

## Lesson-11: Introduction to Agriculture in India

Theme 8: How Does Technology Work?

11 Periods (40 minutes each)



Learn Better (Main Coursebook), Stay Ahead (Workbook), Book of Holistic Teaching, Book of Project Ideas, CRM signs, Poster, Gratitude sheet



Animation, Animated Activities, Concept Map, Dictionary, eBook, Infographic, Quiz, Slideshow, Video, Test Generator

Confirming better

I am grateful for my meals.

### Curricular Goals and Objectives (NCF)

#### To enable the students:

- to develop an understanding of why agriculture is important in India.
- to explore the different types of crops grown in various seasons and regions.
- to identify the factors that influence the growth of crops such as soil, water, climate and tools.
- to recognise the role of animals in farming and how livestock is cared for.
- to understand what horticulture is and how fruits, vegetables and flowers are grown.
- to become aware of the different ways people catch fish in rivers, seas and ponds.
- to learn and use new words related to farming, crops and animal care.

### Methodology

#### Period 1

**Teacher:** Good morning, everyone.

Today, we are going to begin an exciting new lesson. It is all about something that helps us get the food we eat every day. Can you guess what it is?

(Pause for responses)

**Teacher:** Yes, it is agriculture. Agriculture means growing crops and taking care of animals to get food, clothes and other things we need.

**Teacher:** Let us warm up with a few quick questions. Are you ready?

**Teacher:** Where do you think the rice or wheat in your meals comes from?

(Pause for responses)

**Teacher:** That is right. Farmers grow them in fields. Those fields are part of agriculture.

**Teacher:** Can you name some fruits or vegetables that are grown on farms?

(Pause for responses)

**Teacher:** Great answers. Tomatoes, mangoes, potatoes. All of these come from farms.

**Teacher:** Now, can you think of animals that are raised on farms?

(Pause for responses)

**Teacher:** Yes. Cows, goats and hens are all part of farming too. Farmers take care of them and we get milk, eggs and meat.

SHOULD DO

5 MIN.



**Teacher:** Why do you think farming is important? (Pause for responses)

**Teacher:** Good thinking. Farming gives us food, helps many people earn money and keeps our villages and towns busy and healthy.

**Teacher:** Alright, let us begin learning more about agriculture in India.

#### Confirming better

**Teacher:** Now, let us move to the 'Confirming Better' section. It says, 'I am grateful for my meals.' Let us all say it together. (Pause and repeat with students)

MUST DO

5 MIN.



Confirming better I am grateful for my meals. PLH 68

**Teacher & Students:** 'I am grateful for my meals.'

**Teacher:** I want you to take a moment and think about the meal you had today. Maybe it was breakfast or a snack. Who prepared it? Where did it come from? (Pause for responses)

**Teacher:** Yes, meals don't just appear. Farmers grow the food, someone cooks it and we get to enjoy it. So many people help us get our food.

**Teacher:** How do you feel when you eat something delicious or when you are really hungry and finally get your meal?

(Pause for responses)

**Teacher:** That is right. We feel happy, full and cared for. That is why it is important to be thankful for the meals we get.

**Teacher:** Now, imagine if someone didn't have enough food to eat. How would that feel?

(Pause for responses)

**Teacher:** Yes, it would be very hard. That is why we must never waste food and always be thankful for what we have.

**Teacher:** So, every time we eat, let us remember to feel grateful. Can we all say it one more time?

**Teacher & Students:** 'I am grateful for my meals.'

### KWL chart

**Teacher:** We will begin a new chapter, 'Introduction to Agriculture in India'. We are going to use a KWL chart to help us organise our thoughts and learning. I have made a KWL format on the blackboard. Please take out your notebooks and draw the same format.

K	W	L

**Teacher:** The KWL chart has three columns. The first column is labelled 'K,' in which you will write what you already know about the topic. In the second column 'W', you will write what you want to know and the third column 'L' is what I have learnt, which you will fill at the end.

**Teacher:** Take a few minutes to think and write. If you have any questions, feel free to ask.

**Teacher:** You all did amazing work in this activity. Let us move on to Re-KAP activities. We will use Kinaesthetic, Auditory and Pictorial activities today to make our learning exciting. Let us start with the Kinaesthetic activity.

### Kinaesthetic

#### Kinaesthetic

Work in pairs. Write the names of three agricultural products. Give your sheet to your partner. They will write the name and one area where it is grown. 68

**Teacher:** Alright, everyone. Let us get ready for a fun activity called 'Name and Match'. We are going to move around a bit and learn about the food we eat.

**Teacher:** You will be working in pairs for this activity. Here is how it works:

**Teacher:** First, each of you will write the names of three agricultural products on a sheet of paper. These can be crops like rice, wheat, cotton or fruits and vegetables like mango or tomato.

**Teacher:** Then, you will exchange your sheet with your partner.

**Teacher:** Now, your partner will write the name of one place in India where each of those products is grown.

For example, if the word is 'rice,' they might write 'West Bengal.'

**Teacher:** You will have about 5 minutes for the whole activity. Walk around your table if needed, talk softly and help each other.

**Teacher:** Ready? Let us get started and see how much we already know about agriculture in India.

**Teacher (after activity):** Well done, everyone. You worked in pairs, shared your ideas and learnt about where our food comes from. Now let us get ready to learn more.

### Auditory

#### Auditory\*

Listen to your teacher carefully. Answer the questions. 68

**Teacher:** Now, I want you all to listen to me carefully. I will read out a few special words. These words are related to crops, farming and how people in different parts of India celebrate festivals associated with crops or use things made from crops.

**Teacher:** After I say each word, I want you to write down one or two words that you think are connected to it. It could be a type of crop, a festival, a place or something made from crops.

**Teacher:** Are you ready? Let us begin.

1. Great Plains of India
2. Onam
3. Bihu
4. Pashmina
5. Jamdani saris

(Give students time to write after each word)

**Teacher:** Wonderful. I could see you were all listening carefully and thinking. Now let us talk about your answers and learn more about how these words are linked to crops and farming in India.

### Pictorial

#### Pictorial - PS

Tick (✓) the landforms that are best suited for farming. 68


☐

☐

☐

☐

**Teacher:** Look at the pictures under the 'Pictorial' section on page 68. We are going to find out which landforms are best suited for farming. Once we identify them, we will tick (✓) the correct boxes. Ready?

**MUST DO**

10 MIN.



**Teacher:** Let us start with the first picture (top left). This shows an area with water and many small islands. Can we grow crops easily here?

(Pause for responses)

**Teacher:** No, it is difficult to grow crops on small islands like these. So, do not tick (✓) the box for this one.

**Teacher:** Now, look at the second picture (top right). This shows a flat land with many green fields. What do you think? Can crops grow well here?

(Pause for responses)

**Teacher:** Yes, that is right. Flat, fertile land like this is great for farming. So, tick (✓) the box next to this picture.

**Teacher:** Let us move to the third picture (bottom left). This shows a hilly area with a river. It is beautiful, but do you think it is easy to grow crops here?

(Pause for responses)

**Teacher:** Correct. It might be difficult to farm on steep hills, so do not tick (✓) this box either.

**Teacher:** Finally, look at the fourth picture (bottom right). This shows a desert with sand and a camel. Is farming possible in dry and sandy places like this?

(Pause for responses)

**Teacher:** Right again. Deserts do not get much water, so they are not good for farming. So, do not tick (✓) this one.

**Teacher:** Great work, everyone. Let us check your answers. You should have ticked only the picture of the green farmland. Well done. Give yourselves a big round of applause for thinking like little geographers today. See you in the next class.



You may show the **eBook** given on the digital platform.

### Differentiated Activities

**110 km/hr**



Draw or describe two landforms (not shown in the picture) and write whether they are good for farming or not.

**80 km/hr**



(Provide a small worksheet with pictures of landforms.)

For each landform, ask students to decide if it is 'Good for farming' or 'Not good for farming.' Then, match each landform with the correct farming possibility.

**40 km/hr**



Give cut-outs or flashcards of the same four landforms. Ask them to sort into two groups:

- Can be used for farming
- Cannot be used for farming

### Home Task

Ask an adult at home what crops are grown in your area/region. Write down the name of one crop and why it grows well there. (Example: 'We grow rice because we have a lot of rain.'). Bring your notes to class tomorrow to share.

### Period 2

**Teacher:** Good morning/afternoon, everyone. Before we start today's lesson, let us do a quick and fun warm-up activity. I will ask you a few interesting questions related to farming and food and I want you to answer quickly. Ready?

**Teacher:** What is your favourite fruit or vegetable to eat?

**Teacher:** Yummy. Mangoes, carrots and tomatoes. Those are all delicious and healthy.

**Teacher:** Now tell me, where do you think these fruits and vegetables come from? Do they grow in a shop or somewhere else?

(Pause for student responses)

**Teacher:** That is right. They grow on farms. Farmers grow them in fields and that is how we get our food.

**Teacher:** Can you name one thing a farmer needs to grow crops?

**Teacher:** Yes. Water, seeds, sunlight and good soil are all important for growing plants.

**Teacher:** Last question: Have you ever seen a farm or fields while travelling or in a movie?

**Teacher:** Wonderful. Farms are such an important part of our lives, even if we live in cities.

**Teacher:** Well done, everyone. Now, let us move on to today's lesson and learn more about agriculture in India.

### Interacting better



**Interacting better**

Discuss with your partner. Write the names of five plant-based food items you eat every day.

ICL

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**Teacher:** Alright, everyone. Please turn to the 'Interacting Better' section on page 69 of your Main Coursebook.

**MUST DO**

10 MIN.



**Teacher:** The question here says: 'Discuss with your partner. Write the names of five plant-based food items you eat every day.'

**Teacher:** This means we are going to talk about the foods that come from plants like fruits, vegetables, grains and pulses.

**Teacher:** Take a few seconds to think what you usually eat for breakfast, lunch or dinner that comes from a plant?

**Teacher:** Now, find a partner. You will each share some plant-based foods you eat every day. After talking, write down five plant-based food items you both mentioned.

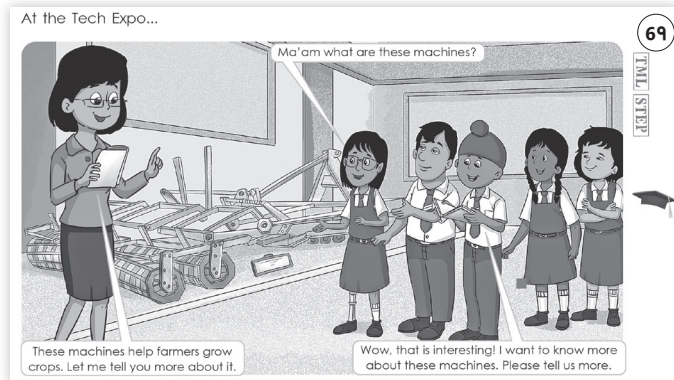
**Teacher:** You will have 2 minutes to talk and write. Ready? Let us begin.

(Give students 2 minutes to talk and note down the items.)

**Teacher:** Time is up. Let us hear a few examples. Who would like to share the food items their partner mentioned?

**Teacher:** That is excellent. We eat so many things that come from plants. Rice, dal, bananas, spinach, chapati—all of these are from farms.

**Teacher:** Great work, everyone. Let us move to the next part of the lesson.



**Teacher:** Look at the image. The children are curious about something interesting they have seen. Have you seen something like this before?

(Pause for student responses)

**Teacher:** That is right. These could be machines that help with ploughing the soil, planting seeds or even cutting crops. Isn't that amazing?

If you could ask one question about farming machines, what would you ask?

(Pause and take a few responses.)

**Teacher:** That is wonderful. Let us read further to know more about agriculture.

Agriculture means to grow plants or crops on land. Horticulture, livestock rearing and fishing are also included in agriculture.

More than two thirds of our country's population is engaged in farming. Thus, agriculture is the main occupation in India.

**TYPES OF CROPS**

Many crops can be grown in India. This is because India has fertile soil, suitable climate and good irrigation facilities. Crops grown in India can be classified as – food crops and cash crops.

**Food crops**

Crops cultivated for consumption are called food crops. Rice, wheat, pulses and millets are some examples. Common millets, such as jowar, bajra,

rice cultivation

**Discovering Better**

**millets:** types of crops whose seeds are used as food

LAD

**Teacher:** We all eat food every day—rice, wheat, vegetables, fruits etc. But have you ever wondered where all this food comes from?

**Teacher:** Yes. It all starts with agriculture, which means growing plants or crops on land. But agriculture is not just about crops. Can anyone guess what else it includes?

**Teacher:** That is right. Agriculture also includes horticulture (growing fruits, vegetables and flowers), livestock rearing (like taking care of cows, goats and hens) and fishing.

**Teacher:** In fact, more than two-thirds of the people in India are farmers. That means most people in our country are connected to agriculture in some way or the other.

**Teacher:** Can anyone tell me why farming is considered so important in India?

(Pause for student responses)

**Teacher:** Excellent answers. Yes, because it gives us food, jobs and even things we use every day, like cotton for our clothes or sugar for sweets.

**Teacher:** Imagine you are a farmer. What crop would you like to grow—rice, wheat, cotton or something else? Why? (Give students time to respond and encourage them to share their thoughts briefly with the class.)

**Teacher:** So today, we learnt that:

- Agriculture means growing crops on land.
- It also includes growing fruits, raising animals and catching fish.
- Most people in India are involved in agriculture, which makes it very important for our country.

**Teacher:** Great job, everyone. We will continue our lesson in the next class.

You may show the **Animation** given on digital platform.

## Differentiated Activities

**110 km/hr**



1. If you had a farm, what three things would you grow or raise? Why?
2. Can you think of two ways farming helps the whole country?

**80 km/hr**



Answer these questions in your notebook:

1. What is agriculture?
2. Name two other activities that are included in agriculture besides growing crops.

**40 km/hr**



Look at the words below. Circle the ones that are part of agriculture.

- Cricket

- Farming
- Livestock
- Football
- Horticulture
- Drawing
- Fishing
- Cooking

## Home Task

In your notebook, list down the major crops that are grown in India. You may take the help of an adult for this activity to gather information from the internet.



## Period 3

**Teacher:** Hello, everyone. Before we start today's lesson, let us do a little warm-up activity to get our brains thinking like farmers.

**SHOULD DO**

10 MIN.

**Teacher:** Imagine this. You are standing in a big green field. The sun is shining and you can see rows of plants growing. Some plants will give us food to eat. Others will be taken to factories to make things or sold in markets. Isn't that interesting?

(Pause for responses and questions)

**Teacher:** Today, we are going to learn about the two main types of crops that farmers grow. One type is grown mainly for eating. The other is grown to be sold or used in industries.

**Teacher:** We will explore examples of both types and find out how they help us in different ways.

**MUST DO**

30 MIN.

### Types of Crops

#### TYPES OF CROPS

Many crops can be grown in India. This is because India has fertile soil, suitable climate and good irrigation facilities. Crops grown in India can be classified as – food crops and cash crops.

#### Food crops

Crops cultivated for consumption are called food crops. Rice, wheat, pulses and millets are some examples. Common millets, such as jowar, bajra,



**Discovering better**

**millets:** types of crops whose seeds are used as food

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**Teacher:** Now, look at the 'Types of Crops' section. Today, we're going to learn about the different kinds of crops grown in our country and how farming has improved over time.

**Teacher:** Did you know that India is one of the top countries in the world when it comes to farming? This is because we have fertile soil, a good climate and lots of rivers and irrigation to help plants grow.

