NCERT Solutions For Class 8 Science Chapter 1 Crop Production and Management

Here, we have provided NCERT Solutions For Class 8 Science Chapter 1. Class 8 students can refer to these NCERT solutions for Chapter 1 before exams for a better understanding of the concepts.

NCERT Solutions for Class 8 Science Chapter 1 discusses the production and management of crops in detail. The subject experts have created solutions considering the most recent <u>CBSE Class 8 Science Syllabus</u> and guidelines. This article provides you with an overview of each topic covered in Chapter 1 as well as solutions to the questions given at the end of the chapter.

NCERT Solutions For Class 8 Science Chapter 1 Overview

NCERT Solutions For Class 8 Science Chapter 1 Crop production and Management Overview: The first chapter of the Class 8 Science textbook from the NCERT introduces the principles of agriculture and farming techniques. Students will gain an understanding of several facets of crop production, such as agricultural techniques, soil preparation, planting, irrigation, and harvesting.

The necessity of agriculture for life support and food security is discussed at the beginning of the chapter. It talks about the many phases of crop cultivation. Students gain knowledge of the many crop varieties and the conditions necessary for their growth.

Other important topics discussed in this chapter include techniques for preparing the soil, which are critical for meeting nutrient requirements for crops and preserving soil fertility. The chapter also explores modern and ancient irrigation strategies to guarantee improved crop production with an adequate supply of water.

NCERT Solutions For Class 8 Science Chapter 1 PDF

For the convenience of the students, we have provided the NCERT Solution for Class 8 Science Chapter 1 in PDF format here. Students can download it from the given link below and study thoroughly to gain a better understanding of the concepts covered in the first chapter of the CBSE Class 8 Science textbook.

NCERT Solution for Class 8 Science Chapter PDF

List of the Topics Covered in CBSE Class 8 Science Chapter 1

Here is the list of all the topics covered in CBSE Class 8 Science Chapter 1

- Agricultural Practices
- Basic Practices of Crop Production
- Preparation of Soil
- Sowing
- Adding Manure and Fertilizers
- Irrigation
- Protection from Weeds
- Harvesting
- Storage
- Food and Animals

NCERT Solutions For Class 8 Science Chapter 1 Exercise

Exercise Questions

1. Select the correct word from the following list and fill in the blanks.

float, water, crop, nutrients, preparation

(a)	The	same	kind	of	plants	grown	and	cultivated	on	a	large	scale	at a	ı place	e is
call	led _				.•										

(b) The	first step before	e growing cro	ps is	of the soil
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(c) [amag	ged seeds v	wou	ld		on top of v		
(d)	For	growing	а	crop,	sufficient	sunlight	and	 and
		fror	n th	ne soil a	re essential.			

Solution:

- (a) The same kind of plants grown and cultivated on a large scale at a place is called the **crop**.
- (b) The first step before growing crops is the **preparation** of the soil.
- (c) Damaged seeds would **float** on top of the water.
- (d) For growing a crop, sufficient sunlight, water, and nutrients from the soil are essential.

2. Match items in column A with those in column B.

(1) Kharif crops	(a) Food for cattle
(2) Rabi crops	(b) Urea and superphosphate
(3) Chemical fertilizers	(c) Animal excreta, cow dung urine and plant waste
(4) Organic Manures	(d) Wheat, gram, pea
	(e) Paddy and maize

Solution

(2) Kharif crops	(e) Paddy and Maize
(2) Rabi crops	(d) Wheat, gram, pea
(3) Chemical fertilizers	(b) Urea and superphosphate

- (4) Organic Manures (c) Animal excreta, cow dung urine and plant waste
- 3. Give two examples of each.
- (a) Kharif crop
- (b) Rabi crop

Solution:

Kharif crops: Paddy and maize

Rabi crops: Wheat and pea

- 4. Write a paragraph in your own words on each of the following.
- (a) Preparation of soil
- (b) Sowing
- (c) Weeding
- (d) Threshing

Solution:

Preparation of the soil is the first step in agriculture. It involves loosening the soil to enable root penetration and ensure roots can breathe easily. This process promotes the growth of earthworms and microorganisms that add humus to the soil, enhancing its fertility. Additionally, loosening the soil brings nutrient-rich soil to the surface, which is vital for plant growth.

Sowing is a critical process in crop production. It starts with the selection of healthy seeds. Sowing can be done using traditional methods or modern equipment like seed drills, ensuring seeds are planted at the right depth and spacing for optimal growth.

