Lesson-1: Landforms of the Earth

11 Periods (40 minutes each)

Learn Better (Main Course Book), Stay Ahead (Workbook), Book of Holistic Teaching, Book of Project Ideas, CRM signs, Poster.

Animation, Animated Acctivities, Concept Map, Dictionary, Dictionary, eBook, I Explain, Infographic, Quiz, Slideshow

Confirming better

I keep things clean.

Curricular Goals and Objectives (NCF)

To enable the students:

- Identify and describe various landforms on the Earth.
- Understand the significance of different landforms in daily life.
- Develop critical thinking by engaging in activities related to landforms.
- Explore the characteristics of specific landforms like mountains, valleys and plateaus.
- Engage in collaborative discussions to solve questions and share ideas.

Methodology

Period 1

SHOULD DO

10 MIN.

Teacher: Good morning, students.

Students: Good morning, teacher.

Teacher: Before we began today's lesson, let us put up the family posters of our characters and their families. Also, we will put the lesson poster. Please sip some water to refresh yourselves while I put up the posters on the class board.

(Pause while students refresh themselves.)

Teacher: Feeling ready now? Great! Today, we will explore something exciting: Landforms of the Earth.

Confirming better

Teacher: Let us begin with the 'Confirming better' called 'I Keep Things Clean.'

Teacher: Let us talk about why keeping things clean is important, especially when exploring landforms. Imagine going to a beautiful mountain or beach, only to find it littered. How would that make you feel?

Teacher: Keeping our surroundings clean, even in our daily lives, ensures we respect and preserve the natural beauty of these landforms. Remember, small steps like using dustbins and avoiding littering can make a big difference.

Teacher: Now, I want you to think about one action you can take to keep our environment clean. Turn to your partner and share your idea.

(Students share in pairs and the teacher picks a few to share with the class.)

Teacher (with a smile): Let us start with a special activity called the 'KWL Chart.' Has anyone heard of it before?

Teacher: KWL stands for What I Know, What I Want to Know and What I Have Learned. It helps us organize our thoughts and set goals for our learning.

K	W	L

Teacher: Let us begin with the K section—What I Know. Think about what you already know about this lesson concepts, such globe, earth or anything.

Teacher: Now, let us move to the W section—What You Want to Know. For example, you could say, 'about equator, different zones of earth.' What are your questions?

(Encourage students to share their ideas. Ask them to record responses on the chart.)

Teacher: We will complete the 'Learned' section after end of lesson. Who is ready to dive in?

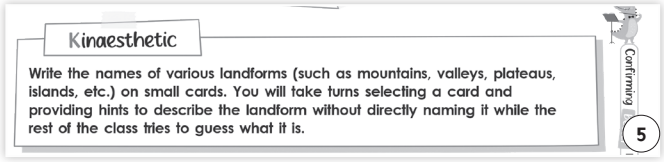
Teacher: Great! Let us move on to our Re-KAP activities. Please open page 5 in your book. Today, we start a new chapter: Landforms of the Earth.

Teacher: In every chapter, you will see three activities on the first page. These activities will help you understand the concepts better. Let us start with the first one, 'Re-KAP'. We are going to complete this together. Are you ready?

MUST DO

10 MIN.

Kinaesthetic



Teacher: For our first activity, let us play a fun guessing game. Write the names of landforms like mountains, valleys, plateaus and islands on small cards. Each of you will take turns selecting a card, giving clues about the landform and the rest of the class will guess.

Teacher: Let us begin! Who would like to go first?

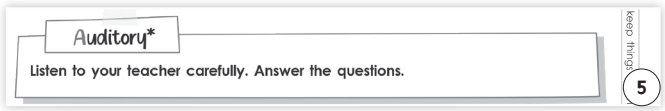
(Students take turns giving clues and guessing the landforms.)

Teacher: Fantastic teamwork, everyone! Let us move on to the next activity.

MUST DO

10 MIN.

Auditory



Teacher: Let us move on to sharpen our listening skills. I will read a short passage and your task is to listen carefully. Afterward, I will ask you some questions based on what you heard. Are you ready?

Students: Yes, teacher!

Teacher: Great! Listen closely:

'From the Himalayas to the islands, I sat with a map of India. The mighty Himalayas were cold and white. The northern plains were green and fertile, where farmers grew crops through hard work. The Thar Desert was hot and dry, with very little water. The southern plateaus were high and flat. Lastly, the two island groups were surrounded by water on all sides.'

Teacher: Now, let us test your listening skills!

Teacher: Question 1: What colour represented the Himalayas?

Question 2: What were two features of the Thar Desert?

Question 3: How were the northern plains described?

Teacher: Wonderful! Let us continue with the next activity.

MUST DO

10 MIN.

Pictorial

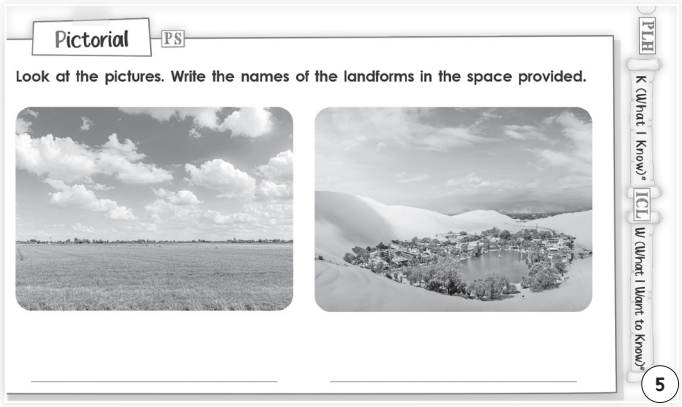
Teacher: Let us build on what we just learned by moving to an activity where you can use your eyes.

Teacher: For our next activity, the 'Pictorial Activity,' I want you to open your books to page 5. Here, you will find two pictures that show different landforms. Are you ready to put your observation skills to the test?

Students: Yes, teacher!

Teacher: Great! Let us carefully observe the pictures and identify the landforms in them. Remember to raise your hand if you know the answer. Let us get started!

Teacher: Correct, well done! This is a plain and you explained it perfectly. Plains are often used for farming because they have good, fertile soil. Now, who will tell me about the second picture.



Teacher: Excellent! That is a desert and you explained it well. Deserts are hot, dry and have sand dunes. Great job! Now, who else can share more about the landforms in these pictures?

(Encourage students to raise their hands, answer respectfully and listen to each other.)

Teacher: As we wrap up, remember to observe landforms around you when you go outside. Think about how they were formed and we will explore more in the next class.

Differentiated Activity

110km/hr

Research and create a presentation on different types of landforms found around the world.

80km/hr

Write a short paragraph explaining the key differences between mountains, plains and deserts. Use the landforms we discussed today as examples.

40 km/hr

Match the landforms from today's lesson (mountain, plain, desert) with pictures and write one sentence describing each landform.

Home Task

Draw your favourite landform (mountain, plain, desert, or any other landform you like) and label its features (e.g., peaks for mountains, dunes for deserts, rivers for plains).

Period 2

Teacher: Good morning, students.

Students: Good morning, teacher.

Teacher: Alright, before we dive into today's exciting lesson, let us take a moment to get our minds ready. I want everyone to close their eyes, take a deep breath and imagine you are standing at the top of a mountain. Breathe in the fresh air... and breathe out slowly... Let us do this five times and feel the calmness flow through us.

SHOULD DO

10 MIN.

Teacher: How are you all feeling now? Ready to conquer the lesson?

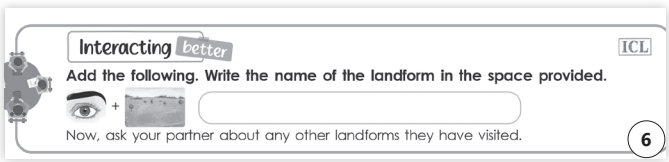
Students: We feel relaxed and ready, teacher.

Teacher: Awesome! Now that we are all set, let us get started with today's adventure. We are going to explore Mountains today. But before we jump in, let us do a fun activity to explore different landforms. Turn to the activity on the page 6 and I will explain how it works.

Interacting better

Teacher: On page 6, we have an interesting activity called 'Interacting better.' Look at the pictures: an eye and a land. What word do they make when combined together?

MUST DO
5 MIN.


Interacting better ICL
Add the following. Write the name of the landform in the space provided.
Now, ask your partner about any other landforms they have visited.
6

Teacher: Great! Now, if you add these together, what does it make? Think about a landform.

Teacher: Correct! 'Eye' and 'land' together make 'island.' Can everyone write 'island' in the blank?

Teacher: Now, ask your partner about any landforms they have seen. For example, 'Have you ever seen a mountain, river or desert?

Teacher: Great job! Now, let us turn to page 6 and begin our chapter starting with mountains.

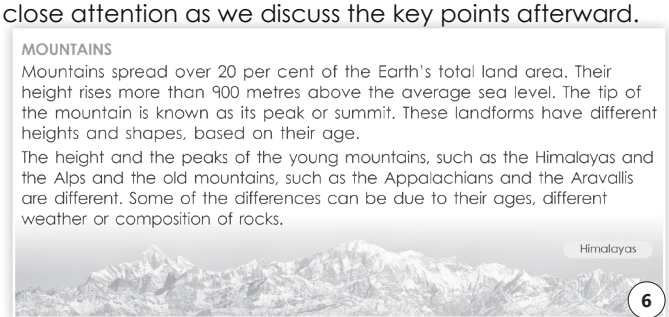
Teacher: Now that we have finished the 'Interacting better' activity, let us move on to the chapter about landforms. We'll focus on mountains first. Please turn to page 6.

(Ensure all students are on the correct page before starting.)

MUST DO
15 MIN.

Mountains

Teacher: Let us begin by reading the first paragraph together. I will call on some of you to read aloud, so pay close attention as we discuss the key points afterward.


MOUNTAINS
Mountains spread over 20 per cent of the Earth's total land area. Their height rises more than 900 metres above the average sea level. The tip of the mountain is known as its peak or summit. These landforms have different heights and shapes, based on their age.
The height and the peaks of the young mountains, such as the Himalayas and the Alps and the old mountains, such as the Appalachians and the Aravallis are different. Some of the differences can be due to their ages, different weather or composition of rocks.
Himalayas
6

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

Teacher: Good students! Now, let us talk about mountains.

How are mountains formed?

What kinds of plants and animals live on mountains?

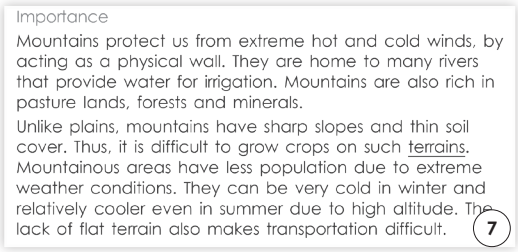
How do mountains help store fresh water?

What would happen to rivers if there were no mountains?

Let us explore these questions and learn more about mountains.

Importance of Mountains

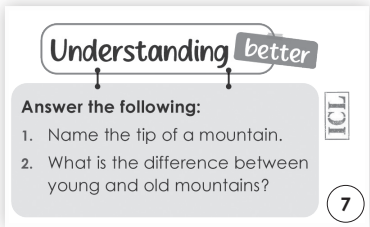
(Elaborate on why mountains are crucial to the environment and humans.)


Importance
Mountains protect us from extreme hot and cold winds, by acting as a physical wall. They are home to many rivers that provide water for irrigation. Mountains are also rich in pasture lands, forests and minerals.
Unlike plains, mountains have sharp slopes and thin soil cover. Thus, it is difficult to grow crops on such terrains. Mountainous areas have less population due to extreme weather conditions. They can be very cold in winter and relatively cooler even in summer due to high altitude. The lack of flat terrain also makes transportation difficult.
7

Understanding better

MUST DO
10 MIN.

Teacher: Let us now answer the questions in the 'Understanding better' section. First question—what is the tip of a mountain called? Who will answer?


Understanding better
Answer the following:
1. Name the tip of a mountain.
2. What is the difference between young and old mountains?
ICL
7

Teacher: Correct! The tip of a mountain is called a peak or summit. Well done! Now, for the second question—what is the difference between young and old mountains? Who would like to try answering?

Teacher: Exactly! Young mountains have sharp peaks and steep slopes because they are newly formed. Can anyone give me an example of a young mountain?

Teacher: Yes, the Himalayas are a great example of young mountains. Now, let us move on to old mountains. How are old mountains different?

(Students give random responses)

Teacher: Correct! Old mountains have rounded peaks and gentle slopes due to erosion over time. Can anyone name an old mountain range?

Teacher: Well done! The Aravalli Range is a great example of old mountains. Excellent work students.

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

Teacher: Alright, class! Let us do a fun group activity called the 'Mountain Exploration Challenge.' Ready?

Students: Yes, teacher

Teacher: Great! I will divide you into groups of 4-5. Each group will get paper and markers. Discuss and answer these questions:

How are mountains formed?

What are the differences between young and old mountains?

What types of plants and animals live on mountains?

How do mountains help store fresh water?

Then, draw and label a simple diagram of a young or old mountain. Make it colourful and clear.

Teacher: Fantastic teamwork, everyone! Give yourselves a big clap!

