**What are Drains?**

Drains are long dug trenches in the soil used to remove excess water.

**Types of drains**

**Natural drainage**- this when water permeates the soil to enter underground water channel. Soil such as sand and limestone (marl) are prone to this, they well aerated but suffer during dry periods.

**Artificial drainage**- are created by means of ditches or underground drains, and is necessary on heavy clay soils and loams. Some of these drains are dung on hillside and are referred to as contour drains.

**Importance of drains in soil fertility**

1. Plants does better on a well drain soil, this is because:
2. It encourages aeration; make oxygen more available to root hairs so they can absorb nutrients from the soil and the activities of soil organisms.
3. Increases root room so they are able to pull up water.

**Activity for Irrigation and Drainage**

1. Say why:
2. Sandy soils have natural drainage
3. Sugar cane lands must be ploughed deeply
4. Farmers prefer to construct open drains in their garden plots
5. Say how:
6. drains increase root room
7. drainage improves aeration
8. Tell what type of irrigation is best suited for the following crops and explain why:
9. Rice or paddy
10. Vegetables leafy crops
11. Corn
12. Tomatoes
13. Sugarcane
14. Pastures on level lands
15. Tell why:
16. Shallow-rooted crops need more regular irrigation than deep rooted crops
17. Cultivated field-crops should not be flooded for very long periods
18. Crops should be irrigated to root depth
19. Crop growth is slow during the dry season