**Teacher:** Let us first talk about the two main types of crops. The first one is called food crops. These are the crops we grow to eat. Can anyone guess what might be included here?

(Wait for guesses – guide them if needed)

**Teacher:** That is right. Some food crops are rice, wheat, pulses like moong, masoor and arhar and millets like jowar, bajra and ragi.

**Teacher:** Have you eaten any of these at home? Which one is your favourite?

(Encourage responses.)

### Discovering better

**Teacher:** Now, take a look at 'Discovering better'. It explains what millets are.

(Ask any student to read out to the whole class. Show them pictures or real samples of millets. Encourage them to share whether they have seen millets used in their homes.)

ragi, and pulses, such as moong, masoor and arhar, are grown in India. Rice and wheat are the main food crops here.

#### Cash crops

Cash crops are grown for sale in the market. Some of them are also used in industries. Sugarcane, jute, cotton, tea and coffee are the primary cash crops. Map 11.1 shows the crop distribution in India.

#### AGRICULTURAL PRODUCTION

Various factors have contributed to the increase in India's total agricultural production since Independence. They are:

1. use of tractors and other modern machinery for agriculture
2. use of fertilisers\* and pesticides\*
3. use of better quality seeds
4. irrigation of more areas

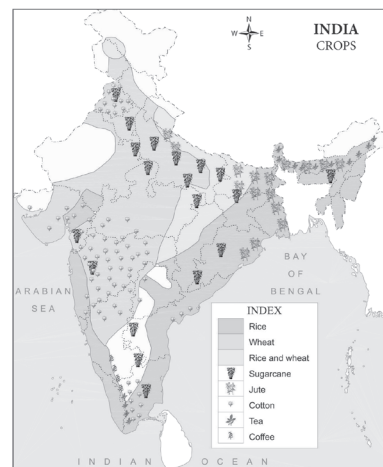


**Understanding better**

**Soy pulse or pulse:**

1. Agriculture means cultivation of land.
2. Millet and pulses are the main food crops grown in India.

ICL



Map 11.1 crop distribution in India

\*Check the 'Grasping better' section to learn the meaning of the word.

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**Teacher:** Now, let us learn about the second type – cash crops. These are not usually grown for eating, but for selling in markets or using in industries. For example, sugarcane is used to make sugar and cotton is used to make clothes.

**Teacher:** Other cash crops include jute, tea and coffee. Have you seen tea plants or cotton in real life? Where? (Let students share experiences if any.)

**Teacher:** That is great. These two types of crops help farmers and our country in different ways – one helps feed people and the other helps in trade and factories.

**Teacher:** But how did farming become better in India over the years?

**Teacher:** After Independence, many things helped increase agricultural production. Let us look at them one by one:

1. Modern machines like tractors made the work of the farmers faster.
2. Fertilisers and pesticides helped protect crops and made them grow better.
3. Better quality seeds gave farmers more food from the same land.
4. More irrigation helped bring water to places where there wasn't enough.

**Teacher:** Isn't that interesting? Farming is not just about growing food. It also involves using science and tools to do it better.

**Teacher:** Let us take a minute to think. If you were a farmer, would you grow food crops or cash crops? Why? (Allow students to think and respond.)

**Teacher:** Wonderful. Now, look at the map given on page 70. It shows the distribution of crops in India. And this will help us to know the regions where each of these crops is grown.

 You may show the **Slideshow** given on digital platform.

## Differentiated Activities

**110 km/hr**



Imagine you are a farmer choosing between growing food crops and cash crops. Answer the following questions in 4-5 sentences:

- Which type of crop would you choose?
- Why would you choose it? (Think about money, food or helping others.)
- What tools or methods would you use to help your crops grow better?

**80 km/hr**



Write two sentences each about:

1. Food crops – What are they? Give two examples.
2. Cash crops – What are they? Give two examples.

**40 km/hr**



Draw two columns in your notebook – label them Food Crops and Cash Crops.

Sort the crops into the correct column:

- Rice
- Cotton
- Wheat
- Jute
- Moong
- Sugarcane

## Home Task

Ask your family or look around your kitchen to find 3 items that come from crops. Write their names and find out whether each one is a food crop or a cash crop. Write your answers in the following format:

Product Name – Rice

Type of crop – Food Crop

How it is used at home – To make lunch or dinner.

## Period 4

**Teacher:** Good morning, everyone. Before we start today's lesson, let us do a quick warm-up activity. I will ask you a few quick questions and you need to shout out your answers. Ready?

**Teacher:** First, can anyone name an animal that is kept on a farm?

**Students (Possible responses):** cow, goat, sheep, hen.

**Teacher:** Wonderful. Animals like cows, goats and chickens are all part of livestock. Now, can you name a fruit or vegetable that grows on trees or plants?

**Students (Possible responses):** mango, apple, tomato.

**Teacher:** Great. Growing fruits, vegetables and flowers is called horticulture.

One more—can you think of a water body where people catch fish?

**Students (Possible responses):** river, sea, pond, lake.


**Teacher:** Fantastic. Catching fish from rivers, seas and lakes is known as fishing.

You all are already little experts. Now, let us dive deeper and learn more about these important activities that help feed our country.

## Live Stock Rearing

**LIVESTOCK REARING**


Sometimes, animals help farmers in work. These animals are called livestock. Cow, buffalo, sheep, goat, bullock, camel, mule and yak are some examples. They help us in various ways.



sunflower field

**HORTICULTURE**

Horticulture means the cultivation of flowers, fruits and vegetables. These are grown to be sold in the market. Various horticultural crops are cultivated in our country.



cow shed

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**Teacher:** Look at the next section, 'Livestock Rearing'. It talks about how animals help farmers in their work.

**MUST DO**

10 MIN.

**Teacher:** Farmers take care of certain animals because these animals help them in different ways. These animals are called livestock. Can anyone name a few animals that farmers keep and care for?

(Encourage responses like cow, buffalo, goat, sheep, etc.)

**Teacher:** Excellent. Some examples of livestock are cows, buffaloes, sheep, goats, bullocks, camels, mules and yaks. These animals are very important because they help farmers in many ways.

**Teacher:** For example, cows and buffaloes give us milk. Bullocks and camels help in ploughing the fields. Sheep give us wool and goats provide milk and meat.

**Teacher:** Can you imagine how difficult farming would be without the help of these animals?

**Teacher:** That is right. Livestock make the farmer's work easier and help them earn a living too. Just like students need books and pencils to do their work well, farmers need healthy animals to do their job properly. That is why they take such good care of them.

**Teacher:** Well done, everyone. Livestock are truly the farmer's helpers.

## Horticulture

**Teacher:** Next, let us learn about 'Horticulture'. Horticulture means growing flowers, fruits and vegetables. These are grown carefully and sold in the market.

**Teacher:** Can you think of some flowers that are sold in markets?

(Encourage answers like rose, jasmine, marigold, etc.)

**Teacher:** Beautiful. Flowers like roses, marigolds and jasmine are grown on farms and sold in shops and flower markets. What about fruits? Can you name some fruits that farmers grow?

(Expected answers: mango, apple, banana, orange, etc.)

**Teacher:** Excellent. Mangoes, apples, bananas and oranges are all grown on farms and orchards through horticulture.

**Teacher:** And vegetables — we eat them every day. Can you list some vegetables you think are grown by farmers?

(Encourage responses like tomato, carrot, spinach, brinjal, etc.)

**Teacher:** Wonderful. Tomatoes, carrots, spinach, brinjals and many more are grown carefully by farmers who practise horticulture.

**Teacher:** These flowers, fruits and vegetables not only make our lives colourful and healthy but also help farmers earn money by selling them in markets.

**Teacher:** So, horticulture is very important — it gives us food to eat, flowers to make our surroundings look beautiful and helps farmers earn a living.

**Teacher:** Well done, everyone. Now you know how important horticulture is.

## Fishing

**Teacher:** Now, let us move to another important part of agriculture — Fishing.

### FISHING

Marine and inland are two ways of fishing. Marine fishing refers to catching fish from the sea. It is common in the coastal states of India. Sardine, mackerel and shrimp are caught by fishermen from the sea. Inland fishing refers to catching fish from lakes, ponds, canals and rivers. Fishermen catch freshwater prawns, rohu, katla and trouts. Inland fishing is popular in the states of Chhattisgarh, West Bengal, Assam and Himachal Pradesh.



(fishing nets (cheena vala))

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**Teacher:** There are two types of fishing — marine fishing and inland fishing. Let us understand the difference between them.

**Teacher:** First, marine fishing means catching fish from the sea or ocean. It is common in places that are near the sea, like the coastal states of India.

**Teacher:** Can anyone name a state that is close to the sea?

MUST DO

10 MIN.

(Encourage answers like Tamil Nadu, Kerala, Maharashtra, Gujarat, etc.)

**Teacher:** Well done. In marine fishing, fishermen catch fish like sardines, mackerel and shrimp from the sea.

**Teacher:** Now, inland fishing is different. Inland means areas that are away from the sea or ocean. So, inland fishing means catching fish from places like lakes, ponds, canals and rivers — not from the sea.

**Teacher:** In inland fishing, fishermen catch freshwater fish like rohu, katla, trout and freshwater prawns.

**Teacher:** Inland fishing is common in states like Chhattisgarh, West Bengal, Assam and Himachal Pradesh.

**Teacher:** So remember,

- Marine fishing = fish from seas or oceans.
- Inland fishing = fish from rivers, ponds and lakes.

**Teacher:** Fishing is important because it provides food for many people and also helps fishermen earn their living.

**Teacher:** Great job, everyone. Let us play a quick matching game.

COULD DO

5 MIN.

I will read out a place or a fish and you have to tell me whether it belongs to Marine Fishing or Inland Fishing. Ready?

- Sardine → \_\_\_\_\_
- Rohu → \_\_\_\_\_
- Pond → \_\_\_\_\_
- Shrimp → \_\_\_\_\_
- River → \_\_\_\_\_
- Sea → \_\_\_\_\_



You may show the **Animated Activities** given on digital platform.

## Differentiated Activities

110 km/hr



1. What is the difference between marine fishing and inland fishing?
2. Name two fish caught through marine fishing and two fish caught through inland fishing.

80 km/hr



- Complete these sentences:
1. Marine fishing means catching fish from the \_\_\_\_\_.

2. Inland fishing means catching fish from \_\_\_\_\_ and \_\_\_\_\_.
3. Two fish caught through inland fishing are \_\_\_\_\_ and \_\_\_\_\_.

40 km/hr



- Circle the correct word.
- Sardine → (Marine / Inland)
- Rohu → (Marine / Inland)
- Sea → (Marine / Inland)
- Pond → (Marine / Inland)

## Home Task

Read the lesson at home.

## Period 5

## Poster



**Teacher:** Hello, everyone. Today, I have something very colourful and exciting to show you.

(Display the poster in the class.)

**Teacher:** This poster tells us about the many important changes or revolutions that happened in Indian farming over the years. Each revolution focused on making one area of farming better — like growing more food, producing more milk, catching more fish or even making more honey.

**Teacher:** Let us take a quick look at some of them:

- The Green Revolution helped India grow more wheat and rice and made sure there was enough food for everyone.
- The White Revolution helped us produce a lot more milk — making India the largest milk producer in the world.
- The Blue Revolution made fishing better by using new technology to catch more fish.

- And the Red Revolution focused on growing more tomatoes.

(Encourage students to look closer.)

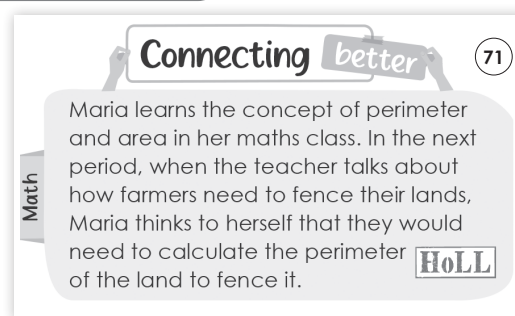
**Teacher:** Can you see there were revolutions for even things like mustard seeds, onions, honey and cocoa? Each colour stands for a different kind of improvement in farming.

**Teacher:** By using better seeds, new machines and smarter farming methods, India became stronger in agriculture. Farmers earned more money and people had more food to eat.

**Teacher:** We will now go through each revolution briefly. Pay attention, you will discover just how amazing our farmers and scientists have been in making India a food-secure country.

(Read out the information and facts given in the poster and engage in a quick discussion about each of these topics).

## Connecting better



**Teacher:** Let us now look at the 'Connecting Better' section. It talks about how Maria used what she

learnt in one subject to understand something in real life.

**Teacher:** In her maths class, Maria learnt about two important concepts: perimeter and area. Can anyone tell me what perimeter means?

(Pause for student responses)

**Teacher:** That is right. Perimeter is the distance around the boundary of a shape — like the length of a field around its edges.

**Teacher:** Now, in the next period, when the teacher spoke about how farmers need to fence their lands, Maria made a smart connection. She thought, 'Oh. To build a fence around the land, farmers would need to calculate the perimeter of their fields.'

**Teacher:** Isn't that clever? She linked what she learnt in maths to what farmers do in real life. Can anyone think of why knowing the perimeter is important when fencing land?

(Pause for students to discuss with their peers and respond)

**Teacher:** Exactly. Farmers need to know how much fencing material they will need and they can only find out if they know the perimeter of their land.

**MUST DO**

15 MIN.

**MUST DO**

5 MIN.



**Teacher:** This shows us that what we learn in Math is not just for exams — it helps us understand and solve real-world problems too. Well done, everyone. Let us now move on to the next part of our lesson.

### Caring better

**Teacher:** Look at the 'Caring Better' section now. It talks about how important fruits are for our health. Can anyone tell me why eating fruits is good for us?

**MUST DO**

5 MIN.



**Caring better**

Fruits are very important in one's diet. They give us various nutrients. However, many people cannot afford to buy fruits. Set up a free-of-cost fruit stall for them around your neighbourhood. You may keep some fruits of your choice. Make sure you are accompanied by an adult. Do this activity once a month. Get help from neighbours in setting the fruit stall.

Seva

71

(Pause for students to respond)

**Teacher:** Exactly. Fruits give us important nutrients like vitamins, minerals and fibre. They help us stay strong and healthy.

**Teacher:** But sadly, not everyone can afford to buy fruits easily. Some people in our neighbourhood might not be able to get them regularly.

**Teacher:** That is why the idea shared here is so wonderful — it suggests setting up a free-of-cost fruit stall in your neighbourhood.

**Teacher:** Imagine how happy people would be if they could pick up fruits for free.

What do you think you will need to do if you want to set up such a fruit stall?

(Encourage a few answers.)

**Teacher:** Yes, you will need to collect fruits, set up a small table or stall and be sure to have an adult accompany you for safety. You can even ask your neighbours to help you with fruits or arranging the stall.

**Teacher:** It is a good idea to do this once a month to regularly help people around you.

**Teacher:** What fruits would you like to keep in your free fruit stall?

(Allow a few quick answers.)

**Teacher:** Wonderful choices. By doing this, we are not only sharing healthy food but also spreading kindness and care in our community.

**Teacher:** Well done, everyone. Let us carry this beautiful thought with us as we move to the next part of the lesson.

### Grasping better

**Teacher:** Look at the 'Grasping better' section. We are going to learn some new words related to farming. Let us go through them one by one.

**MUST DO**

10 MIN.



**Grasping better**

**fertilisers:** chemicals that increase the productivity of the soil  
**pesticides:** chemicals that keep pests away from crops

DING

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**Teacher:** The first word is 'fertilisers'. These are chemicals that increase the productivity of the soil by providing essential nutrients to plants. Can anyone explain how fertilisers help in farming?