Differentiated Activity

110km/hr

Research and create a mini mind map about another landform (e.g., rivers, deserts, or valleys) using the structure of the mountains mind map. Include:

How it is formed

Types (if applicable)

Importance

80km/hr

Create a **list** of at least five facts about mountains, covering:

Formation

Types

Importance

(Students can use the class mind map for reference.)

40 km/hr

Answer these simple guiding questions in complete sentences:

1. How are mountains formed?
2. Name two types of mountains.
3. Why are mountains important for rivers?

Home Task

Write a short paragraph (5-7 sentences) on the topic: 'How Mountains Benefit Humans and the Environment.'

Period 3

SHOULD DO 05 MIN.

Teacher: Good morning, students.

Students: Good morning, teacher.

Teacher: How are you all feeling today?

Students: We are fine, thank you! How about you?

Teacher: I am feeling great! Before we start today's lesson on plateaus and plains, let us do something fun to refresh our minds. Let us take a quick stretch and do a little activity. Everyone, stand up and shake your arms and legs to get all the energy flowing.

MUST DO 25 MIN.

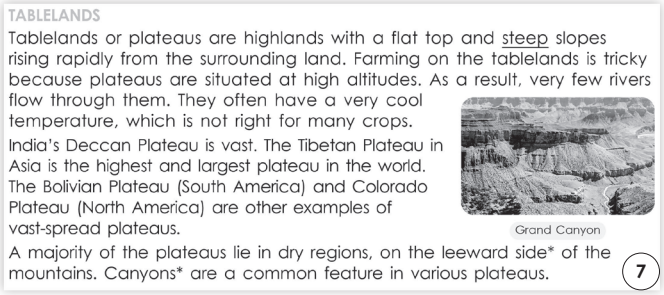
Teacher: How are you all feeling now? Ready to dive into the lesson?

Students: Yes, teacher!

Tablelands

Teacher: Awesome! Today, we will learn about tablelands, also known as plateaus. These are highlands with unique features and play an important role in the environment and human activities.

(Write the word Plateau on the board)


TABLELANDS

Tablelands or plateaus are highlands with a flat top and steep slopes rising rapidly from the surrounding land. Farming on the tablelands is tricky because plateaus are situated at high altitudes. As a result, very few rivers flow through them. They often have a very cool temperature, which is not right for many crops.

India's Deccan Plateau is vast. The Tibetan Plateau in Asia is the highest and largest plateau in the world. The Bolivian Plateau (South America) and Colorado Plateau (North America) are other examples of vast-spread plateaus.

Grand Canyon

A majority of the plateaus lie in dry regions, on the leeward side* of the mountains. Canyons* are a common feature in various plateaus.

7

Teacher: What do you think a plateau looks like? Have you heard of the Deccan Plateau or Tibetan Plateau?

Teacher: Before we jump into our fun activity, let us first learn about plateaus. Please open your book to page number 7 to the section on 'Tablelands' or plateaus. We are going to read about plateaus together.

(Read and explain about plateaus and their importance. Explain the images on Page 7)

Questions After Reading and explanation

What are the key characteristics of a plateau?

Can you name at least two plateaus from different parts of the world?

Why is farming difficult on plateaus?

Where are plateaus usually found and what features do they often have?

What are the main uses of plateaus for humans?

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

Discovering better

MUST DO 10 MIN.

Teacher: Now that we have finished reading about plateaus, let us move on to the 'Discovering better' section. Can everyone find it in your books?


Discovering better

terrains: refer to the natural features of an area of land

steep: sudden rise or fall; not gentle

LAD

7

Teacher: Great! This section explains the meanings of some important words—'terrains' and 'steep.' Let us start with 'terrains.' 'Terrains' refers to the natural features of an area of land. For example, a plateau is a type of terrain. Who can think of another example of terrain?

Teacher: Good! Now let us talk about 'steep.' 'Steep' means a sudden rise or fall, like the steep slopes of a plateau. Have you seen something steep in real life?

Teacher: Great example! Now, for your homework, I want you to write the meanings of 'terrains' and 'steep' in your notebooks. Can you also use each word in a sentence? For example, 'The steep mountain was difficult to climb.' Does that make sense?

Teacher: Good! We will discuss your sentences in the next class. Make sure to write neatly and think of creative examples.

Differentiated Activity

110km/hr

Write down three differences between plains and plateaus. Then, list two examples of each from around the world

80km/hr

Draw a plain and a plateau. Label each with its key features (e.g., flat terrain for plains, steep slopes for plateaus). Write one difference between them.

40 km/hr

Match the pictures of a plain and a plateau (teacher-provided or drawn) with their names and write one word to describe each (e.g., 'Flat' for plains, 'Steep' for plateaus).

Home Task

Write the meanings of 'terrains' and 'steep.' Use each word in a sentence and write why farming is difficult on plateaus.

Period 4

SHOULD DO
10 MIN.

Teacher: Good morning, my curious explorers.

Students: Good morning, teacher.

Teacher: Are you ready for a fun and adventurous class today?

Students: Yes, teacher.

Teacher: Let us wake up our minds with a quick game! I will ask a question and if the answer is 'yes,' you stand up. If it's 'no,' you sit down. Ready?

1. Have you ever seen a river?
2. Have you ever been to a desert?
3. Do you think deserts have a lot of plants?
4. Are rivers only found in mountains?
5. Do you like learning about landforms?

MUST DO
20 MIN.

(Encourage students to participate and laugh together as they respond.)

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

Plains and their importance

(Read and explain about plains and their importance on page 7 and 8)

Teacher: Alright, now that we are all laughing and ready, let us open our books to page 7. Today, we will learn about plains. Let us read together and explore how plains are formed and why they are important.

(Have students take turns reading the section on plains. Pause after each part to explain and ask questions.)

Teacher: Let us discuss.

Why do you think plains are home to more people compared to mountains?

Can you name any plains you have learned about before?

What makes the soil on plains so good for farming?

Can you think of some structures or projects that are easier to build on plains? Why?

(Allow students time to answer each question and discuss their ideas.)

Discovering Better

MUST DO
10 MIN.

Teacher: Let us move to the 'Discovering better' section on page 8. Everyone, please open to that page. We will start with the word 'airfields.' Who can tell me what an airfield is?

(Allow a few students to answer.)

Teacher: That is right! An airfield is a flat area where military or private planes can land and take off.

Teacher: Now, think about it for a moment. Why do you think airfields are built on plains? What makes plains a good place for airfields? Write your ideas in your notebooks.

Teacher: Let me ask you this—Can you think of other examples of things that are easier to build on flat land? Maybe roads, buildings or parks? Write those down as well.

(ask quick questions about plains and ask students to raise their hands to answer.)

What is a plain?

Why are plains good for farming?

Can you name one structure that is easier to build on plains?

Why are airfields built on plains?

Name one plain you know about.

Teacher: Great, explorers! You all did amazing. Tomorrow, we will learn more about landforms and their importance. Keep up the good work.

Differentiated Activities:

110km/hr

Imagine you are living in a plain. Write about how the flat land helps people in your community, like for farming, building homes or creating roads.

80km/hr

Imagine you are a farmer living in a plain. Write one sentence about what crops or animals you would raise there and why the land is good for that.

40 km/hr

Name one landform you have learned about (like a plateau, plain or mountain) and describe one thing about it.

Home task

Write 5 sentences on importance of the plains.

Period 5

SHOULD DO 10 MIN.

Teacher: Good morning, my curious explorers.

Teacher: Are you ready for a fun and adventurous class today?

Students: Yes, teacher.

Teacher: Let us start with a fun 'Desert Adventure' activity! I will ask a question about deserts and if the answer is 'yes,' you will do a little 'Cactus Stretch' (stand tall and stretch your arms like a cactus). If it is 'no,' you will just stand still.

Have you ever seen a desert in real life?

Do you think deserts are hot during the day?

Are deserts full of water?

Do you think cactus plants grow in deserts?

Deserts

MUST DO 15 MIN.

Teacher: Wow, you all look like you are ready to explore the desert! Now, let us open page number 8 of our books and dive into learning about deserts today.

Teacher: Let us dive into the amazing world of deserts!

(Shows pictures of cactus, babool tree, sand dune and camel)

What does this remind you of?

Deserts

Have you ever seen a desert?

What do you think is the main feature of a desert?

Can you name any animals that live in a desert?

What kind of plants can survive in hot and dry places?

What do you think the weather is like in deserts?

Teacher: That is right. Now let us learn some cool and fun facts about deserts.

(Read and discuss key features of deserts).

share fun facts:

Deserts are very dry because they receive little or no rainfall.

They have hot days and cold nights—a big temperature difference!

Sand dunes are huge piles of sand found in deserts, shaped by the wind.

Teacher: Now, let us make this fun—imagine you are stuck in a desert. What would you do to survive?

(Encourage students to share ideas, like finding water, building shade or following animal tracks)

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

Understanding Better

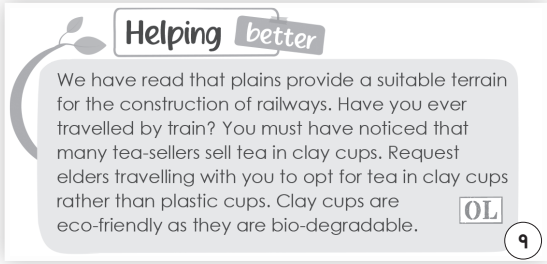
MUST DO 5 MIN.

Teacher: good! Let us see if you remember certain facts about plains and deserts. Read the statements given in 'Understanding better' on Page 8 and tell if the statements are true or false. (Let the students read the statements and answer)

Helping better

MUST DO 10 MIN.

Teacher: Now, let us turn to the 'Helping better' section on page 9. We have read that plains are great for building railways. Who here has travelled by train?



Teacher: Wonderful! When you travel by train, have you noticed the tea sellers offering tea in clay cups?

Teacher: Great observation! For your homework, I want you to write about your train journey. Have you noticed the teasellers using clay cups? Why do you think it is better to choose clay cups over plastic cups?

Teacher: Exactly! Remember to explain why using clay cups is good for the environment. We will discuss your answers in the next class.

Teacher: Good, We have learned so much about deserts and how life survives in such harsh conditions. Can anyone share one interesting thing they learned today?

Teacher: For tomorrow's class, please bring your workbook with you. We will continue with some activities and discussions. See you all next time.

Differentiated Activities

110km/hr

Imagine you are living in a desert. Write about how the unique features of the desert, like its dry land, extreme temperatures and sparse vegetation, affect daily life. Think about survival strategies, homes or ways to find water.

80km/hr

Imagine you are a camel in a desert. Write one sentence about how your body helps you survive in the harsh desert conditions, like storing fat in your hump or having long eyelashes to keep sand out.

40 km/hr

Name one feature of a desert (like sand dunes, cacti or camels) and describe one thing about it. For example: 'Sand dunes are large hills of sand shaped by the wind.'

Home task

Draw a desert scene with some plants, animals and sand dunes. Label each feature and add a sentences to describe about desert.

Period 6

SHOULD DO 10 MIN.

Teacher: Good morning, explorers! Before we start our river adventure, let us warm up with a fun joke.

Teacher: What did the river say to the beach?

Students: What?

Teacher: 'Long time no sea!' (*Laugh and giggle*)

Teacher: Amazing students! Before we start our river adventure, let me ask you some questions to see what you already know about rivers.

Teacher: Can anyone tell me where a river begins?

Teacher: Great! And what happens to a river as it flows? Does it stay the same or change?

Teacher: Excellent! Now, does anyone know what we call the place where a river meets the sea?

Rivers

Teacher: Fantastic! You all have some great knowledge about rivers. Now, let us move on to rivers, another fascinating landform.

MUST DO 20 MIN.

(read and explain about river on page number 8 and 9) - put snip

Teacher: We are going on a journey along a river! You will create your own river map, showing its journey from the mountains to the sea.

Each group will receive chart paper, markers and crayons to draw your river. Make sure to include:

The Upper Course – Where the river starts in the mountains.

The Middle Course – Where the river bends (meanders).

The Lower Course – Where the river slows down and forms a delta.

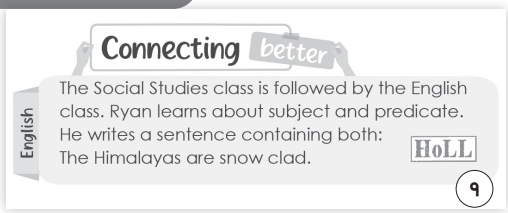
Add animals, boats, forests and bridges to make your river come to life. Each group will have 10 minutes to work on your map and then present it to the class. Ready?

Teacher: Grab your materials and get started! You have 10 minutes. If you need help, raise your hand. Ready, set, go!

(Walk around the classroom, checking on progress, giving encouragementand guiding students.)

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

Connecting better



MUST DO 10 MIN.

Teacher: We learned about rivers and the Himalayas. Now, let us connect it to something we are learning in English — subject and predicate. Ready for a fun twist?

Teacher: We are going to play a game called **S**entence Stretchers. Ryan wrote a sentence: *'The Himalayas are snow clad.'* This sentence has a subject (The Himalayas) and a predicate (are snow clad). Your challenge is to stretch this sentence to make it more interesting.

