BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI-110034

SUBJECT – GEOGRAPHY

CLASS - IX

CHAPTER – PHYSICAL FEATURES OF INDIA

Read the lesson -*Physical Features of India* from the textbook (Students may refer to the link given below for the online textbook) and refer to the notes shared below. Thereafter, follow the instructions and do the given assignment in the Geography notebook. Please mention date, index and topic.

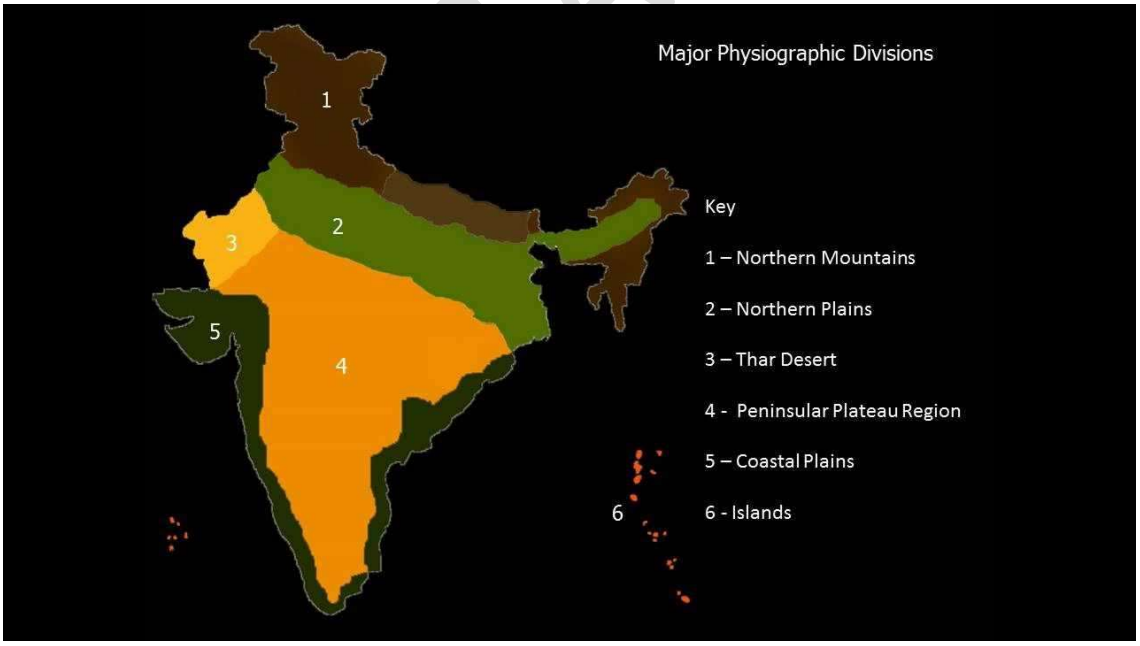
http://ncert.nic.in/textbook/textbook.htm?iess1=1-6

INTRODUCTION

The diversity of India is evident in the diverse landforms of the country. High contrast can be seen in the form of high mountains, deep vallies, plains, plateaus, deserts and islands.

In this chapter, we will be identifying the location of these landforms on the map, their characteristics and theories behind their formation. Also, the chapter will explain the impact of these landforms on the lifestyle of the people.

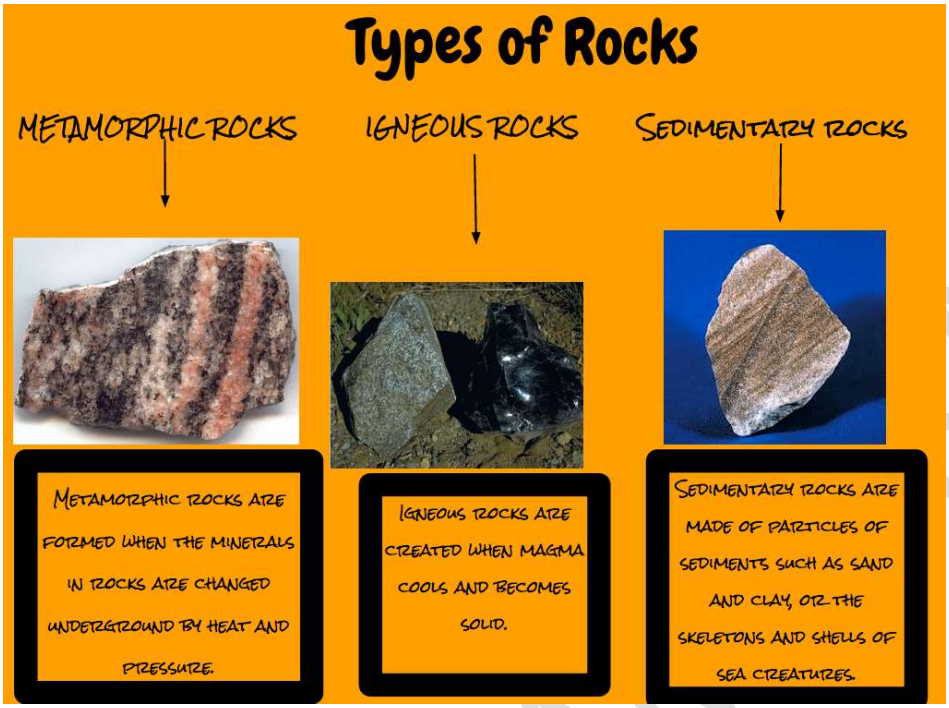
Figure 1, given below shows us the diversity of landform features present in India