(Pause for student responses)

**Teacher:** Yes, that is correct. Fertilisers help plants grow better by giving them the nutrients they need, like nitrogen, phosphorus and potassium. This makes crops grow stronger and healthier.

**Teacher:** The next word is 'pesticides'. These are chemicals that keep pests away from crops. Pests can damage crops, so pesticides are used to protect them.

**Teacher:** Can anyone describe how pesticides work in farming?

(Pause for student responses)

**Teacher:** Yes. Pesticides help to protect crops from insects, fungi and other harmful organisms that could damage or destroy the crops. It ensures a healthy and plentiful harvest.

### Helping better

**Teacher:** Now, let us move on to the 'Helping better' section. We are going to talk about ways to make better choices for the environment.

**MUST DO**

5 MIN.



**Helping better**

Do not use plastic flowers for decorative purposes. Plastic is bad for the environment. You may use dried flowers, pebbles, sand and gravel to make floral arrangements instead.

OL

71

**Teacher:** Did you know that using plastic flowers for decorative purposes is bad for the environment?

**Teacher:** Yes. Plastic flowers are made from materials that do not decompose and can harm the environment. That is why plastic is bad for the planet. It takes a long time to break down and it can pollute our land, rivers and oceans. It harms wildlife and adds to the waste we already have.

**Teacher:** So, instead of using plastic flowers, you can use natural materials like dried flowers, pebbles, sand and gravel to make beautiful floral arrangements. These materials are eco-friendly and much better for the environment.

**Teacher:** Well done, everyone. Let us remember that small changes, like choosing natural materials over plastic, can help us protect the planet. We can now

move on to the next part of the lesson. With this we will conclude the session for today. We will meet in the next class.

 You may show the **Concept Map** given on digital platform.

## Differentiated Activities

**110 km/hr**



Write a short essay on the impact of plastic waste on the environment and suggest eco-friendly alternatives that can help reduce pollution.

**80 km/hr**



Write a paragraph explaining why plastic flowers should not be used for decoration and how we can help the environment by choosing natural materials.

**40 km/hr**



Write one sentence about why plastic flowers are harmful to the environment.

## Home Task

Create your own floral arrangement at home using natural materials such as dried flowers, pebbles, sand or gravel. Take a picture of your arrangement and write a short description (3-4 sentences) explaining how you made it and why it is better for the environment than using plastic flowers. Bring the picture along with the description to the next class.

## Period 6

### Recalling better

Recalling better

- Agriculture refers to the cultivation of land.
- Crops are of two types – food crops and cash crops.
- Better quality seeds, fertilisers, pesticides and tractors help farmers grow more and better crops.
- The growing of fruits, vegetables and flowers is called horticulture.
- Some animals help farmers in work. Such animals are called livestock.
- Fishing is of two kinds – marine and inland.

CING

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**Teacher:** Now, look at the 'Recalling better' section. We are going to recall and discuss what we have learnt so far about farming and the related activities.

**MUST DO**

20 MIN.

**Teacher:** Can anyone read the first point aloud and tell us what agriculture means?

**Teacher:** Exactly. Agriculture refers to the cultivation of land. It involves preparing the soil, planting seeds and taking care of crops. Why do you think agriculture is important?

**Teacher:** Very good. Now, moving on to the second point. Can anyone read it aloud and name the two types of crops?

**Teacher:** That is right. Crops are of two types – food crops like wheat and rice, which we eat and cash crops like

cotton and sugarcane, which are sold to earn money. Can you name a food crop you have seen or eaten?

**Teacher:** Nice. Let us now look at the third point. Can anyone read it aloud and tell us how farmers can grow better crops?

**Teacher:** Yes. Farmers use better quality seeds, fertilisers, pesticides and tractors to grow more and better crops. These tools and chemicals help protect the crops and make farming easier and faster.

**Teacher:** Moving on, the fourth point talks about horticulture. Can anyone explain what horticulture means?

**Teacher:** Correct. The growing of fruits, vegetables and flowers is called horticulture. It is an important part of farming that gives us fresh produce and beautiful flowers.

**Teacher:** Now, the fifth point mentions livestock. Can anyone explain what livestock are?

**Teacher:** Exactly. Livestock are animals that help farmers with their work. Animals like oxen, horses and buffaloes are used for ploughing fields or carrying loads. They are very helpful to farmers.

**Teacher:** Finally, the last point talks about fishing. Can anyone tell me the two kinds of fishing?

**Teacher:** Well done. Fishing can be of two kinds – marine fishing, which happens in the seas and oceans and inland fishing, which takes place in rivers, lakes and ponds.

## Learning better

### Exercise A

Learning better

CBA

A Tick (✓) the correct answer.

- What is the term for growing crops on land?
 

a. agriculture

b. inland fishing

c. livestock rearing
- Indian crops can be classified into how many types?
 

a. two

b. four

c. three
- Which of the following is the main food crop besides wheat?
 

a. rice

b. jute

c. coffee
- Which of the following is livestock?
 

a. shark

b. lion

c. buffalo
- Horticulture is the cultivation of \_\_\_\_\_, fruits and vegetables.
 

a. flowers

b. food crops

c. cash crops

72

**Teacher:** Look at the questions in Exercise A on page 72. Read the questions carefully and tick (✓) the correct answer.

**MUST DO**

10 MIN.

**Teacher:** I will read the first question for you:

1. What is the term for growing crops on land?

- a. agriculture
- b. inland fishing
- c. livestock rearing

**Teacher:** Think carefully. Discuss with your partner and raise your hand when ready.

**Teacher:** Correct. The answer is 'agriculture'. Tick (✓) option 'a'.

(Follow the same pattern and complete the exercise.)

### Exercise B

#### B Write true or false.


1. Rice is a cash crop. \_\_\_\_\_
2. Use of better quality seeds has led to an increase in India's total agricultural production. \_\_\_\_\_
3. Horticulture means rearing of cows and camels. \_\_\_\_\_
4. Cows and buffaloes commonly help farmers and are called livestock. \_\_\_\_\_
- 72 5. Marine fishing refers to catching fish from lakes and ponds. \_\_\_\_\_

**Teacher:** Look at Exercise B now. Read the questions carefully and write 'true' or 'false' against them.

**MUST DO**

10 MIN.

**Teacher:** Read each statement and think carefully. You may discuss with your partner to complete this activity. We will discuss the answers once you complete them.

 You may show the **Infographic** given on digital platform.

 You may show the **Dictionary** given on digital platform.

### Differentiated Activities

110 km/hr



How does agriculture help people in India in their daily lives? Describe its importance in a few sentences.

80 km/hr



Ask students to imagine they are talking to a farmer. They must write 3–4 questions they would ask about the crops they grow and how they

care for them.

40 km/hr



Draw a picture of a farm showing crops and animals. Write 2–3 sentences about what is happening in your picture.

### Home Task

### Book of Project Ideas

#### Chapter 11: Introduction to Agriculture in India

Make an online presentation titled as 'Agriculture in India.' Find out the food and cash crops grown in different states/Union Territories of India. Also, add the information about the climate best suited to grow those crops.

Theme 8: How Does Technology Work?

PRO | 21st CS

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**Teacher:** Complete this project at home with the help of your parents. Create an online presentation titled 'Agriculture in India.'

**Teacher:** Follow these steps to complete your project:

- Find out the names of food crops and cash crops grown in different states and Union Territories of India.

- Add information about the type of climate best suited to grow these crops.
- Make your presentation colourful and easy to understand. You can include pictures, maps or charts to make it more interesting.

**Note:** Remember to refer only to reliable sources like websites ending with **.edu** or **.org** to gather accurate information.

## Period 7

### Exercise C

#### C Write short answers in your notebook.

1. Define agriculture.
2. Name two cash crops.
3. Naina makes a beverage using leaves, water and milk every morning. Which kind of crop does the leaves come from?

73

**Teacher:** Look at Exercise C now. Read the questions carefully and write short answers for them in your notebook.

**MUST DO**

20 MIN.

**Teacher:** Let us do the first question together. It says, 'Define agriculture.'

**Teacher:** We have already discussed this in class. Can anyone recall and tell us what agriculture means?

**Teacher:** That is correct. Agriculture is the process of growing crops by cultivating the land and raising animals. (Follow the same pattern, discuss other questions with the class and complete the exercise.)

**Teacher:** Well done, everyone. Let us move to Exercise D.

### Exercise D

#### D Write long answers in your notebook.

1. Elaborate the factors responsible for India's increased agricultural production.
2. Differentiate between marine fishing and inland fishing.

73

**Teacher:** Look at Exercise D now. Read the questions carefully and write long answers for them in your notebook.

**MUST DO**

20 MIN.

**Teacher:** Let us do the first question together. It says, 'Elaborate the factors responsible for India's increased agricultural production.'

**Teacher:** We have already discussed this in class. Can anyone recall and share some factors that have helped India grow more crops?

**Teacher:** That is correct. Better quality seeds, the use of fertilisers and pesticides, modern machinery like tractors, improved irrigation facilities and government support have all helped farmers increase agricultural production in India.

(Follow the same pattern, discuss other questions with the class and complete the exercise.)

**Teacher:** Well done, everyone. Let us continue the remaining in the next class.

 You may show the **Video** given on digital platform.

## Differentiated Activities

110 km/hr



Imagine you are a scientist helping farmers. Think of a new method or tool that could help improve farming in India. Create a short set of steps explaining how it would work and how it would help farmers grow better crops. Write down your ideas and be ready to share them with the class.

80 km/hr



Pick a crop that is grown in India, like rice, wheat or cotton. Write a short description of why this crop is important for farmers and people. Then, mention the kind of climate it needs to grow well.

40 km/hr



Draw a simple maze worksheet where you help a farmer reach his field by tracing the right path. Include small pictures like trees, crops, animals, etc. along the way.

## Home Task

Creating better – Make your own handmade paper.

**Creating better**

Make your own handmade paper. Take an A3 size sheet. Ask an adult to give you some leftover black coffee solution. Pour it in a deep tray. Dip your paper in it for sometime. Then, place it in sunlight until dry. Use this paper for writing letters or essays.

73

## Period 8

**Teacher:** Good morning/afternoon everyone. Before we start today's lesson, let us have a quick warm-up to get our creative minds flowing. Ready?

**SHOULD DO**

10 MIN.



**Teacher:** I will ask you a few fun questions and I want you to shout out your answers. Let us get started.

**Teacher:** First question: If you could grow any crop in your own farm, which crop would you choose?

**Teacher:** Wonderful. Some of you said rice, wheat, cotton and even sugarcane. All great choices.

**Teacher:** Now, think about this: What do you think a farmer needs the most to grow healthy crops?

**Teacher:** Exactly. Seeds, good soil, water, sunlight and sometimes fertilisers and tractors. Farmers need many things to take care of their crops.

**Teacher:** Here is another question: If you could design your dream farm, would you grow crops, keep animals or do both?

**Teacher:** Wow, I love your ideas. Some of you want fruits and vegetables, while others want cows and hens too. You are thinking like real farmers.

**Teacher:** Great job, everyone. Now, we are going to use these ideas to draw and design your own dream farm. You can include crops, animals, tractors or anything else you think a farm needs.

## Thinking better

**Thinking better**

21st CS HOTS

Think and discuss in class.

How does the use of technology, like tractors and irrigation systems, change the way farming is done in India? What are some benefits and challenges of using these technologies? **73**

**Teacher:** Look at the 'Thinking Better' section. We are going to think about some interesting questions. Ready?

**MUST DO**

10 MIN.



**Teacher:** The first question is: 'How does the use of technology, like tractors and irrigation systems, change the way farming is done in India?'

**Teacher:** What do you think? How does using machines like tractors or systems that bring water to crops change farming?

**Teacher:** Yes, that is right. Technology has made farming faster and easier. Tractors help farmers plough large areas quickly and irrigation systems make sure crops get enough water, even when it doesn't rain enough.

**Teacher:** Let us move on to the second question: 'What are some benefits and challenges of using these technologies?'

**Teacher:** Can anyone share what they think are some good things and some difficulties farmers might face when using machines and technology?

**Teacher:** Correct. Some benefits are that it saves time, increases crop production and makes farming less tiring. But challenges can include the high cost of buying machines, needing fuel or electricity and learning how to use new equipment properly.

**Teacher:** Well done. Now, let us move to 'Choosing better'.

## Choosing better

**Choosing better**

LSV

A farmer in Punjab wants to improve the fertility of his soil. What should he use?

- chemical fertilisers that provide quick nutrients
- organic materials made from natural materials, such as cow dung and kitchen waste

**73**

**Teacher:** We have a scenario here where a farmer in Punjab wants to improve the fertility of his soil. The question is, what should he use?

**MUST DO**

10 MIN.



**Teacher:** Option 1: 'Chemical fertilisers that provide quick nutrients.'

**Teacher:** Do you think this is the best choice for the farmer?

**Teacher:** Chemical fertilisers may provide quick results, but they can also harm the soil over time and affect the environment. They are not always the best long-term solution.

**Teacher:** Option 2: 'Organic materials made from natural materials, such as cow dung and kitchen waste.'

**Teacher:** Does this sound like a better choice?



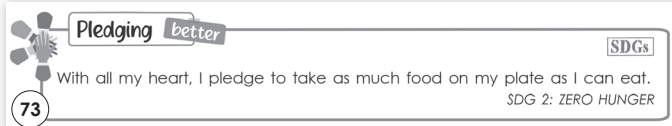
**Teacher:** Yes, using organic materials is a much better option. Organic fertilisers like cow dung improve the soil's health and fertility in the long run. They enrich the soil naturally and are safe for the environment.

**Teacher:** So, what should the farmer in Punjab use to improve his soil?

**Teacher:** Yes, using organic materials made from natural sources like cow dung and kitchen waste would be the best choice. This will keep the soil healthy and help the farmer grow better crops.

**Teacher:** Well done. Let us move on to the next activity.

## Pledging better



**Teacher:** Now, look at the 'Pledging Better' section. Today, we are going to make another pledge together. It is all about reducing food waste and ensuring that we only take as much as we can eat.

**Teacher:** Let us read the pledge together: 'With all my heart, I pledge to take as much food on my plate as I can eat.'

**Teacher:** Can anyone tell me why it is important to take only what we can eat?

**Teacher:** Yes, that is right. By taking only what we can eat, we reduce food waste. This helps ensure that there is enough food for everyone and also helps protect the environment. Food waste is a huge problem and we can all do our part to help reduce it.

**Teacher:** Now, let us think about how we can make sure we take only the food we need. What are some ways we can do this?

**Teacher:** Yes, we can serve ourselves a smaller portion and if we are still hungry, we can always go back for more. It is important to avoid taking too much food just because you feel you may need it. .

**Teacher:** Let us say the pledge together one more time. Ready?

**Teacher and Students:** 'With all my heart, I pledge to take as much food on my plate as I can eat.'

**Teacher:** Well done, everyone. By being mindful of how much food we take, we are helping to reduce waste and support the goal of Zero Hunger. This is a small but meaningful way to make a big difference.

**Teacher:** Well done. See you in the next class.

You may show the **I Explain** given on digital platform.

## Differentiated Activities

110 km/hr

Create a poster about agriculture in India. Include information about different types of crops

grown in various states, famous farming practices and important agricultural figures or farmers. Be creative. Present your poster to the class and explain why agriculture is important to India. Add any fun facts to make your poster stand out.