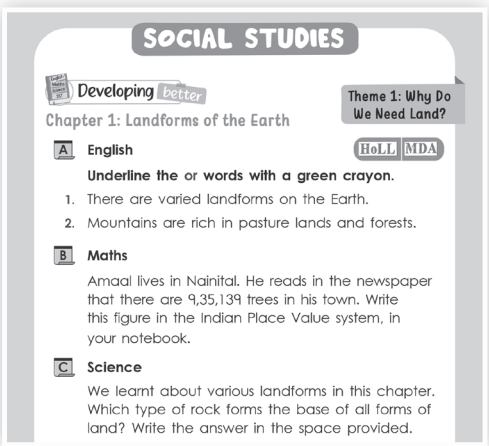
Teacher: Fantastic! You have all created some amazing sentences. Let us quickly identify the subject and predicate in a few of these stretched sentences. Raise your hand and point them out.

(*Guide students to identify the subject and predicate in the extended sentences.*)

Teacher: You have all been fantastic explorers today. I loved seeing your creativity and teamwork. Learning about landforms helps us understand the world and how people adapt to it. Remember to bring your workbooks tomorrow for an exciting new activity.

Stay curious, stay creative and keep exploring

Book of Holistic Teaching


SOCIAL STUDIES

Developing better

Theme 1: Why Do We Need Land?

Chapter 1: Landforms of the Earth

A English — HoLL MDA

Underline the or words with a green crayon.

1. There are varied landforms on the Earth.
2. Mountains are rich in pasture lands and forests.

B Maths

Amaal lives in Nainital. He reads in the newspaper that there are 9,35,139 trees in his town. Write this figure in the Indian Place Value system, in your notebook.

C Science

We learnt about various landforms in this chapter. Which type of rock forms the base of all forms of land? Write the answer in the space provided.

Refer to the Book of Holistic Teaching, page number 29 under the title "landforms of the earth" Complete the activities mentioned in this section and ensure that the students complete them. These activities are designed to enhance their holistic understanding and engagement with the topic. Provide any necessary support and materials to help the students successfully finish the activities.

Differentiated Activity

110km/hr

Imagine you are a river, starting in the mountains and flowing to the sea. Write a short story (4–5 sentences) about your journey. Describe what you see, how you feel as you rush down the mountains and finally meet the sea.

80km/hr

Draw and label the journey of a river on a blank page.
Include the Upper Course, Middle Course and Lower Course.

40 km/hr

Name one feature of a river (like delta, meander or source) and describe one thing about it. Example: 'A delta is a landform where the river meets the sea and deposits soil, creating fertile land.'

Home Task

Ask an elder or family member why rivers are important in their life or work. Write down 3 things they share.

Period 7

SHOULD DO 5 MIN.

Teacher: Good afternoon, my brilliant stars! Are you ready to shine even brighter in this session?

Teacher: Great! Let us begin with a little burst of energy to refresh our minds.

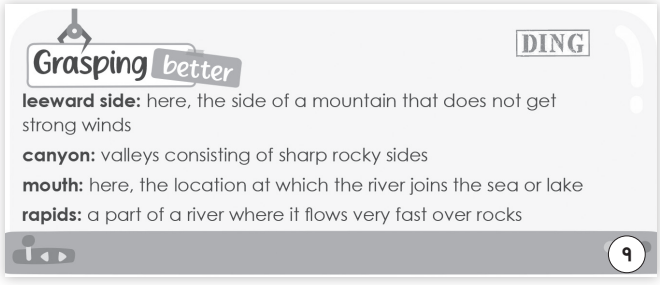
Teacher: Here is a quick game to warm up. We are going to play Word Train! I will say a word and you will have to say a related word quickly. The next person will say a word related to that and so on.

Here is an example: If I say 'river,' the next person could say 'water,' then the next person might say 'fish,' and so on. Let us see how long we can keep the train going without stopping! I will start: 'Himalayas."

(Students take turns saying words: 'mountain,' 'snow,' 'cold,' etc. The game continues until they pause or repeat a word.)

MUST DO 7 MIN.

Grasping Better



Teacher: Next, we will move on to something equally exciting — learning new terms to help us understand the chapter even better. This is called 'Grasping better', where we dive deeper into some key vocabulary.

(*Display or write the terms from the* 'Grasping better' *section on the board: leeward side, canyon, mouth and rapids.*)

Teacher: Let us explore these words together. I will read each one and then we will discuss what it means and where you might see it.

(Encourages students to write the words and their meanings.)

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

Caring better

MUST DO 6 MIN.

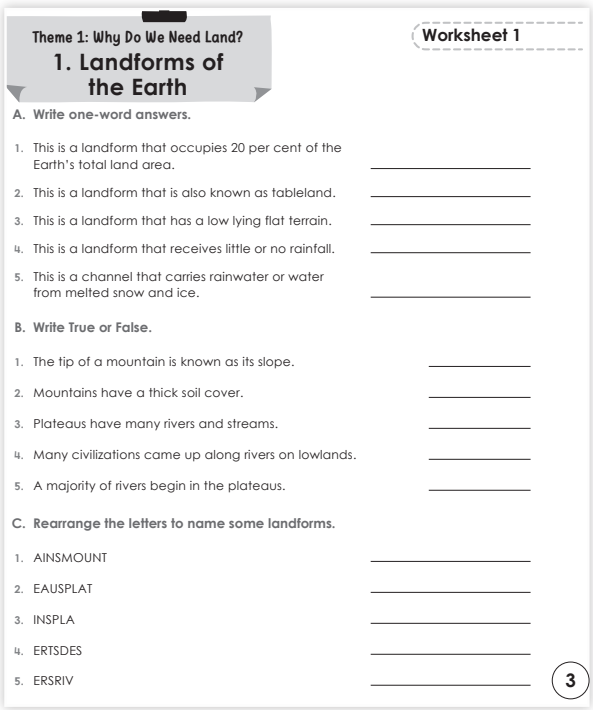
Teacher: Today, I have an exciting idea for us to help take care of nature. Let me ask you something first. Have you ever gone on a hike or a nature walk? What did you see on your walk?

Teacher: That is great. How about we ask our parents to organize a hike or nature walk where you and your friends can pick up litter along mountain trails? It will be a fun way to explore nature and at the same time, we can help protect it. What do you think?

(*Read and explain the section 'Caring better' on page* 9)

MUST DO 22 MIN.

Teacher: Alright, explorers! Ready for the next challenge? Please take out your workbooks and turn to Worksheet 1 and 2.


Theme 1: Why Do We Need Land?

Worksheet 1

1. Landforms of the Earth

A. Write one-word answers.

1. This is a landform that occupies 20 per cent of the Earth's total land area. _____
2. This is a landform that is also known as tableland. _____
3. This is a landform that has a low lying flat terrain. _____
4. This is a landform that receives little or no rainfall. _____
5. This is a channel that carries rainwater or water from melted snow and ice. _____

B. Write True or False.

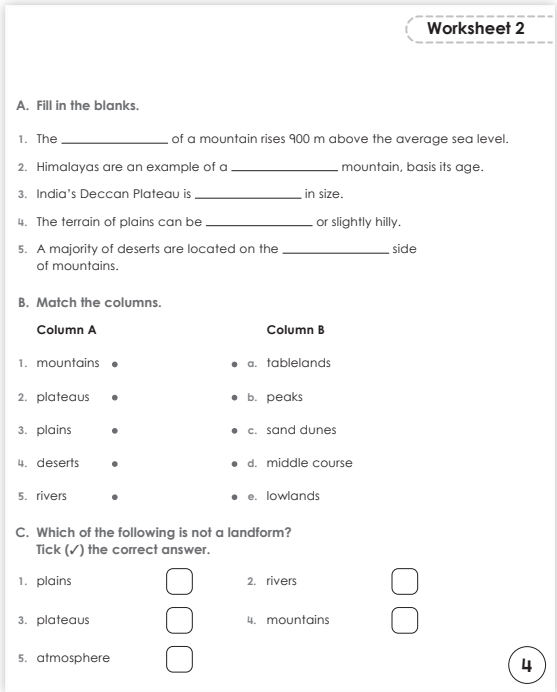
1. The tip of a mountain is known as its slope. _____
2. Mountains have a thick soil cover. _____
3. Plateaus have many rivers and streams. _____
4. Many civilizations came up along rivers on lowlands. _____
5. A majority of rivers begin in the plateaus. _____

C. Rearrange the letters to name some landforms.

1. AINSMOUNT _____
2. EAUSPLAT _____
3. INSPLA _____
4. ERTSDES _____
5. ERSRIV _____

3

Teacher: We will start with Worksheet 1! First, I want you to look at the one-word answers section. Let us do a quick example together.



Worksheet 2

A. Fill in the blanks.

1. The _____ of a mountain rises 900 m above the average sea level.
2. Himalayas are an example of a _____ mountain, basis its age.
3. India's Deccan Plateau is _____ in size.
4. The terrain of plains can be _____ or slightly hilly.
5. A majority of deserts are located on the _____ side of mountains.

B. Match the columns.

Column A		Column B
1. mountains	•	• a. tablelands
2. plateaus	•	• b. peaks
3. plains	•	• c. sand dunes
4. deserts	•	• d. middle course
5. rivers	•	• e. lowlands

C. Which of the following is not a landform? Tick (✓) the correct answer.

1. plains ☐ 2. rivers ☐
3. plateaus ☐ 4. mountains ☐
5. atmosphere ☐

4

(Wait for responses)

Teacher: Great, Let us move on to the true/false statements. I will read one out loud and you tell me if it is true or false.

Teacher: Now, look at the next section – 'Rearrange the letters.'

Teacher: Now, for Worksheet 2, we have fill-in-the-blanks, matching columns and fill in the blanks. Let us do it together.

Teacher: Remember, if you do not finish these activities in class, you can complete them for homework. But ask me if you need any help. See you all in the next class complete your worksheets.

Differentiated Activity

110km/hr

Imagine you are organizing a nature conservation campaign for your community. Write a short plan (4–5 sentences) explaining how you will encourage people to take care of rivers, mountains, or other natural landforms. Include activities like litter picking, tree planting, or awareness campaigns.

80km/hr

Create a mini-poster on how to protect rivers and mountains. Use drawings, simple slogans (like 'Keep Rivers Clean' or 'Save Our Mountains') and one fact about why these landforms are important.

40 km/hr

Draw a picture of your favourite landform (like a river, mountain, or canyon). Write one sentence about why it is special or why it should be protected. Example: 'Rivers give us water to drink and grow food.'

Home task

On a blank map of India or the world, label and colour major rivers, mountains and plains. Write the names of three rivers and three mountains you have learned about and complete worksheet 1 and 2.

Period 8

SHOULD DO 05 MIN. ☐

Teacher: Good morning, explorers! Before we dive into today's lesson, let us start by stretching our bodies to get energized and ready to learn. Stand up, reach for the skyand stretch as high as you can!

(Allow students to stretch for a few seconds.)

Recalling better

MUST DO 15 MIN. ☐

Teacher: Now, let us move on to **Recalling better!** I will ask you some questions based on what we have learned so far. You can answer and for each correct response, you will earn a smiley face. Ready?

What are mountains? What is a peak or summit?

Define a plateau. Name the highest plateau in the world.

Define plains.

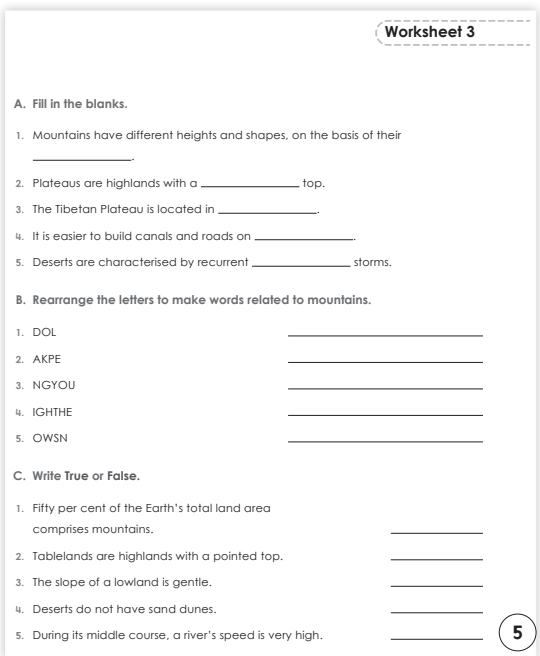
How much rainfall is received in the desert?

What are the three courses of a river?

(Ask these questions one by one and guide the students through the discussion.)

Teacher: Now, take out your workbooks and open to Page 5, worksheet 3. We are going to work on a worksheet together. As you complete it, think about everything we have discussed so far.

MUST DO 15 MIN. ☐



Worksheet 3

A. Fill in the blanks.

1. Mountains have different heights and shapes, on the basis of their _____.
2. Plateaus are highlands with a _____ top.
3. The Tibetan Plateau is located in _____.
4. It is easier to build canals and roads on _____.
5. Deserts are characterised by recurrent _____ storms.

B. Rearrange the letters to make words related to mountains.

1. DOL _____
2. AKPE _____
3. NGYOU _____
4. IGHTHE _____
5. OWSN _____

C. Write True or False.

1. Fifty per cent of the Earth's total land area comprises mountains. _____
2. Tablelands are highlands with a pointed top. _____
3. The slope of a lowland is gentle. _____
4. Deserts do not have sand dunes. _____
5. During its middle course, a river's speed is very high. _____

5

(Allow students time to complete the worksheet. Walk around and offer support as needed.)

Teacher: Now that everyone has finished the worksheet, let us check each other's answers. Pair up with your classmate and go through the answers together.

