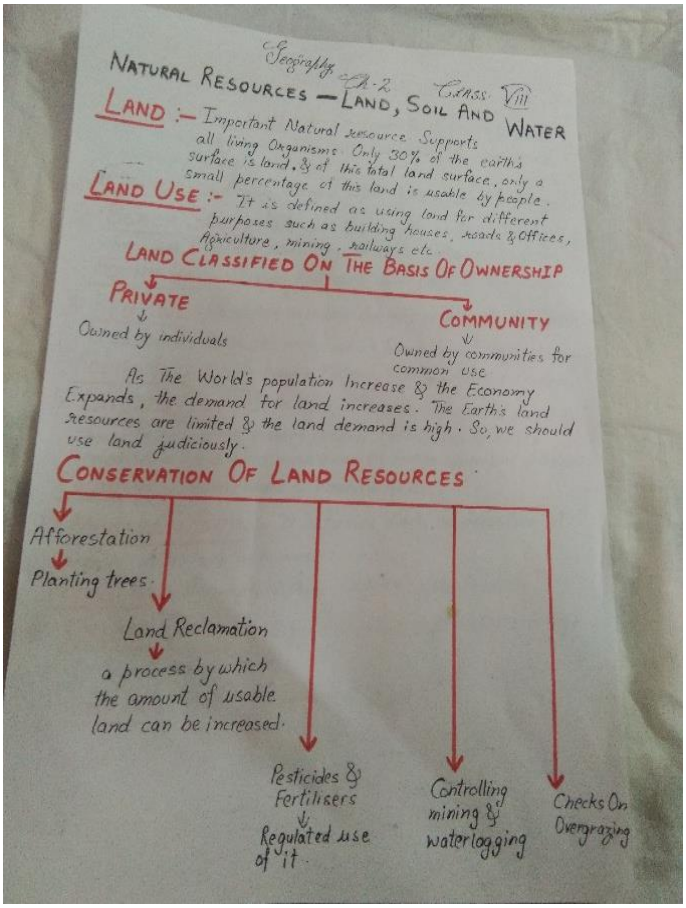
North Ex Public School
(Session 2020-2021)
Subject- Geography,
Class VIII, Chapters 2,
Natural Resources – Land And Soil
WORKSHEET NO. 5

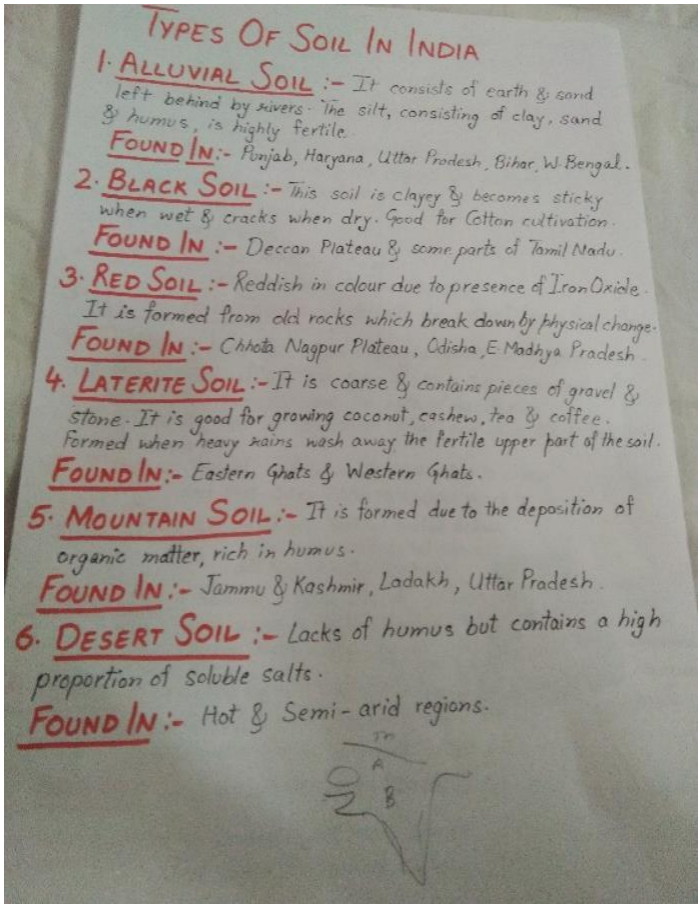
Before attempting this worksheet kindly go through the following link which will help you in attempting this worksheet

NOTE: if students are not having printer facility at home , they can copy the worksheet in a separate notebook and can write answers in that copy.

LINK : https://youtu.be/xuJZ3VDumec

Topic -Natural resources -Land and Soil .





SOIL :- It is the top layer of the land surface of the Earth. Composed of disintegrated rock particles, humus, water & Air. All the properties to sustain life.