80 km/hr

Think about the crops grown in your region. Write a short description of the types of crops that are grown and how they are important to the local economy and people. You can also include why these crops are meaningful to you.

40 km/hr

Think about a crop you like to eat or one grown in your area. Write down simple facts about how it is grown and where it is typically found. You can also draw the plant or crop to help you remember what it looks like.

## Home Task

Revising better - In this chapter, you understood where food comes from and the effort farmers put into growing it. Write the ways in which you can show gratitude to the farmers in your Little Book.

**Revising better**
DBL

In this chapter, you understood where food comes from and the effort farmers put into growing it. Write the ways in which you can show gratitude to the farmers in your Little Book.

73

## Period 9

## Gratitude



**Teacher:** Good morning, everyone.  
Today, let us begin by  
focusing on something truly  
meaningful—gratitude.

**Teacher:** I want you to think about one person who has  
made a positive difference in your life. It could be a  
family member, a friend or even a teacher.

**Teacher:** Now, take your gratitude sheet and make a  
small box where you can write a short note to the person  
you are grateful for.

**Teacher:** Write one or two sentences thanking them  
for what they have done or how they have made a  
difference in your life.

**Teacher:** Once you are done writing, you will share  
your notes with the class and place them on our  
gratitude chart.

### Worksheet 1

**MUST DO**

10 MIN.



(Guide/help students to solve the questions and complete  
the exercise.)

**Teacher:** Time is up. Let us check your answers together.

**Teacher:** Excellent work. We can now move on to  
Exercise B.

**Teacher:** Now, look at Exercise B. You need to rearrange  
the given letters to form words related to Agriculture. I will  
give you a few minutes. You may discuss with the friend  
sitting next to you and write the words in the blanks given.  
(After a few minutes)

**Teacher:** Great. Let us check your answers together.

**Teacher:** Well done. We can now move on to Exercise C.

### Exercise C

**Teacher:** In Exercise C, read the given statements and  
mark them as 'True or False'. You will work independently  
on this exercise.

(As required, guide/help students to solve the questions  
and complete the exercise.)

**Teacher:** Time is up. Who would like to share the answers?

**Teacher:** Well done, everyone. We have completed  
worksheet1

## Book of Holistic Teaching

### Chapter 11: Introduction to Agriculture in India

Theme 8: How Does  
Technology Work?

HoLL MDA

#### A English

Fill in the blanks with the correct prepositions.

- Manoj calls Rahul \_\_\_\_\_ the storehouse to  
examine the jowar. (towards / inside)
- Kiran likes a teaspoon of sugar \_\_\_\_\_ her  
coffee. (at / in)

#### B Maths

Mira has to put a fence around her sugarcane  
field. It is rectangular in shape. Its length is 15 m  
and breadth is 10 m. How much wire will she need?  
Write the answer in the space provided.

#### C Science

Nita is a livestock farmer. Every morning she draws  
water from the well. She places it along with the  
feed for her animals. Which simple machine helps  
her draw water from the well? Write the answer in  
the space provided.

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**Teacher:** Let us have a look at the  
Book of Holistic Teaching, Chapter 11:  
Introduction to Agriculture in India on  
page 36-37.

**COULD DO**

10 MIN.



(Ensure that the mentioned activities are completed by  
the students. These activities are designed to enhance  
their holistic understanding and engagement with the  
topic. Provide any necessary support and/ or materials to  
help them successfully finish the activities.)

Theme 8: How Does Technology Work?
11. Introduction to  
Agriculture in India

Worksheet 1

**A. Fill in the blanks.**

- \_\_\_\_\_ means to grow plants or crops on land.
- Above \_\_\_\_\_ of our country's population is engaged in farming.
- \_\_\_\_\_ is the central occupation in India.
- Many crops can be grown in India because it has fertile \_\_\_\_\_.
- Crops grown in India can be classified as \_\_\_\_\_ crops and cash crops.

**B. Rearrange the letters to name some crops.**

- RGIA \_\_\_\_\_
- ICRE \_\_\_\_\_
- WEATH \_\_\_\_\_
- ULPSES \_\_\_\_\_
- ILLMET \_\_\_\_\_

**C. Write true or false.**

- Rice and wheat are the main cash crops. \_\_\_\_\_
- Mining is the central occupation in our country. \_\_\_\_\_
- Cash crops are grown for consumption by people. \_\_\_\_\_
- India's fertile soil makes it suitable for many crops to grow here. \_\_\_\_\_
- Use of average quality seeds have contributed to the increase \_\_\_\_\_

42 in India's agricultural production since independence. \_\_\_\_\_

**Teacher:** Now, open worksheet 1 and  
look at Exercise A. We are going to  
fill in the blanks. Let us read the first  
question together.

**Teacher:** \_\_\_\_\_ means to grow plants or crops  
on land.

**Teacher:** Who can tell me the answer?

**Teacher:** Agriculture, that is correct. Keep going with  
the rest, I will give you a few minutes to complete the  
remaining blanks.

**SHOULD DO**

20 MIN.



**Teacher:** Let us clap for everyone's effort and end today's session. See you in the next class.

## Differentiated Activities

**110 km/hr**



Create a detailed poster showing the difference between food crops and cash crops. Include examples from different states of India and explain why certain crops are grown for consumption while others are grown for commercial purposes.

**80 km/hr**



List and describe three food crops and three cash crops grown in India. For each crop, explain where it is primarily grown and why it is important for the economy or daily life of people in that region.

**40 km/hr**



Choose one type of livestock (e.g., cow, buffalo, sheep) and draw it. Write one or two sentences explaining how this animal helps farmers in their work.

## Home Task

Complete Worksheet 2 (page 43) of your Workbook.

## Period 10

**Teacher:** Hello, everyone. I hope you completed worksheet 2. Shall we discuss the answers?

**Students:** Yes.

(Discuss the answers for each exercise and then begin with worksheet 3)

## Worksheet 3

**MUST DO**

15 MIN.



**Teacher:** Now, open your worksheet 3 and look at Exercise A. We are going to fill in the blanks using the options in the brackets. Let us read the first question together.

**Teacher:** \_\_\_\_\_ is also included in agriculture. (horticulture/mining)

**Teacher:** Who can tell me the answer?

**Teacher:** Horticulture, that is correct. Keep going with the rest, I will give you a few minutes to complete the remaining blanks.

(Guide/help students to solve the questions and complete the exercise.)

**Teacher:** Time is up. Let us check your answers together.

**Teacher:** Excellent work. We can now move on to Exercise B.

**Teacher:** Now, look at Exercise B. You need to rearrange the given letters to form words related to cash crops and food crops. I will give you a few minutes. You may discuss with the friend sitting next to you and write the words in the blanks given.

(After a few minutes)

**Teacher:** Great. Let us check your answers together.

**Teacher:** Well done. We can now move on to Exercise C.

## Exercise C

**Teacher:** In Exercise C, read the words given and tick (✓) the crops that are not grown to be consumed by people. (As required, guide/help students to solve the questions and complete the exercise.)

**Teacher:** Time is up. Who would like to share the answers?

**Teacher:** Well done, everyone. We have completed worksheet 3.



You may show the **Quiz** given on digital platform.

## Differentiated Activities

**110 km/hr**



Write a short note on fishing in India.

**80 km/hr**



Complete the sentences with the correct words from the box below.

(Use: Agriculture, Tractors, Livestock, Horticulture, Fishing)

- \_\_\_\_\_ refers to the cultivation of flowers, fruits and vegetables.
- \_\_\_\_\_ are animals like cows, buffaloes and camels that help in farming.
- \_\_\_\_\_ helps in the production of crops by making the land suitable for planting.
- \_\_\_\_\_ is the process of catching fish, either from the sea or from inland sources.
- \_\_\_\_\_ is the main occupation in India, with most people involved in farming.

## Worksheet 2

### A. Give one-word answers.

- Crops grown for sale in the market: \_\_\_\_\_
- The main food crop, apart from rice: \_\_\_\_\_
- The process of catching fish from the sea: \_\_\_\_\_
- The practice of growing plants or crops on land: \_\_\_\_\_
- The process of cultivation of flowers, fruits and vegetables: \_\_\_\_\_

### B. Match the columns.

#### Column A

- livestock
- horticulture
- rice
- coffee
- inland fishing

#### Column B

- a primary food crop
- animals kept by farmers for their use
- a cash crop
- catching fish from lakes, rivers and so on
- the practice of growing fruits, vegetables and flowers

### C. Which of the following statements is incorrect for cash crops? Tick (✓) the correct answer.

- Coffee is one of the primary cash crops. ☐
- Coffee, jute and sugarcane are also used in industries. ☐
- Coffee, jute and sugarcane are grown for sale in the market. ☐
- Coffee, jute and sugarcane are grown for consumption by people. ☐
- Jute and sugarcane are primary cash crops. ☐

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40 km/hr



Write 'True' or 'False' next to the statements below:

1. Rice and wheat are examples of cash crops.
2. Tractors and machinery are used to make farming easier and more efficient.
3. Horticulture involves the cultivation of livestock.
4. Sugarcane is an example of a food crop.
5. Fishing is only done in the sea.

### Home Task

With the help of your parents, find out whether your state or any nearby state practices marine fishing or inland fishing. In your notebook, make and complete this table:

State	Type of Fishing	Common Fish
Example – Karela	Marine Marine	Sardine
-	-	-
-	-	-
-	-	-

Bring this information to class for a sharing activity.

### Period 11

**Teacher:** Good morning, everyone.

How are you all today?

**Teacher:** Wonderful. Before we dive into today's lesson, let us do a quick recap on what we have learnt so far.

**Teacher:** I want everyone to participate and share one learning from this chapter. Also, tell us how it is/will be useful for you in daily life?

(Give time to the students to think and then share their learnings one by one.)

**Teacher:** Ready?

**Teacher:** Excellent. You all are doing great. Let us now move on to Worksheet 4.

### Worksheet 4

**Worksheet 4**

A. Fill in the blanks with words from the box.

land farming moong coffee market

1. Agriculture refers to growing crops or plants on \_\_\_\_\_.
2. A majority of our country's population is engaged in \_\_\_\_\_.
3. \_\_\_\_\_ is an example of pulses.
4. \_\_\_\_\_ is a primary cash crop.
5. Horticultural crops are grown to be sold in the \_\_\_\_\_.

B. Write **F** for food crop. Write **C** for cash crop.

1. arhar \_\_\_\_\_
2. jowar \_\_\_\_\_
3. wheat \_\_\_\_\_
4. coffee \_\_\_\_\_
5. sugarcane \_\_\_\_\_

C. Which of the following statements is incorrect about fishing?  
Tick (✓) the correct answer.

1. Fishing is of two types. ☐
2. Inland fishing is popular in West Bengal. ☐
3. Marine fishing refers to catching fishes from the sea. ☐
4. Sardine, mackerel and shrimp are caught by fishermen from the sea. ☐
5. Marine fishing is popular in the states of India located close to river basins. ☐

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### Exercise A

**Teacher:** Now, open Worksheet 4 and look at the first question of Exercise A.

**Teacher:** 'Agriculture refers to growing crops or plants on \_\_\_\_\_.' Look at the words given in the box and tell me the answer.

**Teacher:** Farming, correct. Now, you can do the rest of the questions on your own. I'll give you a few minutes.

(Allow students 2-3 minutes to write their answers.)

**Teacher:** Time is up. Let us check your answers together. (Then, move on to the next exercise.)

### Exercise B

**Teacher:** Now, let us move on to Exercise B. Look at the given list of crops and mark them as C for Cash Crops and F for Food Crops.

**Teacher:** Take a few minutes to write your answers in the worksheet.

(Allow students 2-3 minutes to write their answers.)

**Teacher:** Well done. Let us check your answers together. (Then, move on to the next exercise.)

### Exercise C

**Teacher:** Now, in Exercise C, you need to read the statements and tick (✓) the ones that are correct. Let us read the first statement together.

(Allow students 2-3 minutes to write their answers.)

**Teacher:** Time is up. Let us check your answers together.

**Teacher:** Excellent work, everyone. Let us now discuss the project work done by you.

### Book of Project Ideas


(Discuss the project assigned in the previous period, focusing on helping students understand the objectives and addressing any challenges they faced.)

**Teacher:** Now, let us fill in the last column of the KWL chart.

**Teacher:** In this column, you will write what you have learnt in this chapter.

**Teacher:** Think about the topics we have learnt and write them in the 'L' column of the chart. (Wait for students to fill in the chart.)

**Teacher:** Let us all give a huge round of applause to everyone for their effort. See you in the next class. Have a wonderful day ahead.

 You may generate additional practice worksheets using the **Test Generator** given on the Digital Platform.

### Differentiated Activities

110 km/hr



Take turns with your partner to read the lesson on your own.



80 km/hr



Take turns with your partner to read a short paragraph from the lesson. After reading, discuss and write one difference between food crops and cash crops in your notebook.

40 km/hr



Pick a passage from the lesson and read it with the help of your teacher.

### Home Task

Read the lesson at home. Try making new questions and answer them on your own.

## Learning Outcomes

The students will:

Domain	Learning Outcome
Physical Development	<ul style="list-style-type: none"><li>participate in role-play activities related to farming practices, improving physical fitness and coordination.</li></ul>
Socio-Emotional and Ethical Development	<ul style="list-style-type: none"><li>express gratitude towards farmers and demonstrate care and respect for food and the environment.</li></ul>
Cognitive Development	<ul style="list-style-type: none"><li>develop an understanding of why agriculture is important in our daily lives (fosters critical thinking about the relationship between agriculture and daily living).</li><li>explore the different types of crops, livestock, horticulture and fishing practices done in various seasons and regions (helps students understand the science of agriculture, seasons and regional variations).</li><li>identify the factors that influence the growth of crops (promotes problem-solving and analysis of how different factors affect agricultural productivity).</li><li>become aware of the different ways people catch fish in rivers, seas and ponds (supports cognitive understanding of ecosystems and the interdependence between humans and the environment).</li></ul>
Language and Literacy Development	<ul style="list-style-type: none"><li>learn and use new words related to farming, crops and animal care (supports lifelong learning and communication skills).</li></ul>
Aesthetic and Cultural Development	<ul style="list-style-type: none"><li>understand what horticulture is and how fruits, vegetables and flowers are grown (can be tied to an appreciation for the beauty of nature and cultural practices related to farming and horticulture).</li></ul>
Positive Learning Habits	<ul style="list-style-type: none"><li>follow classroom rules and participate in discussions.</li></ul>

### Starry Knights

Was it an interesting topic to teach the learners? Could you execute all the activities or added more to them? Please share.

Reward yourself with a STAR.



## Lesson-12: Introduction to Industries in India

12 Periods (40 minutes each)



Learn Better (Main Coursebook), Stay Ahead (Workbook), Book of Holistic Teaching, Book of Project Ideas, CRM signs, Poster, Gratitude sheet



Animation, Animated Activities, Concept Map, Dictionary, eBook, I Explain, Infographic, Quiz, Slideshow, Video, Test Generator

Confirming better

I am curious to learn about machines.

### Curricular Goals and Objectives (NCF)

#### To enable the students:

- to understand the role of machines and industries in daily life and how they transform raw materials into finished products.
- to recognise the various types of industries in India, including cottage, small-scale and large-scale industries and their significance in the economy.
- to explore the technological advancements in industries and their impact on production processes and efficiency.
- to develop critical thinking by examining the environmental, social and economic effects of industries on local communities and the country as a whole.
- to foster creativity and responsibility by engaging in activities that involve reusing materials, supporting local industries and appreciating the contribution of workers in various sectors.