(Encourage students to share feedback and correct any mistakes.)

Teacher: Let us quickly review the key points of today's lesson. Who can tell me what a plateau is? And what are the three courses of a river?

COULD DO
05 MIN.

Teacher: Amazing, everyone. Let us give ourselves a big round of applause for today's learning. See you in the next class.

Differentiated Activity

110km/hr

Create a map with three features (mountains, plateaus, rivers). Label them and write 1-2 sentences for each, explaining how each feature affects the environment or human life.

80km/hr

Create a simple comparison chart showing mountains, plateaus, and rivers. Write 1 fact for each landform (location, function, or importance) using short sentences or pictures.

40 km/hr

Draw one landform (mountain, river, or plateau) and write one sentence about its importance, such as 'Rivers help crops grow by providing water.'

Home task

Create a poster comparing mountains, plateaus and rivers. Use drawings and simple facts about each landform. You can include one fact about each.

Period 9

Teacher: Good morning, explorers! Let us begin today with a fun energizer! We will play the 'Opposite Action' game using our hands!

SHOULD DO
5 MIN.

Teacher: When I say a landform, you will show the opposite action using your hands! Ready?

If I say 'Mountain,' you will make both hands low (as if showing a valley).

If I say 'River,' you will make still hands (like a calm surface).

If I say 'Plateau,' you will raise your hands up (like a mountain peak).

Teacher: Let's play a few rounds! I will say a landform, and you show the opposite with your hands. Ready? Here we go.

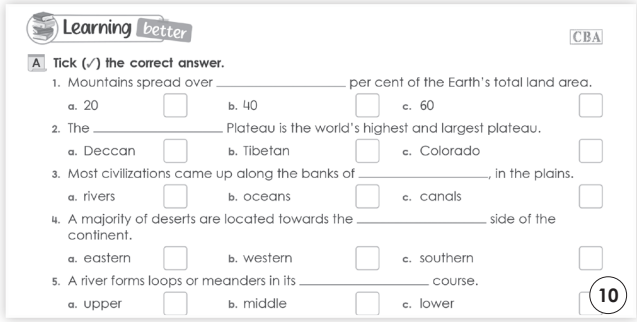
(Continue with a few more actions.)

Learning better

Exercise A

Teacher: Now, it is time for an exciting challenge to see how much we have learned so far. We are moving on to the Learning better activity on page insert page 10. For exercise A, we are going to work together as teams in a fun group challenge called 'Quiz Champions!'.

MUST DO
15 MIN.



Learning better — CBA

A Tick (✓) the correct answer.

1. Mountains spread over _____ per cent of the Earth's total land area.
   a. 20 ☐ b. 40 ☐ c. 60 ☐
2. The _____ Plateau is the world's highest and largest plateau.
   a. Deccan ☐ b. Tibetan ☐ c. Colorado ☐
3. Most civilizations came up along the banks of _____, in the plains.
   a. rivers ☐ b. oceans ☐ c. canals ☐
4. A majority of deserts are located towards the _____ side of the continent.
   a. eastern ☐ b. western ☐ c. southern ☐
5. A river forms loops or meanders in its _____ course.
   a. upper ☐ b. middle ☐ c. lower ☐

10

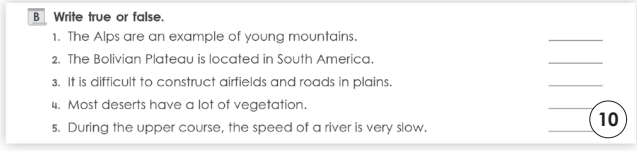
Note: Divide the students into four groups. Each group will discuss the question together for 30 seconds and choose their answer. When time is up, one person from each group will stand up and announce their answer. If your group gets it correct, you earn a point for your team. At the end of Part A, we will see which team is crowned the **Quiz Champions**.

Teacher: Group discussion time! Mountains spread over what percentage of the Earth's total land area? (Clue: It is less than half but more than a quarter.) You have 30 seconds to discuss and decide.

(Read each question aloud, encouraging students to respond. Write their answers on the board for group confirmation and announce the winning team and give them a round of applause).

Learning better

Exercise B



B Write true or false.

1. The Alps are an example of young mountains. _____
2. The Bolivian Plateau is located in South America. _____
3. It is difficult to construct airfields and roads in plains. _____
4. Most deserts have a lot of vegetation. _____
5. During the upper course, the speed of a river is very slow. _____

10

Now, let us jump into exercise B: True or False but we are going to make it more exciting. We will play a game called Stand or Sit. I will read a statement aloud. If you think it is true, stand up tall like a mountain. If you think it is false, sit down low like a river flowing through a valley.

MUST DO
15 MIN.

Teacher: The Alps are an example of young mountains. True or False? Stand if true, sit if false.

(Students respond by standing or sitting. Confirm the correct answer and explain briefly.)

Teacher: Wow, everyone! You were on fire with those True or False questions! Give yourselves a big round of applause.

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

Teacher: Before we end this amazing class, let us take the last five minutes to play a fun recall activity called 'Landform Memory Relay!'

I will point to a student and say the name of a landform, a key term. That student will recall one fact about it and pass the turn to another student by saying a new term.

COULD DO
5 MIN.

Teacher Starts the Relay**:** 'I will start! My word is 'Himalayas.' Who can recall one fact about the Himalayas?'

Teacher: I am so proud of all your hard work today. Keep up the amazing energyand I will see you next time for even more fun and learning. Goodbye, my brilliant students.

Differentiated Activity

110km/hr

Compare: Write a paragraph comparing the river and the desert. Highlight at least 3 differences (like water availability, weather and plant/animal life).

80km/hr

3 key facts about rivers (like 'Rivers start in the mountains and end in the sea').

3 key facts about deserts (like 'Deserts have little rainfall and extreme temperatures').

40 km/hr

Fill-in-the-blanks: Fill in blanks for simple sentences about rivers and deserts.

Example sentences:

'A _____ is a large, dry, sandy area with very little rain.' (Answer: desert)

'A _____ is a body of water that flows from mountains to the sea.' (Answer: river)

Home Task

Project Idea

With the help of the parents, ask students to complete a project from the Book of Project Ideas. Ask them to make an online presentation on the plateaus of the world.

Period 10

SHOULD DO
5 MIN.

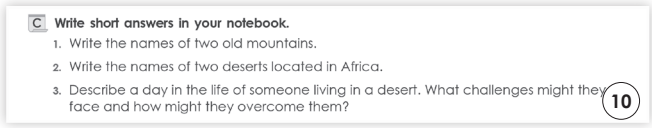
Teacher: Good morning, explorers! Before we dive into today's lesson, let us wake up our brains and bodies with a quick refresh. Everyone, take a sip of water. Hydrating will help you feel energized and ready to learn.

Teacher: Now, take a deep breath in and let it out slowly. Stretch your arms up to the sky and reach as high as you can. Feel the stretch in your body and get ready to learn.

Teacher: Great job! Now that we are all refreshed, let us jump into today's lesson.

Learning better

Exercise C


C Write short answers in your notebook.
1. Write the names of two old mountains.
2. Write the names of two deserts located in Africa.
3. Describe a day in the life of someone living in a desert. What challenges might they face and how might they overcome them?
10

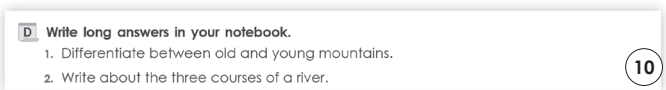
MUST DO
15 MIN.

Teacher: Now, let us move on to the 'Learning better' Exercise C activity on page 10. Open your books and take a look at the short questions. I will read the questions aloudand I want you to try and answer them in your notebooks. Ready?

(Allow students time to write their answers. Walk around to offer support.)

Learning better

Exercise D


D Write long answers in your notebook.
1. Differentiate between old and young mountains.
2. Write about the three courses of a river.
10

MUST DO
15 MIN.

Teacher: let us move on to Exercise D, where you will answer some long questions. I want you to work in pairs and discuss your answers before writing them in your notebooks. Take your time and think carefully about the answers.

(Allow students to discuss the questions and write their answers. Walk around to support them.)

COULD DO
5 MIN.

Teacher: Let us now have a class discussion. Who would like to share the answer to the first question?

(Continue discussing the answers, confirming the correct details for each question.)

Teacher: Before we end today's lesson, let us have a quick recap and wrap-up activity! I will say a word and you need to share one interesting fact related to that word. Ready?

Mountain, Desert and River.

Teacher: Fantastic! Let us finish with a cheer: 'We are awesome learners!' Ready? One, two, three!

Students: We are awesome learners.

Differentiated activity

110km/hr

Let us pretend we are environmental experts. One of you will be a river and the other will be a mountain. You need to talk about your role in the environment

80km/hr

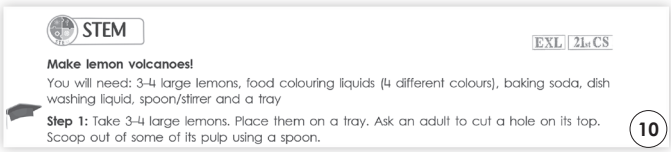
Call on students randomly to share one fact about mountains.

40 km/hr

Share one fact about any landform.

Homework

STEM


STEM

EXL 21st CS

Make lemon volcanoes!

You will need: 3–4 large lemons, food colouring liquids (4 different colours), baking soda, dish washing liquid, spoon/stirrer and a tray

Step 1: Take 3–4 large lemons. Place them on a tray. Ask an adult to cut a hole on its top. Scoop out some of its pulp using a spoon.

10

STEM activity on page 10, take 3–4 large lemons and ask an adult to cut a hole at the top of each one. Scoop out some of the pulp to create a small well in the centre. Add different food colouring to each lemon, followed by a little dish soap. Next, use a spoon to add baking soda into each lemon well and watch the volcanoes erupt. In your notebook, write down what happened during the eruption and explain why it occurred. Submit your observations in the next class.

Period 11

Teacher: Good morning students, before we begin let us quickly talk about what we have learned yesterday. Can anyone remind me of the key points from our last class?

SHOULD DO

5 MIN.

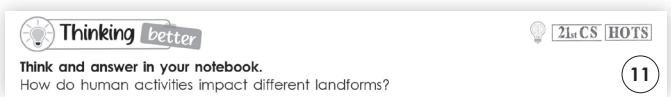
(Allow students to share their thoughts and briefly recap the previous day's learning.)

MUST DO

10 MIN.

(Show CRM sign keep thinking)

Thinking better


Thinking better

21st CS HOTS

Think and answer in your notebook.

How do human activities impact different landforms?

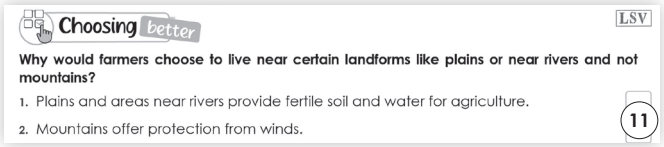
11

Teacher: Now, let us move on to the 'Thinking better' activity on page 11. Take out your notebooks and think about this question: 'How do human activities impact different landforms?'

Write your thoughts in your notebook. Think carefully about how things like construction, farming or pollution might affect the land around us.

Teacher: Once everyone is done, we will share some of your ideas and discuss them together.

Choosing Better


Choosing better

LSV

Why would farmers choose to live near certain landforms like plains or near rivers and not mountains?

1. Plains and areas near rivers provide fertile soil and water for agriculture.
2. Mountains offer protection from winds.

11

Teacher: Open Page 11 and read the question in the section 'Choosing better.' Think about it carefully and choose your answer. Write in your notebook why you chose that answer.

MUST DO

10 MIN.

Why would farmers choose to live near certain landforms like plains or rivers and not mountains? Let us read the two options together.

Option 1: Plains and areas near rivers provide fertile soil and water for agriculture.

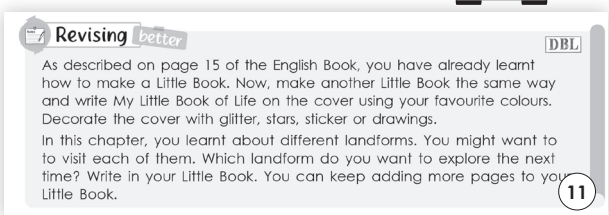
Option 2: Mountains offer protection from winds.

(Ask students to vote for the correct option by raising their hands for Option 1 or 2.)

MUST DO

10 MIN.

Revising better


Revising better

DBL

As described on page 15 of the English Book, you have already learnt how to make a Little Book. Now, make another Little Book the same way and write My Little Book of Life on the cover using your favourite colours. Decorate the cover with glitter, stars, sticker or drawings.

In this chapter, you learnt about different landforms. You might want to to visit each of them. Which landform do you want to explore the next time? Write in your Little Book. You can keep adding more pages to your Little Book.

11

Teacher: 'Let us now move on to Revising better. As described on page 15 of your English Book, make another Little Book and write 'My Little Book of Life' on the cover using your favourite colours. Decorate the cover with glitter, stars, or drawings. In this chapter, you learned about different landforms. Write in your Little Book which landform you want to explore next time. You can keep adding more pages as you learn.'

MUST DO

5 MIN.

Pledging better


Pledging better

SDGs

With all my heart, I pledge to not litter.

