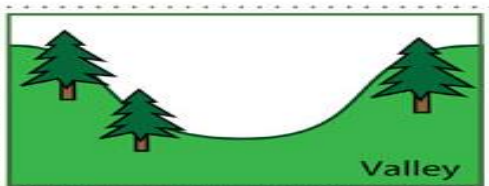
<https://youtu.be/PD265z6OvVo>

Lesson#5 Major Land Features

Topic: Test#1

Objectives. To assess student's abilities.

Study the images below.



Cut these pictures and paste them next to their definitions.

A valley is a low area formed between mountains or a hills, often with a river or stream flowing through it.

A plain is a stretch of flat land with no elevations like hills or mountains.

A hill is a piece of land that rises higher than everything surrounding it. It has less steep and not high as mountain.

Plateau is a landform which is high from the surrounding surface like a mountain but has a flat and dissected top like a plain.

An island is a body of land completely surrounded by water.

Mountain is a major landform which is clearly high from the surrounding areas and has a sloping surface.

Date: 31-08-2020

Day: Monday

Lesson# 4 Rocks

Topic: Test#2

Objectives. To assess student's abilities.

Solve the puzzle of different types of rocks.

Types of Igneous Rock

D	E	P	A	I	G	R	A	N	I	T	E	P	U
A	E	E	E	I	R	H	Y	O	L	I	T	E	N
H	I	R	T	K	I	M	B	E	R	L	I	T	E
T	D	I	I	T	E	T	I	L	R	H	E	W	P
U	E	D	R	R	B	A	S	A	L	T	R	I	T
F	G	O	O	A	P	L	I	T	E	E	L	E	T
F	N	T	N	N	A	E	T	I	R	O	I	D	B
U	I	I	O	B	S	I	D	I	A	N	E	I	T
O	E	T	I	R	C	I	P	O	R	B	B	A	G
I	A	E	R	T	U	D	I	A	B	A	S	E	S
D	A	C	I	T	E	I	J	O	L	I	T	E	T
T	R	O	C	T	O	L	I	T	E	I	B	T	T
B	E	T	I	L	A	N	O	T	E	I	D	I	O
H	E	D	R	T	C	E	T	I	N	U	D	T	I

IJOLITE
PERIDOTITE
PICRITE
KIMBERLITE
NORITE
TONALITE
DIABASE
GABBRO
TUFF
WEHRLITE
TROCTOLITE
DUNITE
DIOHYTE
OBSIDIAN
DACITE
BASALT
APLITE
GRANITE
RHYOLITE

Types of Metamorphic Rock

E	E	C	L	O	G	I	T	E	N	R	A	K	S
T	Q	M	E	E	T	S	O	I	O	G	A	H	E
E	U	A	S	N	H	P	E	L	I	T	E	O	R
T	A	R	L	A	G	A	E	T	E	M	T	R	M
M	R	B	H	S	R	E	N	P	T	I	E	N	M
Y	T	L	L	S	A	T	O	T	I	F	T	F	G
L	Z	E	T	O	N	I	T	I	C	E	I	E	N
O	I	L	S	G	U	M	S	E	A	T	T	L	E
N	T	R	L	E	L	M	P	E	R	I	A	S	I
I	E	E	A	R	I	A	A	N	H	V	M	B	S
T	C	R	T	L	T	S	O	G	T	E	G	T	S
E	R	P	E	G	E	P	S	T	N	U	I	L	R
T	E	T	I	L	L	Y	H	P	A	S	M	S	E
S	G	E	E	M	I	L	S	C	H	I	S	T	B

SOAPSTONE
SCHIST
GNEISS
ANTHRACITE
QUARTZITE
GOSSAN
SUEVITE
MIGMATITE
PHYLLITE
PELITE
SKARN
GRANULITE
MYLONITE
HORNFELS
MARBLE
PSAMMITE
SLATE
ECLOGITE

Types of Sedimentary Rock

F	E	E	S	A	N	D	S	T	O	N	E	T	T
L	I	E	T	I	L	L	I	G	R	A	A	T	G
I	E	E	I	I	M	N	O	C	H	A	L	K	M
N	E	T	T	O	U	E	O	E	S	O	K	R	A
T	G	I	E	A	D	N	B	R	E	C	C	I	A
T	R	R	L	O	S	O	C	R	I	L	L	L	L
U	I	O	A	O	T	T	O	M	I	I	D	I	C
R	T	P	H	L	O	S	T	O	A	G	O	M	O
B	S	A	S	I	N	T	A	C	N	N	L	E	Q
I	T	V	E	T	E	L	M	O	G	I	O	S	U
D	O	E	A	E	D	I	T	A	E	T	M	T	I
I	N	K	T	A	G	S	I	L	R	E	I	O	N
T	E	C	H	E	E	R	C	A	I	L	T	N	A
E	L	A	T	E	R	I	T	E	T	Q	E	E	L

CHALK
 SILTSTONE
 SANDSTONE
 EVAPORITE
 MARL
 ARKOSE
 COQUINA
 GRITSTONE
 LATERITE
 ARGILLITE
 OOLITE
 BRECCIA
 FLINT
 SHALE
 MUDSTONE
 DOLOMITE
 LIMESTONE
 TURBIDITE
 LIGNITE
 COAL

Good luck