### Methodology

#### Period 1

**Teacher:** Good morning/afternoon, students. Before we start today's lesson, let us warm up with a quick game. Are you ready?

SHOULD DO

5 MIN.



**Teacher:** I am going to give you some clues and I want you to guess the machine I am describing. Ready? Here is the first one:

**Teacher:** This machine is in most homes. It helps keep things cool when it is hot outside. It has spinning blades that move the air around. Can anyone guess what it is?

**Teacher:** Yes, that is right. It is a fan.

**Teacher:** Let us try another one. This machine is used to clean our clothes. You put your dirty clothes inside it and it washes them for you. Can anyone guess what it is?

**Teacher:** Exactly, it is a washing machine.

**Teacher:** Now, here is the last one. This machine helps you type and send messages. You can also use it to play games, watch videos and search for information. What do you think it is?

**Teacher:** Yes, it is a computer or smartphone. We will explore more about machines and how they help us. Let us move on to the Main coursebook.

### Confirming better



Confirming better I am curious to learn about machines.

P 74

**Teacher:** Now, look at the 'Confirming better' section on page 74 of your Main coursebook. We are going to explore the fascinating world of machines. Who here is curious to learn more about them? Raise your hand if you are excited.

MUST DO

5 MIN.



**Teacher:** I see many of you are excited, which is fantastic. Machines are all around us and make our lives easier. What kinds of machines do you see or use in your daily life?

**Teacher:** That is great. Now, let us think about how machines help us. Can anyone share a machine they find useful?

**Teacher:** Yes, exactly. Machines like fans, washing machines and even computers are examples of tools that make tasks simpler and faster.

**Teacher:** Let us keep that curiosity going. We will learn more about it in this chapter.

#### KWL chart

**Teacher:** We will begin a new chapter, 'Introduction to Industries in India'. We are going to use a KWL chart to help us organise our thoughts and learning. I have

SHOULD DO

5 MIN.



made a KWL format on the blackboard. Please take out your notebooks and draw the same format.

K	W	L

**Teacher:** The KWL chart has three columns. The first column is labelled 'K,' in which you will write what you already know about the topic. In the second column 'W', you will write what you want to know and the third column is 'L', which you will fill at the end with what you have learnt in this lesson.

**Teacher:** Take a few minutes to think and write. If you have any questions, feel free to ask.

**Teacher:** You all did amazing work in this activity. Let us move on to Re-KAP activities. We will use Kinaesthetic, Auditory and Pictorial activities today to make our learning exciting. Let us start with the Kinaesthetic activity.

### Kinaesthetic

#### Kinaesthetic

Do a show! You can use handkerchiefs, scarves, shawls, or any pieces of fabric you have. Get creative and use the fabric to show your unique style. Talk about what makes each fabric special as you showcase your designs.

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**Teacher:** Let us get ready for the kinaesthetic activity. We are going to have a creative fashion show. You can use handkerchiefs, scarves, shawls or any fabric pieces you have with you. Are you ready to showcase your unique style?

**Teacher:** Each of you will choose a piece of fabric and get creative with how you want to style it. You can drape it, tie it or wear it however you like. The goal is to show your fabric in a way that highlights its beauty and special qualities.

**Teacher:** As you create your design, think about what makes your fabric unique. Is it the colour, texture or pattern? What makes it special?

**Teacher:** Once everyone is ready, we will go around the class and you will have the chance to explain your design to the rest of us. Tell us why you chose that fabric and how it represents your style.

**Teacher:** Let us get started. Remember, this is all about having fun and expressing yourself.

**Teacher:** (After some time.) Let us clap for everyone's effort and move on to the next section.

### Auditory

#### Auditory\*

Listen to your teacher carefully. Answer the questions.

74

**Teacher:** Now, listen to me carefully.

I will read out a list of names. you will write down the names of the states or Union Territories where these crafts are famous. For example, Phiran is famous in Jammu and Kashmir.

**Teacher:** Are you ready? Here we go – Phiran, Phulkari embroidery, Mysore silk saris, Kanchipuram silk saris, Mekhela Chador, Chanderi saris, Paithani silk.

**Teacher:** Take your time. Once you are done, we will discuss your answers. Who will be the first to share their response?

(Phiran – Jammu and Kashmir,

Phulkari embroidery – Punjab

Mysore silk saris – Karnataka

Kanchipuram silk saris – Tamil Nadu

Mekhela Chador – Assam

Chanderi saris – Madhya Pradesh

Paithani silk – Maharashtra)

**Teacher:** Excellent work done. Let us now move on to the next activity.

### Pictorial

**Teacher:** Now, look at the 'Pictorial' section and focus on the given images. I want you to identify which one is a textile product.

MUST DO

5 MIN.

#### Pictorial

Which of the following is a textile product?



74

**Teacher:** Well tried. Let me describe the pictures for you.

**Teacher:** The first picture shows some intricate embroidery. It looks like a fabric with decorative stitching.

**Teacher:** The second picture is of a famous building, the Jama Masjid in Delhi.

**Teacher:** The third picture shows a train loaded with goods.

**Teacher:** The fourth picture shows neatly folded, colourful fabrics, which look one type of textile product.

**Teacher:** Now, I want you to think carefully. Which of these four pictures is a textile product? I will give you a moment to decide. Please raise your hand if you know the answer.


**Teacher:** Yes, the correct answer is the fourth picture, which shows the colourful fabrics. These are textile products.

**Teacher:** Well done, everyone, for identifying the textile products. Let us clap for everyone's effort and end today's session.


 You may show the **Video** given on digital platform.

### Differentiated Activities


**110 km/hr**

 Create a list of at least five machines that you think are essential in day-to-day life. For each machine, explain how it helps improve efficiency in that particular work. Present your list and explanations to the class.

**80 km/hr**

 Choose three machines from the ones we discussed today (fan, washing machine and computer) and explain how they make life easier. Write down your answers in bullet points. Then, pair up with a classmate to compare your responses.

**40 km/hr**

 Draw a simple picture of one machine we discussed today and label the key parts of the machine. Share your drawing with a classmate and explain how the machine works in simple terms.

### Home Task

With the help of your parents, identify one machine that you use at home every day. Write down what the machine does, where it is used and why it is important in your daily life. You can also draw a picture of the machine to illustrate its function.

### Period 2

**Teacher:** Good morning/afternoon, students. Let us start today's lesson with a fun warm-up activity.

**Teacher:** We are going to talk about machines and how they help us turn raw materials into finished products. So, let us see how much you know about different materials and products.

**Teacher:** I will give you some clues about raw materials and finished products. Your job is to match them. Ready?

**Teacher:** Here is the first clue, "This is a raw material that comes from trees. It is used to make paper, furniture and many other things." Can anyone guess what it is?

**Teacher:** Yes, it is wood.

**Teacher:** Great. Now, here is the next clue: "This is a finished product made from wood. We use it in our homes and it can be used to sit on or keep things in." What do you think it is?

**Teacher:** Correct, it is furniture.

**Teacher:** Let us do one more. "This is a raw material that comes from animals and plants. It is used to make clothes, bags and other products." What is it?

**Teacher:** Yes, it is cotton.

**Teacher:** Now, for the finished product. "This product is made from cotton. It is something we wear every day and it helps protect us from the weather." What is it?

**Teacher:** Exactly. It is a shirt or any other clothing.

**Teacher:** Well done, everyone. Let us now move on to the next part of the lesson.

### Interacting better

**Teacher:** Look at the 'Interacting better' section. We will discuss the sentences. I will read the sentences and I want you to fill in the blanks.

**MUST DO**

10 MIN.

**Interacting better** ICL

Discuss in class. Fill in the blanks.

a. West Bengal is known for its \_\_\_\_\_, jute and silk textiles.

b. Tamil Nadu is famous for its \_\_\_\_\_ saris.

75

**Teacher:** The first sentence is: "West Bengal is known for its \_\_\_\_\_, jute and silk textiles."

**Teacher:** What do you think goes in the blank? Can anyone raise their hand and share their answer?

**Teacher:** Yes, that is correct. The answer is "muslin". West Bengal is famous for its muslin, jute and silk textiles.

**Teacher:** Let us move on to the next one. The sentence is: "Tamil Nadu is famous for its \_\_\_\_\_ saris."

**Teacher:** What word do you think fits here? Take a moment and then tell me your answer.

**Teacher:** Excellent. The answer is "Kanchipuram". Tamil Nadu is famous for its Kanchipuram saris.

**Teacher:** Great work, everyone. Let us now move on to the next section of our lesson.

**SHOULD DO**

20 MIN.

Maria and her friends move to the next section.

Sam, what are these machines?

Ryan, these machines are used in textile factories.

Children, these machines help us a lot. Machines like looms and sewing machines speed up the process.

So, technology helps people do their jobs better and faster.

Many natural resources cannot be used directly. For instance, we cannot use silk or logs of wood directly. They are raw materials. We need to turn them into finished products, such as cloth and furniture, before we can use them. In a factory, the raw material is turned into finished products. An industry is set up using raw materials, power supply, machinery, money, human labour and transport, among other things.

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**Teacher:** Now, we will read about how technology and machines help people do their jobs better and faster. Let us look at the first part of the story.

**Teacher:** In the image, we see Maria and her friends moving to the next section of a Tech Expo. Ryan is asking about the machines and Sam explains that these machines are used in textile factories.

**Teacher:** Their teacher then tells them, "Children, these machines help us a lot. Machines like looms and sewing machines speed up the process."

**Teacher:** What do you think the teacher means by "speed up the process"? Can anyone explain?

**Teacher:** Yes, exactly. Their teacher is saying that these machines help workers complete their tasks more quickly and efficiently, allowing them to make more products in less time.

**Teacher:** Now, let us read further. The story also says, "Many natural resources cannot be used directly. For instance, we cannot use silk or logs of wood directly. They are raw materials. We need to turn them into finished products, such as cloth and furniture, before we can use them."

**Teacher:** What do we understand by "raw materials"? Can anyone give me an example of raw materials?

**Teacher:** Great. Raw materials are the basic things we get from nature, like wood, cotton or silk, which need to be processed or changed into something useful. So, silk or wood is not immediately useful; it needs to be turned into products like clothing or furniture.

**Teacher:** The story continues, "In a factory, the raw material is turned into finished products." Can anyone give an example of a finished product?

**Teacher:** Exactly. Finished products are things we can use, like clothes, toys or furniture, that have been made from raw materials.

**Teacher:** The story also explains that an industry is set up using raw materials, power supply, machinery, money, human labour and transport. This is how things are made in factories.

**Teacher:** Now, let us think about it. How do you think technology helps in this process? What role do machines play in factories?

**Teacher:** Yes, machines like looms and sewing machines make the work faster and easier. Without these machines, it would take much longer to make the same number of products.

**Teacher:** Great work, everyone. We have learnt that machines and technology help factories turn raw materials into useful products much faster. Keep this in mind and let us end today's session.



You may show the **Animation** given on digital platform.

## Differentiated Activities

**110 km/hr**



Create a presentation on how different industries use machines in the production process. You can choose any industry, such as textile, food or electronics. Include examples of the machines used and how they improve productivity. Present your findings to the class.

**80 km/hr**



Write a short paragraph explaining the role of one machine used in a factory, at home or in a nearby area. Describe how the machine works and how it helps workers finish their tasks faster. Pair up with a classmate to compare your answers and share what you learnt.

**40 km/hr**



Draw a picture of one machine used in a factory, at home or in a nearby area. Label the parts of the machine and explain in simple words how the machine helps workers do their jobs faster.

## Home Task

Ask your parents to tell you about a machine used in a factory (like a sewing machine, a printing machine or a mixer). Write down what the machine does, how it helps make products and what materials it uses. Draw a picture of the machine and bring it to class to share with your classmates.

## Period 3

**Teacher:** Good morning/afternoon, class. Before we begin learning about types of industries, let us warm up our minds with a fun game.

**SHOULD DO**

10 MIN.



**Teacher:** I will share some short stories with you and I want you to think – Is it something that is happening at home, in a small local workshop or in a big factory? Let us get started.

**Teacher:** Here is the first one, "Rani and her mother weave beautiful mats using cotton threads. They sell them in the nearby market during the weekends." What do you think—is this work happening at home or in a factory?

**Teacher:** At home. That is right. Now the second one is – In a small building, about 15 people are sewing clothes using sewing machines. These clothes are packed and sent to nearby shops.

Does it sound like it is a big factory or something smaller?

**Teacher:** Yes, something smaller. Let us try the last one – In a factory, hundreds of workers are making cars with the help of huge machines. These cars are sent to different cities in India and even to other countries. Where do you think this is happening?

**Teacher:** Exactly, in a big factory. What you just heard were examples of three different types of industries. Let us move on to the next part of the lesson and discuss them.

## Types of Industries

**Teacher:** Look at the next section now. We are going to discuss the different types of industries.

**MUST DO**

10 MIN.

### TYPES OF INDUSTRIES

Industries can be classified as cottage, small-scale or large-scale, based on their size. Map 12.1 shows the location of some important industries of India.

75

**Teacher:** Industries are classified based on their size and they can be grouped into three categories: cottage industries, small-scale industries and large-scale industries.

**Teacher:** Cottage industries are usually run at a small level, often at home and involve the use of simple tools.

**Teacher:** Next, small-scale industries are a bit larger than cottage industries and they produce goods on a small scale, often using machinery.

**Teacher:** Finally, we have large-scale industries which are much bigger in size and they require large amounts of capital, raw materials and workers. They often cater to national or international markets.

**Teacher:** We will talk about them in detail in the next period. Let us now look at the map of India shown on page 76. This map highlights some of the important industries in India and their locations.

## Map

**Teacher:** As we can see, the map shows several cities and regions in India where these industries are located. Each of the symbols represents a different industry. Let us take a closer look at the industries shown on the map.

**MUST DO**

20 MIN.



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(Discuss all cities and their industries in the class.)

**Teacher:** In the north of India, we have Delhi, which is

famous for the textile industry. Ludhiana, also in the north, is known for textiles and iron and steel industries.

**Teacher:** Moving down to Gurugram, this city is associated with automobile industries. As we move further south, we can see Chennai, which is famous for its automobile and electronic goods industries.

**Teacher:** In the west, we have Mumbai, a major centre for the textile industry. Ahmedabad is another important city for textiles. Further south in Kochi, the city is known for its shipbuilding industry.

**Teacher:** The east of India shows Kolkata, which has a significant iron and steel industry. Visakhapatnam is another city with a prominent shipbuilding industry.

**Teacher:** Now, look at Bhilai and Durgapur. These cities are major hubs for iron and steel industries in the central region of India.

**Teacher:** The map also shows the location of electronic goods and railway equipment industries in cities like Bengaluru and Hyderabad.

**Teacher:** Can anyone identify some other cities where these industries are located? What do you notice about the concentration of industries in different parts of India?

**Teacher:** Great observations. The distribution of industries on the map shows us how different regions are known for particular types of industries, whether it is textiles, iron and steel, automobiles or shipbuilding.

**Teacher:** Excellent participation, everyone. Let us clap for everyone's effort and end today's session.



You may show the **Animated Activities** given on digital platform.

## Differentiated Activities

**110 km/hr**



Draw a simple map of India in your notebook and mark the cities discussed in class where different industries are located (e.g., Delhi for textiles, Chennai for automobiles, etc.). Label each city with the industry it is known for. Afterwards, share your map with a classmate and explain the industries in each city.