SDG 13: CLIMATE ACTION

11

Teacher: Now that we have learned a lot about landforms and the environment, it is time for us to make a pledge to take care of our world.

Teacher: Everyone, please stand and raise your right hand. Repeat after me: with all my heart, I pledge to not litter.

(Allow students to repeat after you.)

Teacher: Excellent! You have all made a wonderful pledge today. Let us continue to take care of our world, one step at a time.

Teacher: Before we finish today's class, let me give you your home task for this week. On **page 11**, you will find an activity called **Creating Better**.

Differentiated activity

110km/hr

Choose one landform (e.g., mountain or river) and describe how human activities like construction or farming affect it.

80km/hr

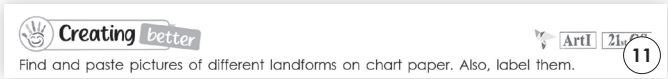
Match landforms (mountain, river, desert, plateau) with their characteristics (e.g., dry, tall, flows, flat).

40 km/hr

Draw a simple landform (mountain, river, or desert) and write one sentence about it.

Home task

Creating Better



Complete creating better activity and revise the whole chapter.

Learning Outcomes

The students will:

Physical Development	• Activities like the **landform guessing game** (kinaesthetic) and the **group tasks** (such as drawing and labeling landforms) promote physical engagement, coordination and active participation, helping students develop motor skills while learning about different landforms.
Socio-Emotional and Ethical Development	• The group activities, such as the '**Interacting better**' **activity** where students discuss landforms, foster teamwork, empathy and respect for others' opinions. Ethical decision-making is also promoted as students reflect on the environmental importance of various landforms, such as mountains.
Cognitive Development	• The lesson on landforms introduces key concepts like **mountains, plateaus** and **plains** through interactive activities, enhancing students' memory and comprehension skills. The activities also encourage critical thinking as students consider the formation and significance of landforms.
Language and Literacy Development	• Students improve their **vocabulary** and **reading comprehension** through activities like **listening to the passage on landforms**, **reading aloud** and **writing about landforms**. The activities strengthen speaking and listening skills while developing the ability to describe and explain different types of landforms.
Aesthetic and Cultural Development	• The **drawing and labeling task** allows students to express their understanding of landforms artistically. By exploring different geographical features, students also gain cultural awareness as they learn how various landforms impact human societies and cultures across the globe.
Positive Learning Habits	• The structured activities, such as **researching landforms**, **answering reflective questions** and **group brainstorming**, encourage responsibility, active participation and a positive attitude toward learning. These tasks help students reflect on their progress and make connections between the lesson and real-world applications of the concepts learned.

Starry Knights

How did your first session go? Could you connect with your learners?

Commendable, indeed!!!

Reward yourself with a STAR.

Lesson-2: Latitudes and Longitudes

10 Periods (40 minutes each)

Learn Better (Main Course Book), Stay Ahead (Workbook), Book of Holistic Teaching, Book of Project Ideas, CRM signs, Posters.

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

Curricular Goals and Objectives (NCF)

To enable the students:

- to develop an understanding of parallels and meridians and their significance in geography.
- to identify and explain the major parallels and meridians, understanding their numbering system.
- to locate places on the globe using the grid system and understand how coordinates help in navigation.
- to calculate time differences using longitudes and understand the role of meridians in time zones.
- to use digital and physical tools, such as globes, maps andonline resources, to explore real-world applications of geography.

Methodology

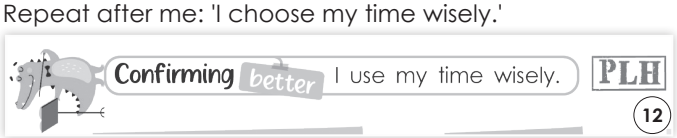
Period 1

Teacher: Good morning, my little explorers. I hope you are all ready for a fun and exciting session today. Let us start with a quick game to warm up. I will name a place and you can tell me the direction it might be in. For example, if I say 'The sun rises,' you would say 'East.' Ready?

(Encourage participation and accept all relevant responses.)

Confirming better

Teacher: Before we dive into today's lesson, let us start with a quick activity to help us focus and get ready. Repeat after me: 'I choose my time wisely.'



Teacher: Now, I want you to take a moment and think about one thing you can do today to use your time wisely. It could be staying focused during the lesson, being helpful to a friend or even taking time to organize your materials. While you think about it, let me put up the lesson poster on the class board or on the wall.

Teacher: Great. You all are so smart.

Teacher: Before we begin today's lesson, let us all take a quick break. Please sip some water to refresh yourselves.

(Pause while students refresh themselves.)

Teacher (with a smile): Let us start with a special activity called the 'KWL Chart.' Has anyone heard of it before?

Teacher: KWL stands for What I Know, What I Want to Know and What I Have Learnt. It helps us organize our thoughts and set goals for our learning.

K	W	L

Teacher: Let us begin with the K section—What I Know. Think about what you already know about this concepts such as globe, equator, poles, latitude and longitude.

Teacher: Now, let us move to the W section—What You Want to Know. For example, you could say, 'about equator, different zones of earth.' What are your questions?

(Encourage students to share their ideas. Ask students to record their responses on the chart.)

Teacher: We will complete the 'Learned' section after end of the lesson. Who is ready to dive in?

Teacher: let us do Re-KAP Today, we will explore directions using three methods:

K stands for Kinaesthetic: You will move and use your hands to learn.

A stand for Auditory: You will listen carefully and answer questions.

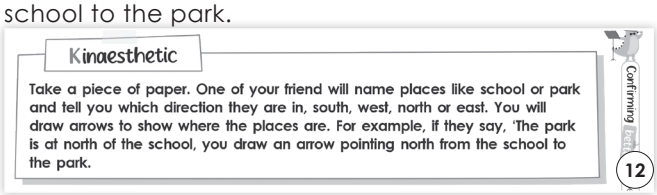
P stands for Pictorial: You will look at pictures and observe to learn.

Kinaesthetic

MUST DO

10 MIN.

Teacher: Let us start with a Kinaesthetic activity. Take a piece of paper and a pencil. One of your friends will name places, like a school or park and tell you which direction they are in (north, south, east or west). You will draw arrows to show where the places are. For example, if your friend says, 'The park is north of the school,' you will draw an arrow pointing north from the school to the park.



(Walk around, observing and assisting students. Encourage students to work together and compare their answers.)

Teacher: Excellent work, everyone. Can someone share an example of the direction you drew? What did your friend say?

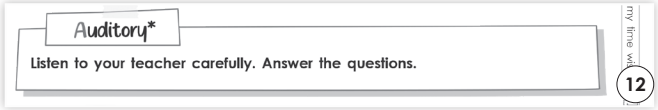
(Students share their drawings and examples. Teacher provides positive feedback.)

Auditory

MUST DO

10 MIN.

Teacher: Now, let us move on to the auditory activity. Listen carefully as I read the names of some states. Your task is to write down the directions in which these states are located. Ready?



(Reads aloud from the page number 112, the following names of states:)

Punjab, Kerala, Patna, Madhya Pradesh, Assam, Gujarat

Teacher: Write down the directions for each of these states based on what you know. For example, if I say Punjab, you might write 'north.' Discuss with your classmates if you are unsure.

(Encourage students to complete the task individually or in pairs. Provide assistance and feedback as needed.)

Teacher: Now let us see how well you listened. Here are some questions:

1. What are the four major directions?
2. In which direction does the sun rise?
3. If you are facing east, where is north?

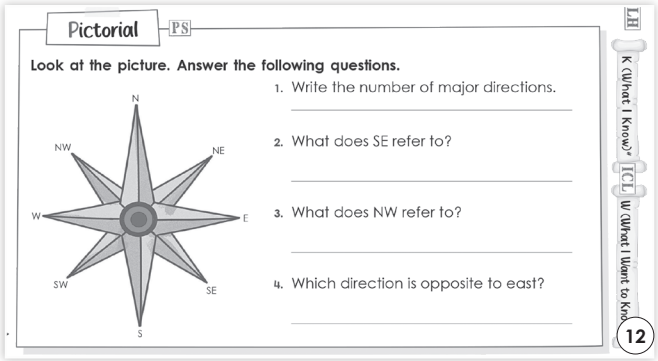
(Encourage students to answer and discuss their responses. Provide hints or guidance if needed.)

Pictorial

MUST DO

10 MIN.

Teacher: Finally, let us look at a picture of a compass rose. This will help us answer some questions about directions. Open your books to page 12.



(Point to the compass rose and explains SE, NW and opposite directions.)

Teacher: Now answer these questions:

1. How many major directions are there?
2. What does SE refer to?
3. What does NW refer to?
4. Which direction is opposite to east?

(Encourage students to raise their hands and share their answers. Facilitate discussion to clarify and reinforce concepts.)

Teacher: Fantastic work, everyone. Today, you learned how to identify directions and use them to locate places. Tomorrow, we will continue learning with even more fun activities. Do not forget to review the directions at home.

Differentiated activity

110km/hr

Challenge them to use more complex directions like 'north-east' or 'south-west' and explain their reasoning to the class.

80km/hr

Encourage them to explain the reasoning behind the direction, even using additional geographical knowledge (e.g., 'Madhya Pradesh is central and surrounded by states like Uttar Pradesh and Maharashtra')

40 km/hr

Ask them to find a real-world example where they might use directions

Home Task

Practice drawing a compass rose on a sheet of paper and label the directions (N, S, E, W, NE, NW, SE, SW). Write an example of a place for each direction.

Period 2

SHOULD DO

10 MIN.

Teacher: Good morning, my little adventurers. Are you ready to dive into another exciting lesson on directions? Let us begin with a fun activity to warm up.

We will play a word game. I will give you scrambled letters and you have to figure out the name of a tool that helps people find directions. Ready?

Teacher: Here's the scrambled word: 'ELBOG'.

Teacher: Work with your partner and see if you can figure out the word.

Teacher: The answer is 'GLOBE'! Great job, everyone! Now, let us get ready to learn more about directions today!

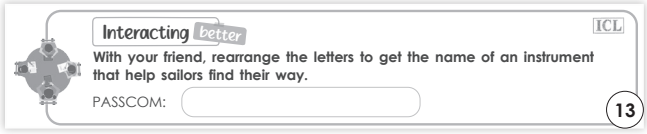
You may show **eBook** given on digital platform.

Interacting better

Teacher: With your friend, rearrange the letters to find the name of an instrument that helps sailors find their way. Ready?

MUST DO

15 MIN.



PASSCOM:_____.

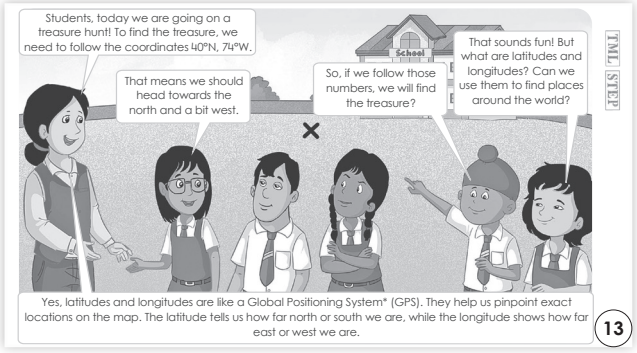
(Allow students to solve the jumbled words and share their answers. The correct answer is 'COMPASS.' Provide positive reinforcement.)

Teacher: Yes, a compass helps us find directions. Today, we will go a step further and learn about another exciting way to locate places on Earth using imaginary lines called latitude and longitude.

Teacher: Let us look at this globe (or map). Can anyone tell me, what shape is the Earth?

Teacher: Correct. Now, imagine we want to find a treasure hidden on Earth. How do we describe its exact location?

Teacher: That is a great start, but what if we need to be even more specific? This is where latitude and longitude come in (Lifts the globe or points to a map.)



Teacher: Look closely. Latitude lines run horizontally, like the steps of a ladder. (Draw or point to a latitude line.) Longitude lines run vertically, meeting at the poles. (Draw or point to a longitude line.) The equator, at 0° latitude, splits the Earth into north and south. The Prime Meridian, at 0° longitude, splits it into east and west.

MUST DO

15 MIN.

Teacher: Let us practice. What is the 0° latitude line called?

Teacher: Perfect. Now, which line runs north south and meets at the poles?

Teacher: Today, we will learn about latitude, longitude and how we locate places on Earth. Who knows what the North and South Poles are?

Teacher: Correct. The North Pole is at the top and the South Pole is at the bottom. These are reference points for latitude and longitude. Now, we will create our own coordinate system.

Teacher: On a piece of paper. Draw a large plus sign with a vertical and horizontal line crossing each other. Label the horizontal line 'Latitude' and the vertical line 'Longitude.' Draw a dot in the centre to represent the Equator (0° latitude) and the Prime Meridian (0° longitude).

Teacher: Great job, everyone. This helps us understand how latitude and longitude work together to find locations on Earth. Would anyone like to share what they learned?

Teacher: Great work today, everyone. Let us quickly recap what we learned. We started with a fun puzzle. What tool helps us find directions on Earth?

Teacher: Then, we looked at the Earth's shape. Can anyone remind me what imaginary lines help us locate places on Earth?

Teacher: Correct. Latitude and longitude are the key lines. Now, who can tell me what the 0° latitude line is called?

Teacher: That is right, the Equator. Now, can anyone tell me what line runs vertically and is at 0° longitude?