FACTORS AFFECTING THE FORMATION OF SOIL

1. **PARENT ROCK** :- (i) How permeable (property) of soil is & on it will depend the drainage.
   (ii) Nutrients - mineral content
   (iii) Depth, Colour, Texture
   (iv) Acidic or Alkaline
2. **RELIEF** :- (i) Attitude / height
   (ii) Steepness of the Slope.
3. **FLORA AND FAUNA** :- Affects the rate of humus formation.
4. **CLIMATE** :- (i) Rate of weathering depends on temperature.
   (ii) Precipitation affects the type of soil, the movement of water within the Soil and the rate of weathering.
   (iii) Affects the rate of vegetation decay and also the formation of humus.
5. **TIME** :- Soil of certain depth is needed to support agriculture and that takes 3000 to 12000 years to form.

SOIL PROFILE :- It is a Vertical section below the earths surface that shows diff layers, known as HORIZONS

SOIL PROFILE

O-horizon :- Top most, Organic layer of soil, made up by decomposed Organic matter to form "Humus".

A-horizon :- Called Top soil. Consists of fine particles & is soft & porous & can hold water. Seeds Germinate & Plant roots grow.

C-horizon :- Comprises the deposit on the Earth's surface where Soil develop.

D-horizon :- Unbroken Solid rock sheets, & are located several feet below the ground surface. It is also called bedrock.

B-horizon :- Consists of SUBSOIL. Made up of Soluble minerals.

SOIL EROSION :- The top soil which is fertile part is carried away by strong winds, rainfall, etc. It makes the land barren. This is called soil erosion.

CAUSED BY FOLLOWING WAYS :-

1. DUE TO OVERGRAZING BY ANIMALS
2. BY DEFORESTATION
3. IMPROPER METHODS OF CULTIVATION
4. HEAVY RAINS, LANDSLIDES AND FLOODS ARE THE NATURAL CAUSES.

SOIL CONSERVATION :- Means protecting Top soil from getting eroded.

VARIOUS TECHNIQUES OF PREVENTING SOIL EROSION

1. **CONTOUR FARMING** :- Crops are grown in rows across the slopes rather than from the top downwards.
2. **TERRACE FARMING** :- Hill slopes are used. The farmer cuts steps or terraces, so that the speed at which the rainwater flows downhills is reduced.
3. **CROP ROTATION** :- It involves the growing of two or more crops alternately. It maintains the mineral contents of the soil & retains its fertility.
4. **CONTOUR BARRIERS** :- Bunds made using stones, grass & soil can be used to build barriers along contours to restrict the flow of water.
5. **MULCHING** :- The bare ground is covered with a layer of organic matter like straw or husk to retain soil moisture.

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6. **AFFORESTATION** :- Erosion of soil by wind can be prevented by planting trees. Trees act as wind breakers.
7. **SHELTER BELTS** :- In the coastal & dry regions, rows of trees are planted to check wind speed to protect soil cover.

IMPORTANT TERMS :-

1. **DERELICT LAND** :- An abandoned & damaged land e.g. after mining.
2. **LAND RECLAMATION** :- A process by which the amount of usable land can be increased
3. **TERRACING** :- Steps cut in hills slopes for cultivation.
4. **SOIL PROFILE** :- A vertical section below the earth's surface that shows different layers.
5. **DECAYED** :- (of organic matter) something which has started to rot through the action of bacter and fungi.

Questions

1. What is land use? Mention any three uses of land.
2. What are the causes of soil erosion?
3. Why land should be used judiciously. Give reason.
4. Give an account of the various methods of soil conservation.
5. Write two important features of each soil type in India.
6. Define Soil. Explain the factors that affecting the formation of Soil.
7. With the help of a neatly labelled diagram, describe a soil profile.
8. Give reason :-Conservation of resources is necessary.
9. Fill in the blanks
    I. -------soil is best for growing cotton.
    II. --------horizon of soil profile represents bedrock.
    III. ---------soil is found in hot and dry regions.
    IV. The Ganga Plain is covered with ----------soil.

Answers

1. Land use is defined as using land for different purposes.
   Uses of land :- Building houses, for agriculture, roads
2. Due to over grazing by animals, By deforestation, Improper methods of cultivation.
3. The world population is increasing and the economy expands, the demand for the land increases. The Earth land resources are limited and the land demand is high. So, we should use land judiciously.
4. Contour farming, Terrace farming, Crop rotation, Contour barriers, Mulching, Afforestation, Shelter belts.
5.
   a. Alluvial soil:-consisting of clay, sand and humus, highly fertile.
   b. Black soil :-clayey &become sticky when wet, Good for cotton cultivation.
   c. Red soil :-presence of Iron oxide, formed from old rocks break down by physical change.
   d. Laterite soil :-It is coarse & contain piece of gravel and stone.
   e. Mountain soil :-formed due to the deposition of organic matter, rich in humus.
   f. Desert soil:-lacks of humus but contain a high proportion of soluble salts.
6. Soil top layer of the land surface of the Earth composed of disintegrated rock particles, humus, water and air. Factors affecting the formation of soil :-
   a. Parent rock
   b. Relief
   c. Flora and fauna
   d. Climate
   e. Time
7. It is Vertical section below the earth surface that shows different layers known as Horizon. (Draw from above Notes.)
8. Conservation means protecting the resources. We can increase our land supply through land reclamation by restoring derelict land, draining swamps and creating new land by landfill methods.
9.
   i. Cotton
   ii. D-horizon
   iii. Desert
   iv. Alluvial