**80 km/hr**



Use a map of India and show the locations of industries and the types of industries found in different regions. Choose at least five cities and explain why certain industries are located in those areas.

**40 km/hr**



Look at the map of India and write down the names of three cities along with the industries found in them. For example, write "Mumbai - Textiles" or "Kochi - Shipbuilding." After completing your task, share your answers with a partner and discuss what makes each industry important in these cities.

## Home Task

With the help of your parents, visit a local market or shop

that sells products made in different industries. Write down the name of the product, the city it comes from and the industry it belongs to. For example, if you buy cotton clothes, it might come from a textile industry in Ahmedabad. Share your findings in the next class.

## Period 4

**Teacher:** Good morning/afternoon, class. Before we begin today's lesson, let us do a quick warm-up for learning about industries.

SHOULD DO

10 MIN.



**Teacher:** I am going to give you some clues about different industries. I want you to guess the type of industry I am describing. Ready?

**Teacher:** Here is the first clue: "This industry produces a large quantity of goods using big machines. It involves many trained workers and usually operates in large factories." What type of industry is this?

**Teacher:** Yes, that is right. It is a large-scale industry.

**Teacher:** Let us try another one. "This industry is usually run in homes or small workshops. It involves a few workers and simple tools." What is this industry?

**Teacher:** Correct. It is a cottage industry.

**Teacher:** Now, here is the last one. "This industry is bigger than a cottage industry but smaller than a large-scale industry. It uses simple machines and works on a smaller scale, making products like utensils, garments and electrical goods." Can anyone guess this one?

**Teacher:** Exactly. It is a small-scale industry.

**Teacher:** Great work, everyone. Now that we have warmed up, let us move on to the next section and learn more about the different types of industries.

## Cottage Industries

**Teacher:** Let us look at the 'Cottage industries' section and read (one student) it aloud for me.

MUST DO

10 MIN.



### Cottage industries

People set up cottage industries in their houses. They engage only a few people. They use simple tools and raw material. Units that grind flour, extract oil and weave cloth are some examples of cottage industries.

75

**Teacher:** Excellent reading. Now, what do you think is the main characteristic of a cottage industry? Can anyone explain?

**Teacher:** Yes, that is right. Cottage industries are small-scale industries that are often set up in people's homes. They usually involve simple tools and require a small number of workers.

**Teacher:** In India, cottage industries are very common, especially in rural areas. These industries are a source of income for many families. For example, in many villages, people make handmade products like handloom cloth, pottery, pickles or even jewellery.

**Teacher:** Let us think about it. Can you give me an example of a cottage industry you have seen or heard about in your community or family?

**Teacher:** Exactly. Handloom weaving is one of the most famous cottage industries in India, especially in regions like Kanchipuram (Tamil Nadu) and Varanasi (Uttar Pradesh). People weave beautiful silk sarees at home and this provides them with a livelihood.

**Teacher:** Now, let us look at some examples of simple tools used in cottage industries. For instance, people use spinning wheels for weaving cloth, hand grinders for grinding flour and cold presses to extract oil from mustard or sesame seeds.

**Teacher:** Now, think about how cottage industries contribute to the local economy. How do you think they benefit the community and the environment?

**Teacher:** Yes, you are right. These industries help the community by creating job opportunities, especially for women and they also help in preserving local traditions and skills.

**Teacher:** Excellent participation, everyone. Let us now move on to the next industry.

## Small-scale Industries

**Teacher:** Now, look at the next section. We are going to learn more about small-scale industries. Can anyone read it aloud for me?

MUST DO

10 MIN.



### Small-scale industries

Small-scale industries work on a small scale. Few people are employed in such industries. They use small machines and work in small factories. Utensils, hosiery items, garments and electrical goods are made in small-scale industries.



small scale industry

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**Teacher:** Excellent reading. What do you think is the main characteristic of small-scale industries? Can anyone explain?

**Teacher:** Yes, exactly. Small-scale industries are smaller in size. They use simple machines and have fewer workers compared to larger industries. These industries usually operate in smaller factories and produce goods on a relatively smaller scale.

**Teacher:** In India, small-scale industries are very important. They provide affordable products to local markets and also offer jobs to people, especially those with low skills or who live in rural areas.

**Teacher:** What are some items you can think of that are made in small-scale industries?

**Teacher:** Yes, that is right. Some common examples include utensils like steel vessels and kitchen appliances, hosiery items like socks and underwear, garments such as shirts and t-shirts and electrical goods like fans, bulbs and electrical wiring.

**Teacher:** Can anyone give an example of a small-scale industry in your area or community?

**Teacher:** Great examples. In India, many small-scale industries are important because they help people earn a living and support the local economy. These industries are bigger than cottage industries. While cottage industries are usually family-run and done at home, small-scale industries often have machines and hire workers from outside the family too.

**Teacher:** Excellent participation, everyone. Let us now move on to the next industry.

## Large-scale Industries

**Teacher:** Let us look at the next section. We are going to learn about large-scale industries. Can anyone read it aloud for me?


**MUST DO**

10 MIN.



Large-scale industries

These industries engage thousands of trained and skilled workers. In a large-scale industry, big machines are used to produce huge quantities of goods. A vast majority of such industries are located near or in big cities. Iron and steel plants, textile mills, oil refineries, chemical plants are some examples of large-scale industries. These industries also include automobiles, electronic goods and railway equipment manufacturing factories.



shipbuilding industry

We can now locate different states in India that are home to cotton, silk and woollen textile industries, among others. Various coastal cities, such as Kochi (Kerala), Mumbai (Maharashtra) and Visakhapatnam (Andhra Pradesh), are home to shipbuilding industries. Other important industries in India are machineries, chemicals, fertilisers, cement and paper.

77

**Teacher:** Excellent reading. Now, tell me what the main feature of a large-scale industry is? What makes it different from small-scale industries?

**Teacher:** Yes, that is right. Large-scale industries produce goods in large quantities using big machines. These industries require trained workers and have larger factories compared to small-scale industries.

**Teacher:** Let us look at some examples of large-scale industries. In cities like Mumbai and Kolkata, you will find iron and steel plants. These industries produce steel, which is used to build infrastructure like buildings, bridges and vehicles.

**Teacher:** Similarly, textile mills are another example of large-scale industries. These mills use big machines to process large amounts of cotton, wool or silk and turn them into finished cloth. Cities like Surat (Gujarat) and Coimbatore (Tamil Nadu) are famous for their large textile mills.

**Teacher:** Let us move on to oil refineries. In places like Vadodara (Gujarat), large-scale industries refine crude oil into products like petrol, diesel and plastic. This is very important for transportation and various manufacturing processes.

**Teacher:** Can anyone think of other large-scale industries that are important in India?

**Teacher:** Exactly. Some other important large-scale industries in India are the automobile industry, which includes companies like Tata Motors and Maruti Suzuki and the railway equipment manufacturing industry, which supports the Indian Railways.

**Teacher:** Excellent participation, everyone. Let us now clap for everyone's effort and end today's session.



You may show the **Concept Map** given on digital platform.

## Differentiated Activities

110 km/hr



Choose a type of industry (cottage, small-scale or large-scale) and write about a city in India that is famous for it. Discuss the economic benefits, employment opportunities and products made in this industry.

80 km/hr



Write a short paragraph about one type of industry. You can choose a city in India where this industry is common. Pair up with a classmate to compare your work and share any additional information you learnt.

40 km/hr



Draw a simple diagram of a factory and label the different machines used. Share your diagram with a classmate and explain the process.

## Home Task

With the help of your parents, visit a local market that produces handmade or machine-made products. Write down the products you see and identify which type of industry produces them (cottage, small-scale or large-scale). You can also draw a picture of the factory or products you saw and share it with the class.

## Period 5

**Teacher:** Good morning/afternoon, class. Before we begin today's lesson, let us do a quick warm-up activity to help us think about the different types of industries we have been learning about.

**SHOULD DO**

5 MIN.



**Teacher:** I will give you a few statements and I want you to think about whether they are true or false. You do not need to say anything yet, just listen carefully and get ready to discuss.

**Teacher:** Here is the first statement: "Small-scale industries are known for making large quantities of goods using big machines." Do you think this is true or false?

**Teacher:** Great. This is false. Small-scale industries use simple machines and work on a smaller scale.

**Teacher:** Let us try another one: "Cottage industries usually involve small factories with many workers." What do you think? True or false?



**Teacher:** Yes, this is false. Cottage industries are usually small-scale businesses run in homes with fewer workers.

**Teacher:** Well done, everyone. Now, let us move on to the next activity.

### Understanding better

**Teacher:** Look at the 'Understanding better' section. I will read the two statements aloud and we will decide together whether they are true or false.

MUST DO

5 MIN.



**Understanding better**

**Say true or false.**

1. Hosiery items are made in small-scale industries.
2. Oil is refined in cottage industries.

ICL

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**Teacher:** The first statement says: "Hosiery items are made in small-scale industries."

**Teacher:** What do you think? Is this true or false?

**Teacher:** Yes, this is true. Small-scale industries, like hosiery factories, are where items like socks, stockings and other undergarments are made.

**Teacher:** Let us look at the next one: "Oil is refined in cottage industries."

**Teacher:** What do you think about this one? True or false?

**Teacher:** This one is false. Oil refining is a large-scale process, not something done in cottage industries. Cottage industries may extract oil, but refining oil requires much larger equipment and facilities.

**Teacher:** Excellent participation, everyone. Let us now move on to the next activity.

### Connecting better

**Connecting better**

Maria remembers from the talk that a farmer measures the length of his farm in metres. "A farm is measured in metres. Can you tell me what unit of measurement you will use to measure your weight?" Maria asks Sam as they walk back to the school bus. "That's easy, I weigh in kilograms."

ICL

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**Teacher:** Now, look at the 'Connecting better' section. It says, "Maria remembers from the talk that a farmer measures the length of his farm in metres. 'A farm is measured in metres. Can you tell me what unit of measurement you will use to measure your weight?' Maria asks Sam as they walk back to the school bus. 'That's easy. I weigh in kilograms.'"

MUST DO

10 MIN.



**Teacher:** Can anyone tell me why the farmer uses metres to measure the length of his farm? Why not kilograms or grams?

**Teacher:** Yes, that is right. Metres are used to measure length or distance. The metre is the standard unit for measuring how long something is, like the length of a farm or a road.

**Teacher:** Now, Maria asks Sam about measuring weight.

Sam says she weighs in kilograms. Can anyone tell me why we use kilograms to measure weight?

**Teacher:** Exactly. Kilograms are the unit of measurement we use for weight. We measure the weight of things, like people, animals and even fruits in kilograms.

**Teacher:** Can anyone give me an example of something you might measure in kilograms?

**Teacher:** Great. People's weight, bags of rice or even luggage at the airport are often measured in kilograms.

**Teacher:** So, what did we learn today? We learnt that different units of measurement are used for different things. Weight is measured in kilograms, while length is measured in meters.

**Teacher:** Well done, everyone. Now, let us move on to the next activity.

### Caring better

**Caring better**

We have helpers, such as electricians, house helps and plumbers. Offer them water and food whenever they come to your house.

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**Teacher:** Now, let us look at the 'Caring better' section. It says, "We have helpers, such as electricians, house helps and plumbers. Offer them water and food whenever they come to your house."

MUST DO

10 MIN.



**Teacher:** Can anyone tell me why we should offer water and food to helpers when they come to our house?

**Teacher:** Yes, that is right. Helpers like electricians, house help and plumbers often work hard, sometimes for long hours. Offering them water and food is a kind way of showing respect and gratitude for the work they do.

**Teacher:** How does it feel when someone offers us something to drink or eat when we are working or feeling tired?

**Teacher:** Yes, it makes us feel appreciated and cared for. Offering these small acts of kindness shows that we value their hard work.

**Teacher:** Now, let us think about the helpers in your own life. Can you think of a time when you or your family offered something to a helper who came to your house?

**Teacher:** Great examples. Offering help or showing kindness is a way of caring for others and creating a more respectful environment.

**Teacher:** So, remember, when a helper comes to your house, whether it is for work or repair, it is always a good practice to offer them a little something to show that you care.

**Teacher:** Well done, everyone. Now, let us move on to the next activity.

## Helping better

### Helping better

Old hosiery items, such as stockings, can be reused. Use them as storage bags for your handkerchiefs and hair ties. You may also use them as a polishing cloth for your school shoes.

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**Teacher:** Look at the 'Helping better'

section. It says, "Old hosiery items, such as stockings, can be reused. Use them as storage bags for your handkerchiefs and hair ties. You may also use them as a polishing cloth for your school shoes."

MUST DO

10 MIN.

**Teacher:** Can anyone think of how old stockings can be useful instead of throwing them away?

**Teacher:** Yes, exactly. You can reuse them for other useful purposes. For example, you can use them as storage bags for small items like your handkerchiefs or hair ties.

**Teacher:** Another idea is to use them as a polishing cloth for your shoes. By doing this, you are not only reusing something, but you are also taking good care of your shoes and helping the environment by reducing waste.

**Teacher:** How many of you have ever reused something old at home, like a broken jar or a piece of cloth, for something useful?

**Teacher:** Great examples. Reusing things, instead of throwing them away, helps us save resources and is also environmentally friendly. It is one way we can show responsibility in how we treat our surroundings.

**Teacher:** So, the next time you find an old stocking or another item that is no longer useful, think about how you can reuse it creatively. This will not only help you but also make a difference in keeping our world clean.

**Teacher:** Well done, everyone. Let us clap for everyone's effort and end today's session.



You may show the **eBook** given on digital platform.

## Differentiated Activities

110 km/hr



Imagine you are an inventor and have to create a new product using only recycled materials. Design a product that can be made from things people might throw away, like plastic bottles, cardboard or old clothes. Draw your invention and explain how it works and how it helps the environment. Afterwards, present your invention to the class and describe the benefits of recycling.

80 km/hr



Create a list of 5 old household items that can be reused. For each item, suggest a new and creative use, just like we did with old hosiery items. Once you have your list, explain how reusing these items can help the environment and save money.

40 km/hr



Write two sentences about small-scale industries and cottage industries using true or false statements. For example, "Hosiery items are made in small-scale industries" (true) or "Oil is refined in cottage industries" (false). Then, pair up with a partner and exchange your sentences. Discuss with your partner whether the sentences are true or false and explain why.

## Home Task

With the help of your parents, find 1-2 items at home that are old or no longer in use. Discuss how these items can be reused for a different purpose. Write down the new uses and bring them to class to share with your friends. This will help you practise reusing things creatively and help the environment.

## Period 6

**Teacher:** Good morning/afternoon, class. Before we begin today's lesson, let us have a quick discussion on recycling and reusing old items.

SHOULD DO

10 MIN.

**Teacher:** Has anyone found old items at home that could be reused? Who would like to share one item you found at home and how you could reuse it?

**Teacher:** Great. For example, old newspapers can be used to create fun crafts or even be used as wrapping paper. Plastic bottles can be turned into plant pots or bird feeders. There are so many ways we can reuse things instead of throwing them away.

**Teacher:** The same thing is applicable to industries. They generate waste, which can be reused as well.

**Teacher:** Why do you think it is important to reuse things? How does it benefit us and the environment?

**Teacher:** Yes, excellent answers. Reusing items helps save resources, reduce waste and protect the environment by decreasing the amount of trash that ends up in landfills.

**Teacher:** In your home task, you were asked to find 1-2 items at home that are no longer being used. I want you to take a moment to share what you came up with for your home task.