Teacher: Exactly. The Prime Meridian. These lines divide the Earth into the Northern and Southern Hemispheres and the Eastern and Western Hemispheres.

Teacher: After that, we practiced creating our own coordinate system. How do latitude and longitude lines help us find locations?

Teacher: Well done today. For the next class, I encourage you to explore the Northern and Southern Hemispheres and think about how latitude and longitude help us describe different places on Earth.

Teacher: Keep practicing andnext time we will explore more. Have a great day.

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

Differentiated activity

110km/hr

After drawing the basic coordinate system (latitude and longitude lines), ask them to go further and label important latitudinal and longitudinal coordinates (e.g., 90°N, 90°S, 0° latitude and 0° longitude).

80km/hr

Ask students to locate major landmarks on the globe (e.g., the Equator, the Prime Meridian) and describe their locations in terms of latitude and longitude.

40 km/hr

Give them a list of locations and provide hints on how to find the coordinates (e.g., use a world map or globe). Allow them to work in pairs to help each other with the task.

Home Task

Draw a Simple Coordinate System:

On a piece of paper, draw a large 'plus sign' to represent the Earth's coordinate system. Label the horizontal line as Latitude and the vertical line as Longitude. Mark and label:

- The Equator (0° Latitude)
- The Prime Meridian (0° Longitude)
- The North Pole and South Pole using approximate coordinates.

Period 3

SHOULD DO
10 MIN.

Teacher: Good morning, everyone. I hope you are feeling energized and ready to learn something new today. Let us begin with a quick activity to get our minds warmed up.

Teacher: I will give you a few actions to perform. Are you ready?

Pretend to draw a circle on the ground.

Walk in a straight line, like you are following a path.

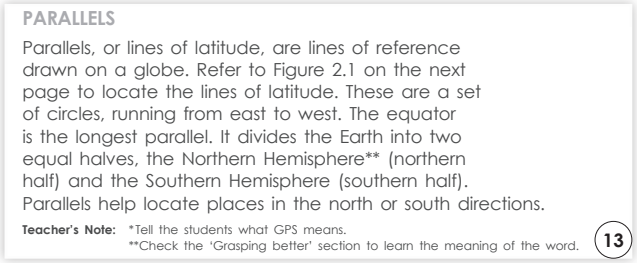
Stretch your arms out, like you are dividing the Earth into two halves.

(Encourage enthusiastic participation and praise students for their effort.)

Parallels

MUST DO
20 MIN.

Teacher: That was great, now that we are warmed up, let us dive into today's exciting topic: Parallels.


PARALLELS

Parallels, or lines of latitude, are lines of reference drawn on a globe. Refer to Figure 2.1 on the next page to locate the lines of latitude. These are a set of circles, running from east to west. The equator is the longest parallel. It divides the Earth into two equal halves, the Northern Hemisphere** (northern half) and the Southern Hemisphere (southern half). Parallels help locate places in the north or south directions.

Teacher's Note: *Tell the students what GPS means.
**Check the 'Grasping better' section to learn the meaning of the word.

13

Teacher: Please open your books to page 14. Let us start by reading the section on Parallels. I will read aloud and you can follow along.

(Read the content on Parallels and explain the concept.)

Teacher: Parallels are lines of reference drawn on a globe. They help us locate places in the north or south directions. Let us look at the Equator first, the longest parallel. It divides the Earth into two equal halves: the Northern Hemisphere and the Southern Hemisphere.

(Explains the Equator and its significance.)

Teacher: Now, let us read the full section together. I will guide you through the details of the parallels, their numbering and what they represent.

(Teacher discusses the numbering system of parallels, with the Equator as the starting point at 0° and the parallels marked at 1° intervals, from 0° to 90°.)

Teacher: Let us look at the map on page 15. This will help you visualize how the parallels are positioned across the globe

Teacher: Now that we have discussed the parallels, I want you to work in pairs. Look at the map in your book and try to locate as many of the major parallels as you can. Have a wonderful day. See you tomorrow for more exciting lessons.

Discovering better

MUST DO
10 MIN.

Teacher: Let us move on to the next exercise, called 'Discovering better.'

In this activity, we will think about the role of parallels in more detail.

Teacher: The term imaginary refers to something that is in our minds and not real, while reference means something that acts as a source of information.

(Write the definitions on the board for clarity.)

Teacher: Parallels are imaginary lines drawn on a globe, which help us with the reference of location. I want you to work with your partner and think of three other examples of imaginary lines or references that help us understand the Earth better.

(Allow students to discuss in pairs. After 5 minutes ask students to share their answers with the class.)

Teacher: What did you come up with? Some examples might include the Prime Meridian or the Tropic of Cancer.

(Encourage class discussion and reinforce the idea that parallels help us navigate and divide the world.)

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

Teacher: Excellent work today. Let us quickly recap what we learned about parallels. Who can remind me what the Equator is and how it divides the Earth?

(Allow a few students to respond and guide the discussion.)

Teacher: Fantastic. We have learned how the parallels work and their importance in understanding the world around us.

Differentiated activity

110km/hr

Allow them to explore more complex ideas related to the parallels and their impact on the world, giving them the chance to lead discussions or create presentations for the class.

80km/hr

Call students on board and ask them to draw parallels of earth.

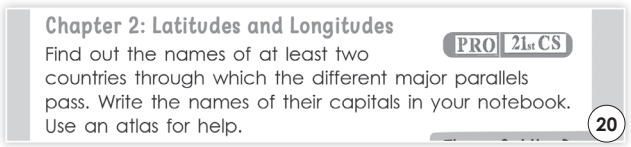
40 km/hr

Provide students with a pre-labeled map of the world showing the Equator and the main parallels (Tropic of Cancer, Tropic of Capricorn, Arctic Circle) then ask them to identify it.

Hometask

Book of Project Ideas

Find out the names of at least two countries through which the different major parallels pass. Write the names of their capitals in your notebook. Use an atlas for help.



Period 4

Teacher: Good morning, everyone. Let us begin today with a fun refresher activity to get our minds energized.

SHOULD DO — 10 MIN.

Teacher: I will give you a few actions to perform. Are you ready?

Point to the North with your finger and then to the South.

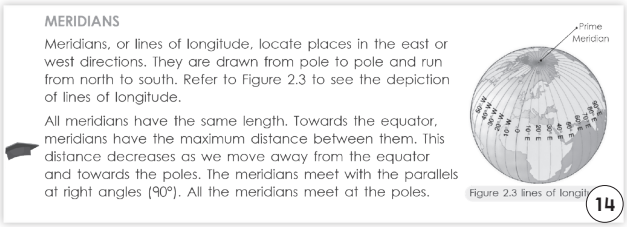
Stand tall and stretch your arms to imagine the distance between the Equator and the poles.

(Encourage enthusiastic participation and praise students for their effort.)

Meridians

Teacher: Great, Now that we are warmed up, let us dive into today's topic: Meridians. Please open your books to page 14. Let us start by reading about meridians. I will read aloud and you can follow along.

MUST DO — 20 MIN.



(Read the content on meridians and explain the key concepts.)

Teacher: Now, let us do a quick activity. On your paper, draw globe and pass a vertical line down the middle and label it as the Prime Meridian. This represents 0° longitude, dividing the Earth into the Eastern and Western Hemispheres.

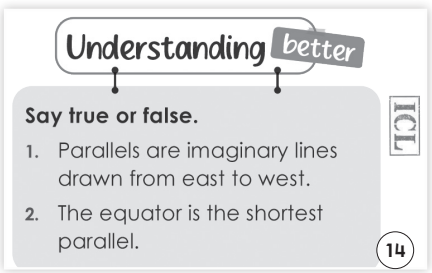
(Give students time to draw and label the Prime Meridian. Walk around to assist.)

Teacher: Now that we have drawn the Prime Meridian, let us work together to identify other important meridians on a map.

Understanding better

MUST DO — 10 MIN.

Teacher: Excellent students.



Teacher: Let us do a quick recap. I will read a statement and you have to say 'True' or 'False'. If the statement is true, show a thumbs up. If it is false, cross your arms.

Parallels are imaginary lines drawn from east to west. (True)

The equator is the shortest parallel. (False)

Teacher: Well done. You all remembered this well.

(Allow a few students to share their thoughts.)

You may show the **sideshow** given on digital platform

Teacher: For your home task, I want you to draw a simple map of the world and label the Prime Meridian. Mark at least three other major meridians on the map. Bring it to class tomorrow.

Differentiated activity

110km/hr

Ask them to identify which continents lie in the Eastern and Western Hemispheres.

80km/hr

Ask them to write a simple sentence about the role of the Prime Meridian (e.g., 'The Prime Meridian divides the Earth into two halves').

40 km/hr

Draw the globe and add the Prime Meridian. Help students label the Prime Meridian and the Eastern and Western Hemispheres clearly.

Hometask

Draw a simple map of the world and label the Prime Meridian. Mark at least three other major meridians on the map.

Period 5

SHOULD DO
05 MIN.

Teacher: Good morning, everyone. Let us start with a quick activity to energize ourselves.

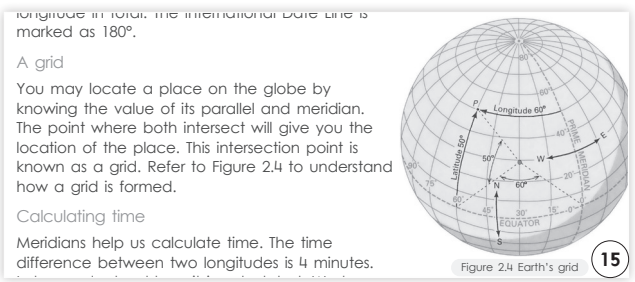
Imagine you are traveling the globe. Take two steps to the North and clap your hands. Now, take two steps to the East and stomp your feet. Pretend you are standing at the point where two imaginary lines cross. What would that point represent?

(Accept random responses and start with topic grid)

Grid

Teacher: Open your books to page 15 and look at Figure 2.4. Let us do a fun activity to understand how a grid is formed. Take a tennis ball or a football and show it to the class. Use a marker to draw a few lines of longitude (north to south) and lines of latitude (east to west) on the ball. These lines are imaginary, but they help us locate places. Together, the lines of latitude and longitude form a grid.

MUST DO
10 MIN.


marked as 180°.

A grid

You may locate a place on the globe by knowing the value of its parallel and meridian. The point where both intersect will give you the location of the place. This intersection point is known as a grid. Refer to Figure 2.4 to understand how a grid is formed.

Calculating time

Meridians help us calculate time. The time difference between two longitudes is 4 minutes.

Figure 2.4 Earth's grid

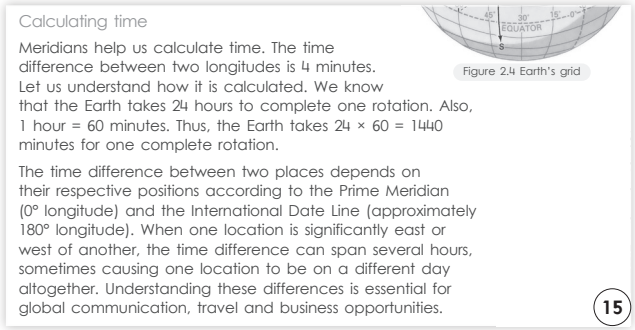
15

(Invite students to come forward one by one. Give each student orange strips to represent longitudes and blue strips to represent latitudes. Ask them to paste the strips on the ball where the lines should go, creating a visible grid. Once all the strips are in place, point out the intersection points and explain that each point represents a specific location on the globe. Ask students to identify and describe a few grid points on the ball. Discuss how this helps pinpoint exact locations on Earth.)

Calculating time

Teacher: Today, we are going to learn how to calculate time using meridians. Are you ready?

MUST DO
15 MIN.


Calculating time

Meridians help us calculate time. The time difference between two longitudes is 4 minutes. Let us understand how it is calculated. We know that the Earth takes 24 hours to complete one rotation. Also, 1 hour = 60 minutes. Thus, the Earth takes 24 × 60 = 1440 minutes for one complete rotation.

The time difference between two places depends on their respective positions according to the Prime Meridian (0° longitude) and the International Date Line (approximately 180° longitude). When one location is significantly east or west of another, the time difference can span several hours, sometimes causing one location to be on a different day altogether. Understanding these differences is essential for global communication, travel and business opportunities.

Figure 2.4 Earth's grid

15

Teacher: Great. Let us start with a question: Did you know that the Earth takes 24 hours to complete one rotation?

Teacher: Excellent. Now, let us calculate. If one rotation equals 24 hours, that is the same as 24 × 60 minutes, which gives us 1,440 minutes for one full rotation.

Teacher: Yes, it is. Now, the Earth has 360 meridians in total. If we divide 1,440 minutes by 360 meridians, what do we get?

Teacher: That is correct. This means the time difference between two meridians is 4 minutes. Now, let us think about how this works in real life.

Teacher: Imagine you are in India andyour school has just started at 8:00 AM. What time do you think it would be in the USA?

Teacher: Good guesses. Let us figure it out. Remember, India is in the Eastern Hemisphere andthe USA is in the Western Hemisphere. They are on opposite sides of the Earth. This creates a big time difference.

Teacher: For example, if it's 8:00 AM in India, it might be around 9:30 PM the previous night in New York, USA. Why? Because of the meridians and the way the Earth rotates.

Teacher: Now, here's a challenge for you. If it's 6:00 PM in India, can you calculate what time it is in Los Angeles, USA?

