









NCERT Solutions for 7th Class Science: Chapter 9-Soil

Class 7: Science Chapter 9 solutions. Complete Class 7 Science Chapter 9 Notes.

NCERT Solutions for 7th Class Science: Chapter 9-Soil

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Exercises

Tick the most suitable answer in questions 1 and 2.

- 1. In addition to the rock particles, the soil contains
- (i) air and water



- (ii) water and plants
- (iii) minerals, organic matter, air and water
- (iv) water, air and plants

Answer

- √ (iii) minerals, organic matter, air and water
- 2. The water holding capacity is the highest in
- (i) sandy soil
- (ii) clayey soil
- (iii) loamy soil
- (iv) mixture of sand and loam

Answer

- √ (ii) clayey soil
- 3. Match the items in Column I with those in Column II:

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Column I

(i) A home for living (a) Large particles organisms

(ii) Upper layer of the soil (b) All kinds of soil

(iii) Sandy soil (c) Dark in colour

(iv) Middle layer of the soil (d) Small particles and packed

tight

(v) Clayey soil (e) Lesser amount of humus

Answer





Column II

Column I

(i) A home for living (b) All kinds of soil organisms

(ii) Upper layer of the soil (c) Dark in colour

(iii) Sandy soil (a) Large particles

(iv) Middle layer of the soil (e) Lesser amount of humus

(v) Clayey soil (d) Small particles and packed

tight

4. Explain how soil is formed.

Answer

The soil is formed by the process of weathering in which the rocks break down by the action of wind, water and climate. It is a very slow process and big rocks get converted into soil.

5. How is clayey soil useful for crops?

Answer

Clayey soil is very useful for crops because:

- (i) It has very good water retaining capacity.
- (ii) This soil is rich in humus and is very fertile.
- (iii) It contains useful organic minerals.

These properties of loamy soil is very suitable for growing crops.

6. List the differences between clayey soil and sandy soil.

Answer





Loamy Soil

Clayey Soil

(i) It has much smaller particles. (i) It

(i) It has much larger particles.

(ii) It can hold good amount of water.

(ii) It cannot hold water.

.....

(iii) It is fertile. (iii) It is not fertile.

(iv) Air content is low. (iv)

(iv) Air get trapped between the

particles.

(iv) Particles are tightly packed

(iv) Particles are loosely packed

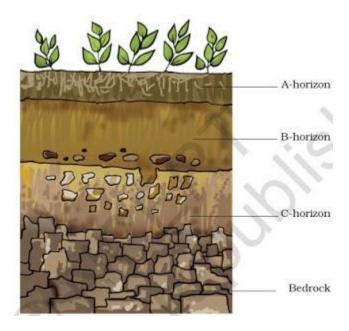
(iv) Good for growing various

(iv) Not suitable for growing crops.

crops.

7. Sketch the cross section of soil and label the various layers.

Answer







8. Razia conducted an experiment in the field related to the rate of percolation. She observed that it took 40 min for 200 mL of water to percolate through the soil sample. Calculate the rate of percolation.

Answer

Amount of water taken = 200 mL

Time taken by water to percolate = 40 min

- :. Rate of percolation = Amount of water taken/Time taken by water to percolate
- = 200 mL/40 min = 5 mL/min

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9. Explain how soil pollution and soil erosion could be prevented.

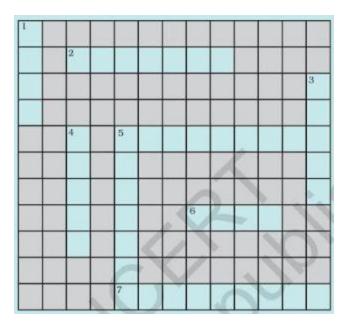
Answer

Steps for preventing soil pollution and soil erosion:

- (i) Plantation should be encouraged because plant roots firmly bind the soil and help in preventing erosion.
- (ii) Methods like crop rotation and mixed farming should be followed.
- (iii) Use of organic fertilizers and manure instead of synthetic.
- (iv) Pesticides and insecticides should be used in limited quantity and find natural way to prevent it.
- (v) Plastic bags should b banned and it doesn't decompose and gives rise to soil pollution.
- (vi) Industrial waste shouldn't be dumped directly as it kill necessary micro organisms of soil.
- 10. Solve the following crossword puzzle with the clues given:







Across

- 2. Plantation prevents it.
- 5. Use should be banned to avoid soil pollution.
- 6. Type of soil used for making pottery.
- 7. Living organism in the soil.

Down

- 1. In desert soil erosion occurs through.
- 3. Clay and loam are suitable for cereals like.
- 4. This type of soil can hold very little water.
- 5. Collective name for layers of soil.

Answer





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Across

- 2. Plantation prevents it. → Erosion
- 5. Use should be banned to avoid soil pollution. \rightarrow Polythene
- 6. Type of soil used for making pottery. \rightarrow Clay
- 7. Living organism in the soil. → Earthworm

Down

- 1. In desert soil erosion occurs through. \rightarrow Wind
- 3. Clay and loam are suitable for cereals like. \rightarrow Wheat
- 4. This type of soil can hold very little water. \rightarrow Sandy
- 5. Collective name for layers of soil. \rightarrow Profile







Chapterwise NCERT Solutions for Class 7 Science:

- <u>Chapter 1 Nutrition in</u> Plants
- Chapter 2 Nutrition in Animals
- Chapter 3 Fibre to Fabric
- Chapter 4 Heat
- <u>Chapter 5 Acids, Bases and</u> Salts
- Chapter 6 Physical and Chemical Changes
- Chapter 7 Weather,
 Climate and Adaptations
 of Animals to Climate
- <u>Chapter 8 Winds, Storms</u> and Cyclones
- Chapter 9 Soil

- <u>Chapter 10 Respiration in</u>
 <u>Organisms</u>
- <u>Chapter 11 Transportation</u> <u>in Animals and Plants</u>
- <u>Chapter 12 Reproduction</u> in Plants
- Chapter 13 Motion and Time
- Chapter 14 Electric
 Current and Its Effects
- Chapter 15 Light
- Chapter 16 Water: A
 Precious Resource
- Chapter 17 Forests: Our Lifeline
- Chapter 18 WastewaterStory





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