**Teacher:** I am excited to hear all the creative ideas you have.

**Teacher:** Well done, everyone. Now, we can move on to the next activity and recall our learnings from this lesson.

MUST DO

30 MIN.

## Recalling better

### Recalling better

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- Raw materials are converted into finished products before use.
- Industries are divided into cottage, small-scale and large-scale on the basis of size.
- People use simple tools and raw materials, available nearby, in cottage industries.
- Small machines are used in small-scale industries.
- Trained workers work in large-scale industries where big machines are used.
- Iron and steel plants, textile, automobiles, electronic goods, shipbuilding, manufacturing, cement and fertilisers are some of the large-scale industries in India.

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**Teacher:** Look at the 'Recalling better' section. We are going to review some important concepts that we have learnt so far. Are you ready?

**Teacher:** Let us read the first point. "Raw materials are converted into finished products before use." What do you think this means? Can anyone explain?

**Teacher:** Yes, exactly. This means that we cannot directly use raw materials like wood, cotton or iron. They need to be processed or turned into something useful, such as furniture, clothes or steel products. For example, cotton is turned into cloth and iron is turned into machinery or building materials.

**Teacher:** Now, let us move to the second point: "Industries are divided into cottage, small-scale and large-scale on the basis of size."

**Teacher:** Can anyone tell me the difference between these industries based on their size?

**Teacher:** That is right. Cottage industries are small-scale, usually run from homes or small workshops. Small-scale industries are a bit larger and use simple machinery. Large-scale industries, on the other hand, are the biggest, using big machines and employing many workers to produce goods in large quantities.

**Teacher:** Let us move to the third point, "People use simple tools and raw materials, available nearby, in cottage industries."

**Teacher:** Can anyone give an example of a cottage industry where simple tools are used?

**Teacher:** Yes, people in cottage industries often use simple tools like spinning wheels to make cloth or grinders to grind flour. These industries usually rely on raw materials found nearby, such as cotton for weaving or wheat for making flour.

**Teacher:** Now, let us discuss the fourth point, "Small machines are used in small-scale industries." How do you think small machines help in small-scale industries?

**Teacher:** Yes, small machines are used to produce products on a smaller scale. These industries might use sewing machines for making garments or small lathes to make utensils. These machines are more affordable and suited for smaller production units.

**Teacher:** Let us now look at the fifth point. It says, "Trained workers work in large-scale industries where big machines are used."

**Teacher:** Why do you think large-scale industries need trained workers?

**Teacher:** Yes, large-scale industries involve complex machines that require skilled operators. For example, in an iron and steel plant, workers need to operate heavy machinery and in an automobile factory, workers need to be trained to assemble parts using specialised equipment.

**Teacher:** Finally, let us discuss the last point, "Iron and steel plants, textile, automobiles, electronic goods, shipbuilding,

manufacturing, cement and fertilisers are some of the large-scale industries in India."

**Teacher:** Can anyone tell me what products are made in these industries?

**Teacher:** Exactly. Iron and steel plants make steel, which is used in construction and machinery. Textile mills produce fabric for clothes. Automobile factories make cars and bikes. Electronic goods industries make products like phones and computers. Shipbuilding industries make ships and boats, while cement and fertiliser industries produce materials for construction and agriculture.

**Teacher:** So, to summarise, large-scale industries are important for producing large quantities of goods and they help provide materials for construction, transportation, technology and many other industries.

**Teacher:** Excellent work today, everyone. Let us clap for everyone's participation and end today's session.



You may show the **Dictionary** given on digital platform.

### Differentiated Activities

#### 110 km/hr



Create a mind map on how raw materials are turned into finished products in different industries. Include examples of industries such as iron and steel, textiles and automobiles. For each industry, write the raw material, the process used and the finished product. Then, present your mind map to the class and explain how each process helps in turning raw materials into useful products.

#### 80 km/hr



Write a short paragraph about one of the industries we discussed today, such as cottage industries or small-scale industries. Describe how these industries use simple tools and raw materials to produce finished products. Use examples like spinning wheels or grinders to help explain. Afterwards, share your paragraph with a partner and discuss the key differences between cottage and small-scale industries.

#### 40 km/hr



Draw a picture of a small-scale industry. Label the tools and raw materials used in it, such as sewing machines and cotton for textile mills or hand grinders for cottage industries. After drawing, write a sentence underneath the picture explaining what is made in that industry. Share your picture and explanation with a classmate.

### Home Task

With the help of your parents, find 1-2 items in your home that come from different industries. Discuss how these items are made. Write down the industry the item came from and the raw materials used to make it. Bring your findings to class to share with your friends. This will help you understand how industries work in real life.

## Period 7

**Teacher:** Good morning/afternoon, class. Before we dive into today's lesson, let us do a fun warm-up activity. We are going to play a guessing game about raw materials and finished products.

**Teacher:** I will describe something and you have to guess what it is. Ready?

**Teacher:** Here is the first clue, "I am a raw material that comes from plants and is used to make clothes." What do you think this could be?

**Teacher:** Yes, that is correct. It is cotton.

**Teacher:** Now, here is the next clue, "I am a finished product made from wood and used to sit on." What is this?

**Teacher:** Correct again. It is a sofa. Now, let us get ready for today's lesson where we will be completing exercises to check our understanding.

### Learning better

#### Exercise A

**Teacher:** Look at Exercise A in the 'Learning better' section. Read the questions carefully and tick (✓) the correct answer.

**A** Tick (✓) the correct answer.

- Which of the following is a raw material?  
a. sofa ☐ b. cloth piece ☐ c. log of wood ☐
- What is turned into fabric in a factory?  
a. kitchen waste ☐ b. cotton ☐ c. finished products ☐
- According to size, how many types of industries are there?  
a. two ☐ b. four ☐ c. three ☐
- What type of machines are used in small scale industries?  
a. very big ☐ b. big ☐ c. small ☐
- Iron and steel plants are categorised as which type of industries?  
a. cottage ☐ b. small-scale ☐ c. large-scale ☐

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(Discuss each question and option with the class and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

#### Exercise B

**Teacher:** Look at Exercise B now. Read the questions carefully and fill in the blanks with the correct answers.

**B** Fill in the blanks with the correct answers.

- A log of wood is a \_\_\_\_\_ resource.
- We \_\_\_\_\_ use raw materials directly.
- Weaving cloth is an example of \_\_\_\_\_.
- Oil refineries are examples of \_\_\_\_\_ industries.
- Kochi, a coastal city, is known for its \_\_\_\_\_ industry.

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(Discuss each question with the students and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

#### Exercise C

**Teacher:** Now, look at Exercise C. Read the questions carefully and write short answers in your notebook.

**C** Write short answers in your notebook.

- What is a factory?
- What is cottage industry?
- Ritu works in a factory that makes stockings. Which kind of industry does she work in?

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(Discuss each question with the students, help them write short answers and complete the exercise.)

**Teacher:** Well done, everyone. Let us clap for everyone for completing the exercises and end today's session.


 You may show the **Slideshow** given on digital platform.

### Differentiated Activities


#### 110 km/hr

 Create a detailed poster showing the three types of industries: cottage, small-scale and large-scale. Include examples, raw materials and finished products for each type of industry. Present your poster to the class and explain the differences between these industries.

#### 80 km/hr

 Write a short paragraph comparing cottage industries and small-scale industries. Mention the differences in size, machines used and the products made. Afterwards, pair up with a partner to discuss your findings.

#### 40 km/hr

 Draw a picture of a small-scale industry (e.g., a hosiery factory or a toy factory). Label the machines and finished products made in the factory. Write one simple sentence below the picture explaining what is made in that factory.

### Home Task

#### Book of Project Ideas

##### Chapter 12: Introduction to Industries in India

Make a poster titled 'Industries Around Me'. **PRO 2LCS**  
Draw the outline of your state or Union Territory on a chart paper. Mark and label the regions where major industries are located. Next, go through old newspapers and magazines. Find pictures of the finished products produced in those industries. Paste them in the respective regions. You may perform this activity with any state or Union Territory.

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Ask students to complete this project at home with parental guidance. Draw the outline of your state or Union Territory on a chart paper. Mark and label the regions where major industries are located. Go through old newspapers and magazines to find pictures of finished products produced in those industries. Paste the pictures on the chart paper in



the respective regions. Title your poster 'Industries Around Me'. Discuss with your parents about the importance of industries in the development of the region. Encourage students to be neat, creative and accurate in their work. Provide guidance as needed to help them organise and design their poster effectively.

(Remind them to review their work and practise presenting. Each student will get 3-5 minutes to present. Ensure they understand deadlines and provide assistance as needed.)

## Period 8

**Teacher:** Good morning/afternoon, class. Before we begin today's lesson, let us start with a warm-up activity.

**SHOULD DO**

10 MIN.

We are going to think about industries and how they work.

**Teacher:** I want you to think about a product you use every day. It could be something like a pencil, a book or a shirt. Now, let us discuss where these products come from and how they are made.

**Teacher:** Can anyone tell me where shirts come from? How do you think cotton is turned into shirt?

**Teacher:** Yes, it is made in factories where workers use machines to make many shirts from raw cotton.

**Teacher:** Now, let us think about smaller products like toys. Where do you think small toys are made? What kind of machines do you think are used?

**Teacher:** Exactly. Small-scale industries use simple tools and small machines to make smaller quantities of products.

**Teacher:** Excellent participation, everyone. Let us move on to the next activity.

## Learning better

### Exercise D

**Teacher:** Look at Exercise D in the 'Learning better' section. Read the questions carefully and write long answers in your notebook.

**MUST DO**

20 MIN.

**D. Write long answers in your notebook.**

1. Write about small-scale industries.
2. Write the differences between small-scale and large-scale industries.

79

(Discuss each question with the students, help them write answers and complete the exercise.)


**Teacher:** Well done, everyone. Let us now move on to the next activity.

## Creating better

**Teacher:** Look at the 'Creating better' section. In this activity, we are going to make a diya using flour. This is a great way to connect with both our art and craft skills.


**MUST DO**

10 MIN.


**Creating better**

**Art** | **2LCS**

Make a diya using flour. Request an adult to give you some flour dough. Shape it in the form of a diya, using your hands. Dry it in sunlight. When dry, paint it. Take the help of an adult, put a cotton wick in it. Add some oil or ghee. Ask the adult to light the diya.



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**Teacher:** First, I will show you how to shape the flour dough into the form of a diya. We will use our hands to make a small lamp, just like the ones we see during Diwali.

**Teacher:** After shaping your diyas, let them dry in the sunlight. Once they are dry, you can paint them with bright colours. You may also need an adult to help you with the next steps.

**Teacher:** After your diya is painted, ask the adult to add a cotton wick to the diya. Then, pour in some oil or ghee and finally, light the diya to see your work come to life.

**Teacher:** This activity connects to the lesson by helping us understand how small-scale industries work. Just like we make diyas by using simple tools, small-scale industries work in a similar way, making small but important products.



You may show the **Infographic** given on digital platform.

## Differentiated Activities

### 110 km/hr



Create a brochure that explains the difference between small-scale and large-scale industries. Include a comparison table showing examples, products, tools and the number of workers involved in each type of industry. Present your brochure to the class and explain why some industries are small-scale and others are large-scale.

### 80 km/hr



Write a short paragraph about small-scale industries. Include one example of a small-scale industry you know, like a hosiery factory or a garment factory. Discuss the tools used in these industries and the kind of products made. Afterwards, share your paragraph with a classmate and discuss the differences between small-scale and large-scale industries.

### 40 km/hr



Draw a picture of a small-scale industry in your notebook. Label the tools used and the products made in that industry. Write one sentence under your picture explaining what the industry does. After finishing your drawing, share it with a partner and explain how the industry works.

## Home Task

With your parents, find 1-2 items at home that are made in small-scale or large-scale industries. For example, you may have a shirt (from a textile factory) or a car (from an automobile factory). Write down the name of the item, the industry it came from and the raw materials used to make it. Bring your findings to class to share with your friends.

## Period 9

**Teacher:** Good morning/afternoon, everyone. Let us have a quick warm-up before we move on to the main activity.

**SHOULD DO**

10 MIN.

☐

**Teacher:** We are going to talk about industries, but before that, I want you to think about something in your daily life. Can you think of any industry you have seen around you? Maybe a factory or a small shop?

**Teacher:** Let us start with a few questions. Can anyone give me an example of a local industry you have seen or heard about?

**Teacher:** Yes, great examples. Some of you mentioned factories and shops that make or sell things. Now, think about why these industries are located in certain places. Do you think industries are located near water or raw materials?

**Teacher:** Yes, industries need things like water and raw materials for their work. For example, a textile mill uses water and cotton and iron factories need iron ore.

**Teacher:** Now, let us move on to the main activity.

### Thinking better

#### Thinking better

Think and answer in your notebook.

Why do you think industries are usually located near sources of water or raw materials?

79

**Teacher:** Let us look at the 'Thinking better' section now. We are going to answer this question together. It asks, "Why do you think industries are usually located near sources of water or raw materials?"

**MUST DO**

5 MIN.

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**Teacher:** Yes, great answers. Industries need raw materials to make products. If they are located near sources like rivers or forests, it is easier and cheaper to get the materials they need. For example, paper mills are located near forests to get wood and textile factories use water for processing cotton.

**Teacher:** Now that we have discussed the importance of location, let us move on to the next activity.

### Choosing better

#### Choosing better

Ritika buys a packet of bread from the grocery store. At home, she notices that the bread has a stale odour. Her father tells her that she should always check \_\_\_\_\_ before buying any food item.

Tick (✓) the correct answer.

1. the name ☐ 2. the price ☐ 3. the expiry date ☐

79

**Teacher:** Let us look at the 'Choosing better' section. We will read through the situation and choose the right option. Can anyone read the given situation aloud for me?

**MUST DO**

10 MIN.

☐

**Teacher:** Excellent reading. Let us have a look at the options now:

1. the name
2. the price
3. the expiry date

**Teacher:** What do you think is the correct answer?

**Teacher:** Yes, the correct answer is the expiry date. It is important to check the expiry date to ensure the product is still safe to eat. When buying food, always check the expiry date to avoid eating something that has gone bad.

**Teacher:** Well done, everyone. Let us move on to the next activity.

### Revising better

**Teacher:** Now, look at the 'Revising better' section. This section helps us think about how industries impact local communities.

**MUST DO**

10 MIN.

☐

#### Revising better

In this chapter, you got to know how industries impact local communities and society as a whole. Write instances where you have seen industries impacting someone near you or your area, in your Little Book.

DBL 79

**Teacher:** In this chapter, we got to know how industries impact local communities and society as a whole. Can anyone share an example where you have seen industries affecting someone near you or your area?

**Teacher:** Yes, great examples. For instance, you might have seen a local bakery or food factory that provides jobs to people in your community. These businesses help people earn a living and also contribute to the local economy.

**Teacher:** Let us take a moment and write about some of these examples in your Little Book. Write instances where you have seen industries impacting someone near you or in your area.

**Teacher:** Take about 5 minutes to write this down.

Afterward, we will share some examples with the class.

### Pledging better

**Teacher:** Now, look at the 'Pledging better' section. We will end today's session with a pledge.

It is important to show respect and love for the people who help us.

**MUST DO**

5 MIN.

☐

#### Revising better

In this chapter, you got to know how industries impact local communities and society as a whole. Write instances where you have seen industries impacting someone near you or your area, in your Little Book.

DBL 79

**Teacher:** Let us all stand together and say the pledge, "With my whole heart, I pledge to respect and love people who help us."