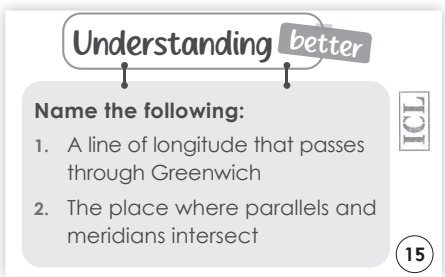
Teacher: Great effort. We'll discuss your answers shortly. This is how meridians help us calculate time and understand the time zones around the world.

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

Understanding better

(open page number 15, understanding better exercise)

MUST DO
10 MIN.


Understanding better

Name the following:

1. A line of longitude that passes through Greenwich
2. The place where parallels and meridians intersect

ICL

15

Teacher: Let us quickly recap what we have learned today with a short activity. I will ask you a couple of questions andyou need to name the correct term.

1. What is the line of longitude that passes through Greenwich called?
2. What is the point called where parallels and meridians intersect?

Teacher: Raise your hands if you know the answers. Let us see who remembers. (Encourage participation and discuss answers briefly.)

Teacher: Now, let me ask you a few quick questions to test your memory:

What is the line of longitude that passes through Greenwich called?

What do we call the points where lines of latitude and longitude intersect? Think about your answers and raise your hands if you know them.

Teacher: Great work today. Remember, these concepts help us understand the world better, especially for travel and communication. See you all tomorrow for more geography fun.

Differentiated activity

110km/hr

Give them a scenario involving multiple time zones: 'If it's 9:00 AM in India, what time is it in Tokyo and London?'

80km/hr

Pair them with a partner to discuss why grids are essential for finding locations.

40 km/hr

Ask them to answer true/false questions:
The Prime Meridian is at 0° longitude. (True)
The Equator is a line of longitude. (False)

Homework

1. Create a grid: Draw lines of latitude and longitude on a world map or globe. Identify at least 3 locations and write their coordinates.
2. Time Calculation: If it is 3:00 PM in India, calculate the time in New York and Los Angeles using meridians.

Period 6

SHOULD DO 05 MIN.

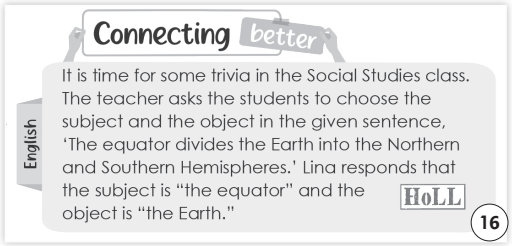
Teacher: Good morning, class. Let us dive into today's lesson with some fun activities that will help us connect everything we have learned so far. Are you ready?

(Show CMR sign- keep thinking)

Connecting better

MUST DO 10 MIN.

Teacher: It is trivia time. Let us start with a fun exercise. Here is a sentence:



'The equator divides the Earth into the Northern and Southern Hemispheres.'

Who can tell me, what is the subject and what is the object in this sentence?

Teacher: That's correct. The subject is 'the equator' because it's doing the action andthe object is 'the Earth' because it's receiving the action. Great job, everyone.

Helping better

MUST DO 05 MIN.

Teacher: Now, let us put your geography knowledge to the test. I have an exciting task for you

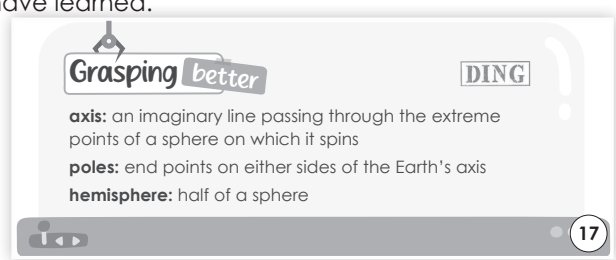
Imagine you are planning an eco-friendly trip using latitude and longitude coordinates. With the help of your parents, research eco-friendly transportation options like walking or public transport to travel between destinations.

Teacher: As you map out your journey, think about how different ecosystems and eco-friendly attractions can be explored along the way. Can anyone share what kind of places they might choose for their eco-friendly trip?

Grasping better

MUST DO 10 MIN.

Teacher: Let us take a moment to understand some key terms we have learned.



Here are a few important definitions:

- Axis: An imaginary line passing through the extreme points of a sphere on which it spins.
- Poles: The end points on either side of the Earth's axis.
- Hemisphere: Half of a sphere, like the Northern or Southern Hemisphere.

Teacher: Now, can someone explain what the axis is and where the poles are located?

show **Dictionary** from LMS portal to recap the key words

Caring better

Teacher: For our final activity today, let us think about how we can use latitude and longitude to help the environment.

MUST DO
10 MIN.

I would like you to work with your parents on planning a community garden project. Use your knowledge of latitude and longitude to choose the best location for planting trees based on two factors:

Sunlight exposure: Latitude determines how much sunlight an area gets throughout the year.

Soil type: Longitude helps us determine different soil types in various regions.

Teacher: This will be a great way to apply what we have learned about Earth's coordinates and do something good for our community. Let us start thinking about where and how we can plan this project.

Teacher: That is all for today, class. Great participation in activities. Keep exploring and thinking about how we can use geography for a better world. See you all tomorrow.

Differentiated activity

110km/hr

Challenge them to come up with their own trivia question about geography (e.g., 'Which hemisphere contains the most landmass?') and share it with the class.

80km/hr

Ask them to think about what type of eco-friendly transport they would choose and why.

40 km/hr

Provide them with a simple fill-in-the-blank sentence, such as:

- 'The _____ divides the Earth into the Northern and Southern Hemispheres.'
- Help them fill it in as a group activity.

Hometask

Choose two destinations and use latitude and longitude coordinates to plan an eco-friendly trip between them. Write a short paragraph describing your journey and the eco-friendly options you would choose.

Period 7

Teacher: Good morning, class. Let us wake up our minds with a fun activity to start our lesson.

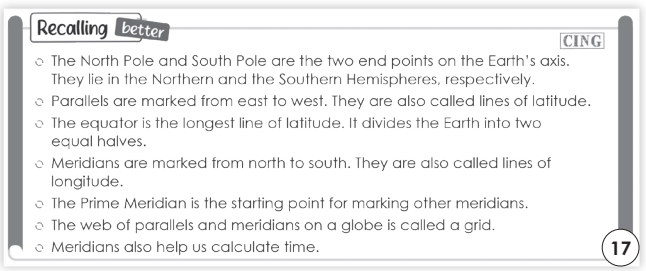
SHOULD DO
3 MIN.

Teacher: Now, before we dive into today's lesson, let us take a quick water break. Drink some water to stay hydrated and we all get started in a minute.

Recalling better

Teacher: Alright, class, let us quickly recap what we have learned today. I will ask a few questions and I want you to think about the answers. You can respond in words or phrases and if you have any doubts, feel free to ask. So, let us begin.

MUST DO
10 MIN.



(Read question for recalling better activity)

Where do the North Pole and the South Pole lie?

What are the lines of latitude?

What are the lines of longitude?

Which is the longest line of latitude?

Name the starting point for marking the other meridians

What is a grid?

How are meridians useful to us?

Teacher: Fantastic work. You all did great thinking through these questions. Keep these key points in mind as we continue learning about directions.

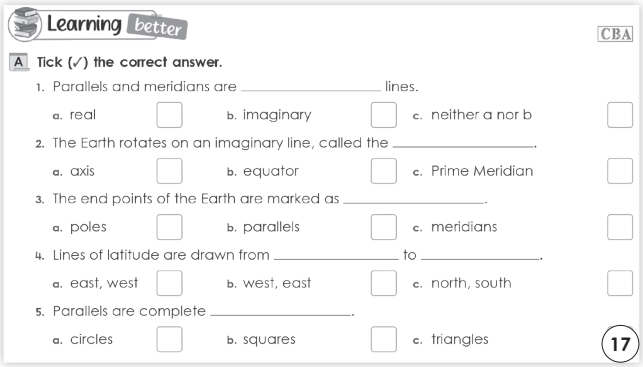
Learning better

Exercise A

Teacher: Now, let us move on to an activity called 'Learning better.' I will write some sentences on the board

MUST DO
10 MIN.

and each sentence will have multiple-choice options. I will have two teams.


Learning better

CBA

A Tick (✓) the correct answer.

1. Parallels and meridians are _____ lines.
   a. real ☐ b. imaginary ☐ c. neither a nor b ☐
2. The Earth rotates on an imaginary line, called the _____.
   a. axis ☐ b. equator ☐ c. Prime Meridian ☐
3. The end points of the Earth are marked as _____.
   a. poles ☐ b. parallels ☐ c. meridians ☐
4. Lines of latitude are drawn from _____ to _____.
   a. east, west ☐ b. west, east ☐ c. north, south ☐
5. Parallels are complete _____.
   a. circles ☐ b. squares ☐ c. triangles ☐

17

Teacher: Team 1, you will send a member to read the sentence and pick the correct option. If you answer correctly, you score a point. If your answer is incorrect, Team 2 gets a chance to answer.

(Continue with activity until completion)

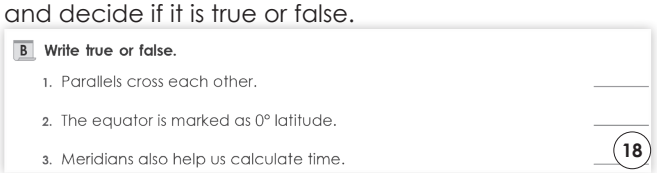
Learning better

Exercise B

Teacher: Now, let us move on to Exercise B of our 'Learning better' activity. I will divide you into groups. Each group will discuss a statement and decide if it is true or false.

MUST DO

10 MIN.


B Write true or false.

1. Parallels cross each other. _____
2. The equator is marked as 0° latitude. _____
3. Meridians also help us calculate time. _____

18

Teacher: After I read the statement, each group will discuss and give me a thumbs-up if they think it is true or a thumb-down if they think it is false.

Teacher: Let us begin with the first statement. (Read aloud the first statement)

(Students discuss in groups and give a thumbs-up or thumbs-down)

Teacher: Great work, everyone. You all participated well and we covered important concepts.

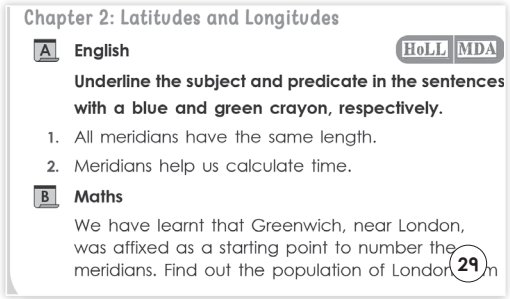
Teacher: For your homework, research and explain how the International Date Line works and its effect on time zones. Write a short paragraph on how time changes when crossing it.

COULD DO

7 MIN.

Book of Holistic Teaching

(Refer to the Book of Holistic Teaching, page number 21 under the title 'Latitudes and Longitudes' Complete the activities mentioned in this section and ensure that the students complete them. These activities are designed to enhance their holistic understanding and engagement with the topic. Provide any necessary support and materials to help the students successfully finish the activities.)


Chapter 2: Latitudes and Longitudes

A English HoLL MDA

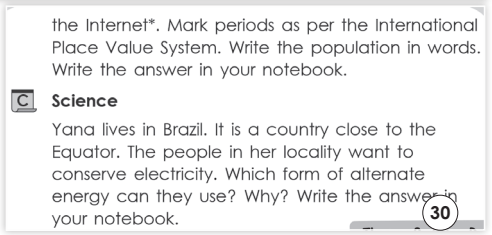
Underline the subject and predicate in the sentences with a blue and green crayon, respectively.

1. All meridians have the same length.
2. Meridians help us calculate time.

B Maths

We have learnt that Greenwich, near London, was affixed as a starting point to number the meridians. Find out the population of London

29


the Internet*. Mark periods as per the International Place Value System. Write the population in words. Write the answer in your notebook.

C Science

Yana lives in Brazil. It is a country close to the Equator. The people in her locality want to conserve electricity. Which form of alternate energy can they use? Why? Write the answer in your notebook.

30

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

Differentiated Activity

110km/hr

How do lines of longitude affect time zones? Why is the Equator the longest line of latitude?

80km/hr

Ask students to create a short story where characters travel across different locations based on coordinates. They should include details about the places they 'visit' and how the grid system helps them navigate.

40 km/hr

Divide students into teams. Provide a world map and call out random coordinates. The first team to locate and mark the correct spot wins a point.

Hometask

Research and explain how the International Date Line works and its effect on time zones. Write a short paragraph on how time changes when crossing it.

Period 8

SHOULD DO

05 MIN.

Teacher: Good morning, class. Let us start with a fun activity today. We will play a quick game called 'Where in the World?'. I will show you different landmarks andyou need to guess where they are located.

Teacher: Let us begin. (Show an image of a landmark, like the Eiffel Tower or the Great Wall of China.) Where do you think this landmark is located? Raise your hand if you know the answer.

Teacher: Great, The Eiffel Tower is in Paris, France.

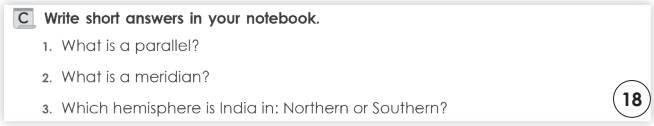
(Tell the students to open Page 18 and look at exercises C of the section 'Learning better'. Ask them to read the questions carefully and answer. Discuss every question and the correct answer once done).

