

Our Ever Changing Earth

Exercises

Long answer questions:

- 1.** What do you mean by exogenic and endogenic forces? Give two examples that can be counted as an effect of these two forces.
- 2.** How is a delta formed at the mouth of a river?
- 3.** How does wind action change the surface in deserts?
- 4.** Differentiate between erosion and weathering?

Solutions

Long-answer questions:

1. Endogenic forces cause movements of the earth's crust. These movements can be slow or sudden. Sudden movements may lead to earthquakes, landslides and volcanic eruptions. Slow movements cause land folding and faulting as well as elevations (mountains) and depressions (rift valleys).
Exogenic forces on the other hand are forces that change the earth's surface (crust) from outside-these include weathering, erosion, soil creep and landslides.
2. As the river approaches the sea, the energy of a river gradually reduces in the last stage. The river water is unable to carry any sediment with it at this stage. So, the river starts depositing its sediment. Due to weak river currents, layers of sediments build up at the mouth of the river and the river channel is blocked with the sediment. The river is then forced to divide into a series of separate channels or distributaries that form a delta after some time. Gradually, plants start growing on the delta that support and stabilise it.
3. Wind is responsible for erosion in the deserts. When it blows across the land, it picks up tiny particles of loose sand. These sand particles strike forcefully against the rocks in case of strong winds or storms. This is called sandblast. Mushroom rocks are formed due to sandblasting as the lower part of the rocks erode more quickly as compared to the top giving the rock a mushroom shape. When sand is deposited at a place, sand dunes are formed. Thus constant wind action shapes the outer surface in deserts into different landforms.

4.

Erosion	Weathering
Small rock fragments broken p due to the process of weathering are removed by the agents of nature, viz. wind water and ice. This eroded material is deposited at some other locations. This weathering of the upper layer of the earth and transportation of material at other locations is called erosion.	Weathering is the breaking up of rocks. For example, due to repeated and rapid heating and cooling, rocks develop cracks. These cracks widen further and finally the rocks break up into smaller pieces.