**Teacher:** This includes the workers in industries, the helpers in our homes and everyone who contributes to making our lives better. Let us always be grateful for their efforts.

**Teacher:** Well done, everyone. I am proud of your participation today. Now, let us finish today's session with a round of applause.


 You may show the **I Explain** given on digital platform.

### Differentiated Activities


**110 km/hr**

 Write a short essay explaining the importance of industries in a community. Include how local industries like factories, small shops and service industries help the economy, create jobs and affect the environment.

**80 km/hr**

 Draw a diagram of a local industry such as a textile factory, a bakery or a shop. Label the raw materials used and the finished products produced in the industry. Write a short paragraph explaining how the industry helps the local community.

**40 km/hr**

 In your notebook, draw two industries you have seen in your area, like a grocery store or a local bakery. Label the tools and products they make. Write one sentence about how these industries help people in the community.

### Home Task

With the help of your parents, find 1-2 industries near your home. They could be small shops, factories or service-based industries like hair salons or restaurants. Write down the name of the industry, what raw materials they use, what finished products they make or the service they provide. Share your findings with the class in the next lesson.

### Period 10

**Teacher:** Good morning/afternoon, class. Before we dive into today's lesson, let us start with an exciting warm-up activity. We are going to explore industries and how they work.

**SHOULD DO**

**10 MIN.**

**Teacher:** I will give you a few clues about everyday objects and I want you to guess which industry made them. Ready?

**Teacher:** Here is the first clue, "This product is made using wood. You see it in your house and it is used to sit on." What do you think this is?

**Teacher:** That is right. It is furniture. Now, let us think about where furniture is made. Can anyone tell me the type of industry where this is made?

**Teacher:** Yes, furniture is made in small-scale industries or large-scale industries, depending on the number of workers and the size of the factory.

**Teacher:** Here is another clue, "This product is used to store electricity and can be found in every home. It is made in factories." What is this?

**Teacher:** Yes, that is right. It is a battery, which is an electrical good. Electrical goods are often made in large-scale industries.

**Teacher:** Great job, everyone. Now that we have warmed up, let us move on to the worksheets.

### Worksheet 1

**MUST DO**

**15 MIN.**

#### Exercise A

#### Worksheet 1

##### A. Fill in the blanks with the correct words.

- We \_\_\_\_\_ use most natural resources directly. (can/cannot)
- We cannot use \_\_\_\_\_ directly. (silk sari/silk)
- In a \_\_\_\_\_, the raw material is turned into finished products. (factory/forest)
- People put up \_\_\_\_\_ industries in their houses. (small/cottage)
- In a cottage industry, \_\_\_\_\_ people are engaged at work. (many/very few)

##### B. Rearrange the letters to form some words associated with industries.

- ARW TAMEIALS \_\_\_\_\_
- ONMEY \_\_\_\_\_
- OWPRE PUPSLY \_\_\_\_\_
- RANTSPORT \_\_\_\_\_
- MUHNA BALOUR \_\_\_\_\_

##### C. Write S for small scale industries. Write L for large scale industries.

- utensils \_\_\_\_\_
- textile mills \_\_\_\_\_
- hosliery items \_\_\_\_\_
- electrical goods \_\_\_\_\_
- shipbuilding industry \_\_\_\_\_

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**Teacher:** Look at Exercise A in 'Worksheet 1'. Read the questions carefully and fill in the blanks with the correct words.

(Discuss each question and option with the class and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

#### Exercise B

**Teacher:** Look at Exercise B now. Read the questions carefully and rearrange the letters to form some words associated with industries.

(Discuss each question with the students and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

### Exercise C

**Teacher:** Now, look at Exercise C. Read the questions carefully and write S for small-scale industries and L for large-scale industries.

(Discuss each question with the students, help them write short answers and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next worksheet.

### Worksheet 2

#### Exercise A

**Teacher:** Look at Exercise A in 'Worksheet 2'. Read the questions carefully and fill in the blanks.

Worksheet 2

A. Fill in the blanks.

1. Wood is a \_\_\_\_\_ material.
2. In a factory, raw materials are turned into \_\_\_\_\_.
3. An industry can be classified into \_\_\_\_\_ types in terms of size.
4. People in cottage industries use \_\_\_\_\_ tools.
5. Grinding flour is an example of \_\_\_\_\_.

B. Match the columns.

Column A		Column B
1. logs of wood	•	a. finished goods
2. furniture	•	b. raw material
3. weaving cloth	•	c. large-scale industry
4. electrical goods	•	d. cottage industry
5. oil refineries	•	e. small-scale industry

C. Write true or false.

1. Large-scale industries use a few workers. \_\_\_\_\_
2. In large-scale industries, people use small machines to produce small quantities of goods. \_\_\_\_\_
3. A vast majority of large-scale industries are located near or in big cities. \_\_\_\_\_
4. Automobiles are manufactured in small-scale industries. \_\_\_\_\_
5. Electronic goods are manufactured in large-scale industries. \_\_\_\_\_

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(Discuss each question and option with the class and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

#### Exercise B

**Teacher:** Look at Exercise B now. Read the questions carefully and match the columns.

(Discuss each question with the students and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

#### Exercise C

**Teacher:** Now, look at Exercise C. Read the statements carefully and write true or false.

(Discuss each question with the students, help them write short answers and complete the exercise.)

**Teacher:** Well done, everyone. Let us clap for everyone for completing the worksheets and end today's session.



You may show the **Quiz** given on digital platform.

### Differentiated Activities

#### 110 km/hr



Work in small groups. Make a chart comparing small-scale and large-scale industries. Write 2–3 examples of each, list some products they make and show one main difference between them (like size or number of workers). Decorate your chart with drawings if you like.

#### 80 km/hr



Create a poster showing the differences between small-scale and large-scale industries. Include examples, what types of goods are made and the number of workers involved. Present your poster to the class.

#### 40 km/hr



Draw two pictures: one of a small-scale industry and one of a large-scale industry. Label the tools, products and the number of workers in each industry. Write one simple sentence about each type of industry.

### Home Task

In your notebook, write a few sentences about what a large-scale industry is. You can look in your book or ask an adult to help you find information. If you like, draw a picture of a large factory too.

### Period 11

**Teacher:** Good morning/afternoon, everyone. Let us have a quick warm-up before we start today's lesson.

#### SHOULD DO

5 MIN.

**Teacher:** I want you to think about all the products you use every day. For example, think about the clothes you are wearing, the food you eat or the toys you play with. Can anyone tell me where these things come from?

**Teacher:** Yes, they come from industries. Now, let us think about how industries work.

**Teacher:** For example, how do you think clothes are made? Can anyone guess the type of industry that makes clothes?

**Teacher:** Yes, clothes are made in textile mills, which are large-scale industries. They take raw materials like cotton and turn them into finished products like shirts and jeans.

**Teacher:** Great. Now, let us move on to the worksheets and complete the exercises.

### Worksheet 3

#### Exercise A

**Teacher:** Look at Exercise A in

'Worksheet 3'. Read the statements carefully and fill in the blanks with the words from the box.

(Discuss each question and option with the class and complete the exercise.)



**Teacher:** Well done, everyone. Let us now move on to the next exercise.

**Worksheet 3**

**A. Fill in the blanks from words from the box.**

logs of wood   machinery   houses   simple   Weaving

- We cannot use \_\_\_\_\_ directly.
- An industry is set up using raw materials, \_\_\_\_\_, money and so on.
- People set up cottage industries in their \_\_\_\_\_.
- In a cottage industry, people use \_\_\_\_\_ tools.
- \_\_\_\_\_ cloth is an example of cottage industries.

**B. Which of the following is not required to set up an industry? Tick (✓) the correct answer.**

1. money <input type="checkbox"/>	2. machinery <input type="checkbox"/>
3. fertile soil <input type="checkbox"/>	4. raw materials <input type="checkbox"/>
5. power supply <input type="checkbox"/>	

**C. Which of the following is not an example of a large-scale industry? Tick (✓) the correct answer.**

1. textile mills <input type="checkbox"/>	
2. extracting oil <input type="checkbox"/>	
3. chemical plants <input type="checkbox"/>	
4. automobile manufacturing factory <input type="checkbox"/>	
5. electronic goods manufacturing factory <input type="checkbox"/>	

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### Exercise B

**Teacher:** Look at Exercise B now. From the given options, which is not required to set up an industry? Tick (✓) the correct answer.

(Discuss each question with the students and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

### Exercise C

**Teacher:** Now, look at Exercise C. Which of the following is not an example of a large-scale industry? Tick (✓) the correct answer.

(Discuss each question with the students, help them write short answers and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next worksheet.

## Worksheet 4

### Exercise A

**Teacher:** Look at Exercise A in 'Worksheet 4'. Read the questions carefully and write one-word answers.

(Discuss each question and option with the class and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

### Exercise B

**Teacher:** Look at Exercise B now. Maya wants to set up an industry. Which of the following will she need? Tick (✓) the correct answer.

**Worksheet 4**

**A. Write one-word answers.**

- raw silk is an example of this: \_\_\_\_\_
- the stage in which we can use a raw material: \_\_\_\_\_
- a human resource required to set up an industry: \_\_\_\_\_
- a place where raw materials are converted into finished products: \_\_\_\_\_
- a type of industry set up by people at their houses: \_\_\_\_\_

**B. Maya wants to set up an industry. Which of the following will she need? Tick (✓) the correct answer.**

1. a farm <input type="checkbox"/>	2. fertilisers <input type="checkbox"/>
3. machinery <input type="checkbox"/>	4. factory workers <input type="checkbox"/>
5. tractors and pesticides <input type="checkbox"/>	

**C. Ishita needs to grind some flour, so she visits Mr Gill's shop to have it finely processed. What type of industry does Mr Gill work in? Tick (✓) the correct answer.**

1. cottage industry <input type="checkbox"/>	2. small-scale industry <input type="checkbox"/>
3. large-scale industry <input type="checkbox"/>	4. both (1) and (2) <input type="checkbox"/>
5. neither (1) nor (2) <input type="checkbox"/>	

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(Discuss each question with the students and complete the exercise.)

**Teacher:** Well done, everyone. Let us now move on to the next exercise.

### Exercise C

**Teacher:** Now, look at Exercise C. Ishita needs to grind some flour, so she visits Mr Gill's shop to have it finely processed. What type of industry does Mr Gill work in? Tick (✓) the correct answer.

(Discuss each question with the students, help them write short answers and complete the exercise.)

**Teacher:** Well done, everyone. Let us clap for everyone for completing the worksheets and end today's session.

## Differentiated Activities

### 110 km/hr



Make a poster showing the journey of a product – from raw material to finished product – in any one type of industry (cottage, small-scale or large-scale). Draw and label each step and write 1–2 sentences to explain what happens at each stage. Then share your poster with a partner.

### 80 km/hr



Imagine you are a worker in a cottage, small-scale or large-scale industry. Write a diary entry describing a day at your job. Explain what you do, what tools or machines you use and how your work helps make useful products for people.

### 40 km/hr



Draw a simple diagram showing small-scale and large-scale industries. Label the tools and workers used in each industry. Write one sentence below each

diagram explaining the difference between the two types of industries.

## Home Task

With the help of your parents and the internet, write about the main cottage industries in India in your notebook.

## Period 12

### Gratitude

SHOULD DO

10 MIN.

### Gratitude Sheet



**Teacher:** Good morning/afternoon, everyone. Today, let us begin the class by focusing on something truly meaningful, i.e., gratitude.

**Teacher:** Look at your 'Gratitude' sheet. I want you to think about one person who has made a positive difference in your life. It could be a family member, a helper at home or even a teacher.

**Teacher:** Now, take your gratitude sheet and make a small box where you can write a short note to the person you are grateful for.

**Teacher:** Write one or two sentences thanking them for what they have done or how they have made a difference in your life.

**Teacher:** Once you are done writing, we will share our notes with the class and place them on our gratitude chart.

## Book of Holistic Teaching

### Chapter 12: Introduction to Industries in India

#### A English

HoLL MDA

Fill in the blanks with the correct similes.

- The factory workers are as \_\_\_\_\_ as a bee.
- Medha is as \_\_\_\_\_ as the sugar that she processes.

#### B Maths

Swati works in the sunflower oil extraction industry. They collect 12–20 bottles of oil every day. Which unit will she use to measure the oil? Write the answer in the space provided.

#### C Science

Raju's job is to unload boxes of goods from the truck in his factory. Which kind of force will he use? Write the answer in the space provided.

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**Teacher:** Let us have a look at the Book of Holistic Teaching, Chapter 12: Introduction to Industries in India on page 37.

COULD DO

10 MIN.

(Ensure that the mentioned activities are completed by the students. These activities are designed to enhance their holistic understanding and engagement with the topic. Provide any necessary support and/ or materials to help them successfully finish the activities.)

## Book of Project Ideas

SHOULD DO

15 MIN.

(Discuss the project assigned in the previous period, focusing on helping students understand the objectives and addressing any challenges they faced.)

**Teacher:** Now, let us fill in the last column of the KWL chart.


COULD DO

5 MIN.

**Teacher:** In this column, we will write what we have learnt in this chapter.


**Teacher:** Think about the topics you have learnt and write them in the 'L' column of the chart. (Wait for students to fill in the chart.)

**Teacher:** Let us all give a huge round of applause to everyone for their effort. See you in the next class. Have a wonderful day ahead.

 You may generate additional practice worksheets using **Test Generator** given on digital platform.

## Differentiated Activities

### 110 km/hr

 Create a short story based on a factory or industry. Your story should include a mathematical application - Use numbers to describe how goods are measured in the industry (e.g., "they collected 50 boxes of goods each day").

80 km/hr



Write 3 – 5 sentences with similes based on factory work and share with your partner. For example - The factory bell rang 'like a school bell' at the end of the day.

40 km/hr



Pair up with a classmate. One of you will pretend to be a factory worker and the other will be a reporter asking questions. The factory worker should explain their job. Then you can switch roles.

### Home Task

With the help of parents, make a poster titled 'Local Products Around Me'.

- Draw the outline of your neighbourhood or city.
- Mark and label the places where products are made (e.g., handicrafts, food items, local textiles).
- Paste the pictures in the places where the products are made in your drawing.
- Write one sentence under each product describing what it is and where it comes from.

## Learning Outcomes

The students will:

Domain	Learning Outcome
Physical Development	<ul style="list-style-type: none"><li>• participate in role-play activities to related to industries in India, improving physical fitness and coordination</li></ul>
Socio-Emotional and Ethical Development	<ul style="list-style-type: none"><li>• develop curiosity, teamwork and respect for workers in industries, promoting gratitude and care for helpers and the environment.</li></ul>
Cognitive Development	<ul style="list-style-type: none"><li>• understand the transformation of raw materials into finished products, categorise the different types of industries and analyse their impact on the economy.</li></ul>
Language and Literacy Development	<ul style="list-style-type: none"><li>• express ideas clearly through written and verbal communication, such as explaining industrial processes, writing short stories and creating presentations.</li></ul>
Aesthetic and Cultural Development	<ul style="list-style-type: none"><li>• appreciate cultural heritage by exploring traditional industries and understanding the importance of local crafts in the economy.</li></ul>
Positive Learning Habits	<ul style="list-style-type: none"><li>• engage actively in class discussions, work independently and collaboratively and develop a sense of responsibility through projects and hands-on activities.</li></ul>

### Starry Knights

As we reach the least stage of the session, would you like to share your experience of teaching the younger learners? What was the most enjoyable activity in this lesson for you as well as the learners?

Reward yourself with a STAR.