Weeding involves the removal of unwanted plants, known as weeds, from the crop field. Weeds compete with crops for nutrients and water, reducing crop yield. Methods to control weeds include tilling the soil before sowing, manual removal, and the use of weedicides, although the latter can pose health risks to farmers due to the chemicals used.

Threshing is the process of separating grains from the chaff. It is commonly done using a machine called a combine, which both harvests and threshes the crops. Threshing can also be performed through winnowing, where air is used to separate the lighter chaff from the heavier grains.

5. What is irrigation? Describe two methods of irrigation that conserve water.

Solution:

Irrigation is the process of providing water to crops at regular intervals. Two water-conserving irrigation methods are:

- (a) **Drip Irrigation:** This method delivers water directly to the plant roots, drop by drop, significantly reducing water waste and minimizing weed growth.
- **(b) Sprinkler System:** Ideal for uneven terrain and areas with limited water supply, this system uses perpendicular pipes with rotating nozzles to evenly distribute water over the crops, mimicking natural rainfall.
- 6. If wheat is sown in the Kharif season, what would happen? Discuss.

Solution:

Sowing wheat during the Kharif season would likely result in crop failure due to unfavorable conditions such as high temperatures, excessive rainfall, and pest infestations. Wheat requires cooler and drier conditions, which are not present during the Kharif season.

7. Describe how a field's continuous crop planting affects the soil.

Solution:

Planting crops continuously in a field depletes essential nutrients such as nitrogen, phosphorus, and potassium. This depletion reduces soil fertility and leads to lower crop yields. To restore soil nutrients and maintain soil health, it is essential to practice crop rotation and allow the field to lie fallow periodically.

8. Explain how fertilizers are different from manures.

Solutions:

Fertilizers	Manure
Fertilizer is an inorganic substance.	Manure is an organic substance.
Fertilizers are prepared artificially	Animal, plant, and human waste decompose to produce manure.
Prepared in factories	Prepared in fields
Do not add humus to the soil	Provide humus to the soil
Rich in plant nutrients	Relatively less in plant nutrients
Long-term usage has adverse effects on soil.	Long-term usage improves soil fertility.

9. What are weeds? How can we control them?

Solution:

Weeds are undesirable plants that grow among crops and compete with them for nutrients, water, and sunlight. They can be controlled through various methods:

- **Tilling:** This involves turning the soil before sowing, which helps to uproot and kill weeds.
- Manual Removal: Physically pulling out weeds from the fields.
- **Weedicides:** Applying chemical sprays to eliminate weeds, though care must be taken as these can pose health risks to farmers.

Benefits of Referring to NCERT Solutions For Class 8 Science Chapter 1 Notes

Students can get the following benefits by referring to NCERT Solutions for Class 8 Science Chapter 1.

- Comprehensive Understanding: The solutions provide detailed explanations of key concepts, which helps students understand important topics thoroughly.
- **Exam Preparation:** These notes offer a structured approach to revision, making it easier for students to prepare for exams effectively.
- **Practice and Reinforcement**: The solutions include a variety of practice questions that reinforce learning and enhance problem-solving skills.
- **Time Management:** By providing precise and concise answers, these notes help students save time during exam preparation and homework completion.
- Adherence to Syllabus: The solutions are designed in accordance with the latest CBSE syllabus, which ensures that students are studying relevant and updated material.
- Improved Performance: Regular use of these notes can lead to better performance in assessments and a stronger foundation in science.
- Confidence Boost: Understanding and mastering the material boosts students' confidence and encourages them to tackle more challenging topics with ease.

NCERT Solutions For Class 8 Science Chapter 1 FAQs

1. How do farmers separate healthy and damaged seeds?

Ans. Farmers can put some seeds in a container full of water and stir them thoroughly. After some time, the damaged seeds are found floating on water because they are hollow from inside and thus lighter. These damaged seeds are then separated.

2. How do manures differ from fertilizers from a production point of view?

Ans. Fertilizers are produced in factories, whereas manures are natural substances obtained by decomposing animal wastes and residues.

3. What are the seasonal times for Kharif and Rabi crop production?

Ans. Kharif crops are grown in rainy seasons, and Rabi crops are cultivated in winter seasons.

4. How is drip irrigation used in areas with poor water availability?

Ans. In drip irrigation, water is supplied drop-by-drop in a particular position, especially on the roots of plants. It saves a lot of water without any waste, so it is useful in areas with poor water availability.

5. What is the correct time to apply weedicides?

Ans. The best time for spraying weedicides to destroy weeds in the field is before flowering and seed formation in crops.