TYPES OF ROCKS

The diversity of the landform begins from the fact that they are formed by different types of rocks. These rocks give variation in the form of rocks like diamond which is

very hard and soap stone which is very soft. *Figure 2* explains the three major types of rocks found:



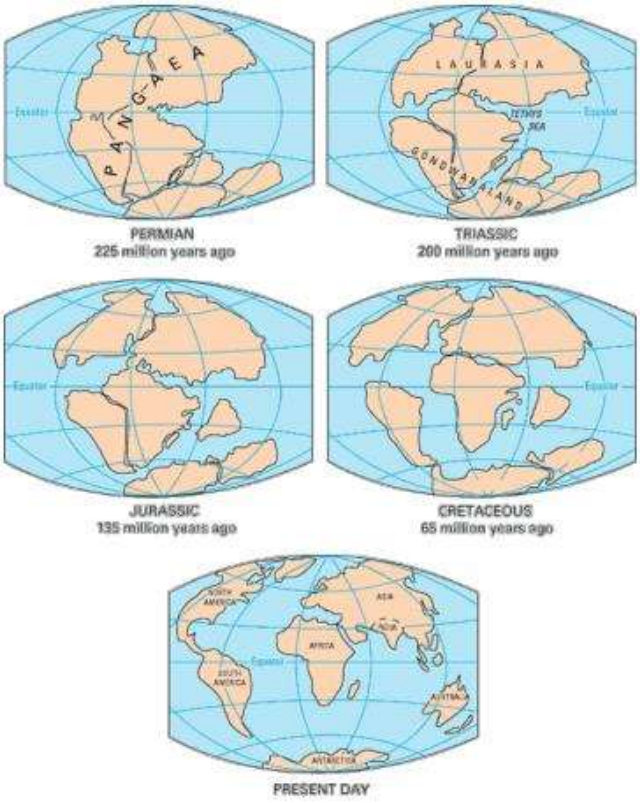
THE THEORY OF CONTINENTAL DRIFT

In 1912, *Alfred Wegener*, a German Geomorphologist proposed '***The Theory of Continental Drift'*** which was the first major attempt to study the formation of continents and oceans on the earth. The theory focusses on the concept of **PANGEA (all land)** and **PANTHALASA (all water surrounding the Pangea)** which eventually got divided into two parts – **ANGARALAND (Laurasia) and GONDWANALAND** with **Tethys Sea** in between.

The movement of these landmasses over the period of millions of years has led to the formation of continents and oceans that we can see today.

Figure 3 given below will help in explaining the formation of continents and oceans according to Wegener:

Continental Drift: a theory



- In 1912, Alfred Wegener proposed the idea of "continental drift."
- The continents were once part of a single land mass and they *drifted* to their present locations.

The theory was mainly supported on the pretext of the famous 'Jig-Saw Puzzle Fit'.

Refer to Figure 4 given below

Evidence for Continental Drift

Jigsaw puzzle fit

Present-day continents

Although, the theory appears quite realistic but was ***criticized*** on several technical grounds mainly the agent responsible behind such massive movements. Nevertheless, the theory provided the base and a motivation to the scientists to work for a new theory that would give better reason for the formation of continents and oceans.

It was in 1960s that the set of scientists brought forward a more valid theory – that is 'THE THEORY OF PLATE TECTONICS'. We can say that Wegener's theory became a very concrete base for the 'Theory of Plate Tectonics' that explained the formation of continents, oceans and even formation of landform features like Himalayas.

https://www.youtube.com/watch?v=YPLsogIPTw0

The above link further explains how the continents and oceans evolved from Pangea.

CONCLUSION

Besides, all the geological formations, a number of processes such as weathering, erosion and deposition have modified the relief to its present form. The two processes – endogenic and exogenic work simultaneously and bring the changes on the face of the earth.

ASSIGNMENT

Q.1. Explain the three types of rocks found on the continental crust .(Give two examples of each type.)

Q.2. Find out and write the meanings of the following terms:

a. Pangea

b. Panthalasa

c. Tethys Sea

d. Endogenic Forces

e. Exogenic Forces

f. Erosion

g. Deposition

Q.3. Observe figure 3 carefully and explain the components of Angaraland and Gondwanaland.