Learning better

MUST DO
15 MIN.

Exercise C

Teacher: Now that we are all warmed up, let us move on to our main activity. I will ask you some questions. Read each question carefully, think about the answer and discuss it with your partner. Then, we will have a class discussion and I will guide you to write the answers in your notebooks.


C Write short answers in your notebook.
1. What is a parallel?
2. What is a meridian?
3. Which hemisphere is India in: Northern or Southern?
18

(Read questions aloud and display them on the board)

Teacher: Take 5 minutes to discuss with your partner. After that, we will discuss your answers as a class.

Teacher: (After discussion) Let us go over the answers together. Who would like to share the answer to the first question? (Proceed with each question, giving students time to answer and discuss.)

Teacher: Now that we have completed the short answer questions, let us move on to the long answer questions. I will give you two long questions to answer in your notebooks.

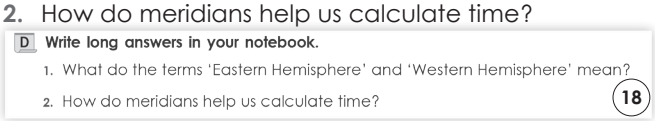
Learning better

MUST DO
15 MIN.

Exercise D

Teacher: (Write the following questions on the board)

1. What do the terms 'Eastern Hemisphere' and 'Western Hemisphere' mean?
2. How do meridians help us calculate time?


D Write long answers in your notebook.
1. What do the terms 'Eastern Hemisphere' and 'Western Hemisphere' mean?
2. How do meridians help us calculate time?
18

Teacher: Now, I will divide the class into two teams. Each team will take one of the long-answer questions. Discuss the question within your team andyou will have 3 minutes to draft an answer.

Teacher: Once you are done discussing, I want each team to share their answers with the class. Then, I will guide you through any corrections or clarifications that are needed. After the discussion, everyone should write your answers in your notebooks, ensuring that you include the key concepts we discussed.

COULD DO
05 MIN.

Teacher: very good students, Now that we have completed our Learning better activity, let us talk about your homework for tonight. It is a fun STEM activity.

Teacher: Your task is to make a paper plate sundial on page number 18, STEM activity. This is a hands-on way to explore how sundials work. Remember to bring your sundials to class tomorrow and we will discuss them together. Enjoy the activity and see you tomorrow.

You may show **Animated Activity** given on digital platform.

Differentiated activity

110km/hr:

Ask them to explain why certain landmarks are located in specific regions.

80km/hr:

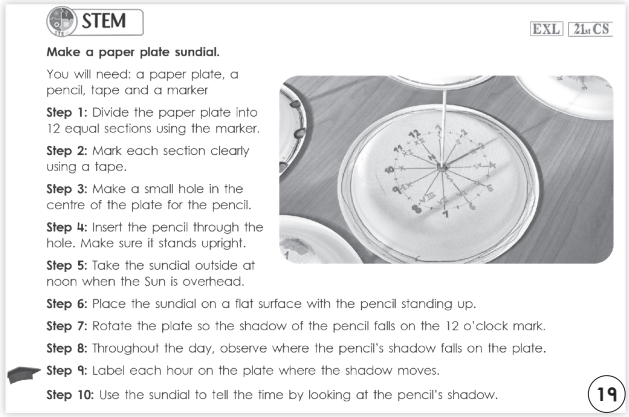
Write a short paragraph for each landmark, describing its location, hemisphere and why it's important.

40 km/hr:

Write coordinates and landmarks on separate index cards. Pair students up and have them match the correct coordinates with the correct landmark.

Hometask

Complete STEM activity given on page 18-Make paper plate sundial.


STEM
EXL 21st CS
Make a paper plate sundial.
You will need: a paper plate, a pencil, tape and a marker
Step 1: Divide the paper plate into 12 equal sections using the marker.
Step 2: Mark each section clearly using a tape.
Step 3: Make a small hole in the centre of the plate for the pencil.
Step 4: Insert the pencil through the hole. Make sure it stands upright.
Step 5: Take the sundial outside at noon when the Sun is overhead.
Step 6: Place the sundial on a flat surface with the pencil standing up.
Step 7: Rotate the plate so the shadow of the pencil falls on the 12 o'clock mark.
Step 8: Throughout the day, observe where the pencil's shadow falls on the plate.
Step 9: Label each hour on the plate where the shadow moves.
Step 10: Use the sundial to tell the time by looking at the pencil's shadow.
19

Period 9

SHOULD DO
10 MIN.

Teacher: Good morning, everyone. How are you all doing today?

Teacher: Let us kick off today's lesson with a fun activity to get our brains warmed up and ready to learn.

Teacher: Imagine you are going on a treasure hunt. The treasure is hidden somewhere in this classroom, but it is tricky to find without the right clues. I will give you a clue and you will need to think fast and move to the right location based on the clue.

Clue: I am always in the middle, dividing the Earth into two halves.

Teacher: Who can tell me where to go based on this clue?

Instructions:

1. Think about the clue I gave you and quickly move to the place in the classroom that matches the clue.

2. When you get there, I will ask you to explain why that location is the answer.

Teacher: The answer is the Equator. The Equator is an imaginary line that divides the Earth into two equal halves, the Northern and Southern Hemispheres. It is always in the middle of the Earth, stretching from the west to the east.

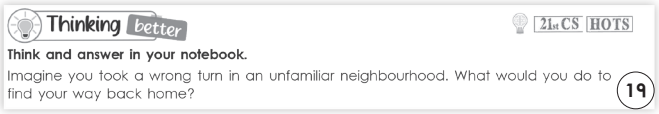
Teacher: Great. Now that we have had a little fun, let us move on to today's lesson.

Thinking better

MUST DO

10 MIN.

Teacher: Now, let us move on to the 'Thinking better' activity. In this task, you will have to think critically and answer a question in your notebook.



Teacher: Imagine you took a wrong turn in an unfamiliar neighbourhood. What would you do to find your way back home? How would you use your knowledge of maps or directions to navigate?

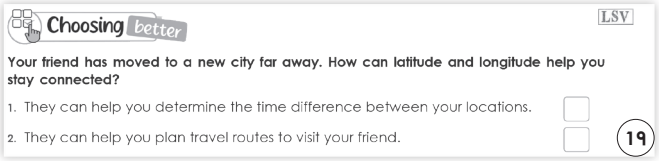
Teacher: After you write your answers, I will give you a few minutes to discuss your ideas with your partner. Then, we will have a class discussion to share our solutions.

Choosing Better

MUST DO

10 MIN.

Teacher: Now, let us move on to the Choosing better activity. I will give you a situation and you will have two options to choose from. You need to decide which one is more helpful in this situation.



Teacher: Your friend has moved to a new city far away. How can latitude and longitude help you stay connected? Here are the two options:

1. They can help you determine the time difference between your locations.
2. They can help you plan travel routes to visit your friend.

Teacher: Now, think about it for a moment. Which option do you think would be more helpful in staying connected with your friend?

(Wait for a few responses)

Teacher: Yes, the correct answer is Option 1: Latitude and longitude can help you determine the time difference between your locations.

Teacher: By knowing the exact latitude and longitude of your friend's new city, you can figure out the time zone difference and plan when to call or video chat. How do you think knowing the time difference will help you stay in touch better?

(Encourage student responses)

Teacher: While Option 2 is useful for travel planning, the primary use of latitude and longitude in this case is for understanding time differences across locations.

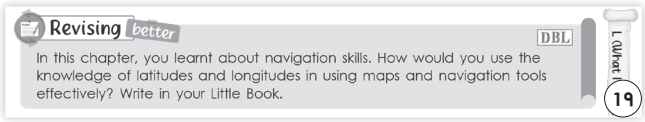
Teacher: Great thinking, everyone! You are doing awesome with these activities! Let us continue learning more about latitude and longitude.

Revising better

MUST DO

10 MIN.

Teacher: Finally, let us move on to the Revising better activity. This is a chance for you to reflect on what you have learned in this chapter about navigation skills.



Teacher: In this chapter, we learned about latitudes, longitudes and how to use them for navigation. Now, think about how you can apply this knowledge in real-life situations, like using maps or navigation tools.

Instructions:

1. Write your answer in your Little Book.
2. Describe how knowing about latitudes and longitudes can help you use maps and navigation tools more effectively.
3. Think about situations like traveling to new places or helping someone find their way.

Teacher: After you finish writing, I will check your answers and make sure everyone has understood the concepts.

Teacher: To end today's lesson, let us do a quick fun task to recap everything we have learned today. We will have a small quiz with some quick questions. I will ask and you can raise your hands to answer.

Questions for the Fun Task:

1. What divides the Earth into the Northern and Southern Hemispheres? (The Equator)
2. What is the starting point for marking the meridians? (The Prime Meridian)
3. What is the importance of latitudes and longitudes in navigation? (They help us locate places and calculate time differences)

Teacher: I hope you all had fun with the activity and quiz today. Now, don't forget to complete your homework. Bring it tomorrow andwe will discuss your answers.

Teacher: Have a wonderful day ahead. See you next time.

Differentiated Activity

110km/hr

Students can also incorporate time zones into their map, calculating the time difference between the new city and their own location using the meridians.

80km/hr

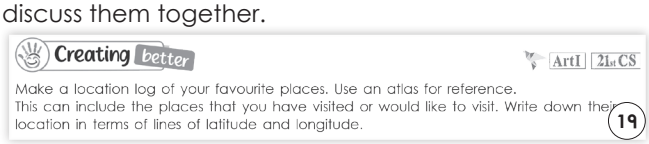
Ask students to share one new thing they learned about latitude and longitude and how this knowledge can help in real-world situations (like traveling or finding destinations).

40 km/hr

give one or two simple clues at a time and help them physically move to the correct place in the classroom based on the clue.

Homework

Complete the Creating Better activity on page 19 of your book. You will need to make a location log of your favourite places, just like we discussed. Be sure to include at least three places, along with their latitude and longitude coordinates. Use an atlas to find the coordinates. You can write a few sentences about each place to make your log more interesting. Remember to bring your location log to class tomorrow and we will discuss them together.


Creating better

ArtI 2LwCS

Make a location log of your favourite places. Use an atlas for reference.
This can include the places that you have visited or would like to visit. Write down their location in terms of lines of latitude and longitude.

19

Period 10

SHOULD DO

05 MIN.

Teacher: Good morning, class. How are you today?

Teacher: Let us start today's lesson with a fun, simple activity called 'Coordinate Hunt.' to warm up our brains.

Teacher: Here is how it works: I will give you a location using latitude and longitude coordinates andyou will need to guess which place it is. Ready?

(Teacher writes a location's coordinates on the board and reads it aloud.)

Clue 1: 15°N, 30°E — This is a large desert in Africa. Can anyone guess where it is?

(Wait for responses and provide feedback.)

Worksheet 1 and 2

MUST DO

15 MIN.

Teacher: Please take out your workbook and open to page 7 and 8, we will complete worksheet 1 and 2.

(Students to open their workbooks.)

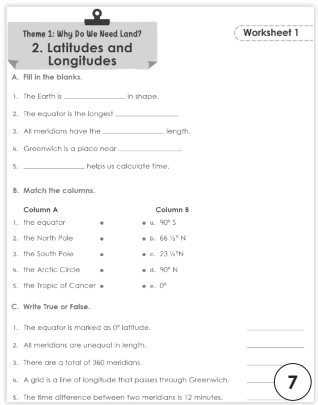
Teacher: On page 7, you will find fill in the blanks. Let us read through the questions and answer them in your notebooks. Please take a few minutes to think about your answers and write them down.

(discusse each question with the class to ensure understanding and provides feedback.)

Teacher: Great students. Now that we have finished the questions on page 7, let us move on to page 8 of your workbook. You will find some questions about latitude and longitude. Let us read the questions together.

MUST DO

15 MIN.


Theme 1: Why Do We Need Land?

2. Latitudes and Longitudes

Worksheet 1

A. Fill in the blanks.

1. The Earth is _____ in shape.
2. The equator is the longest _____.
3. All meridians have the _____ length.
4. Greenwich is a place near _____.
5. _____ helps us calculate time.

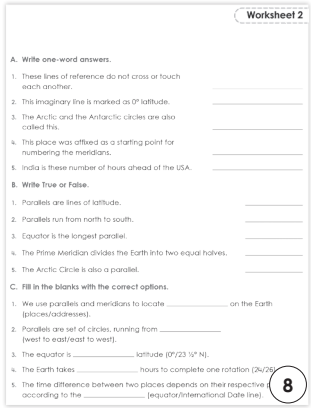
B. Match the columns.

Column A	Column B
1. the equator	a. 90° S
2. the North Pole	b. 66 ½° N
3. the South Pole	c. 23 ½°N
4. the Arctic Circle	d. 90° N
5. the Tropic of Cancer	e. 0°

C. Write True or False.

1. The equator is marked as 0° latitude. _____
2. All meridians are unequal in length. _____
3. There are a total of 360 meridians. _____
4. A grid is a line of longitude that passes through Greenwich. _____
5. The time difference between two meridians is 12 minutes. _____

7


Worksheet 2

A. Write one-word answers.

1. These lines of reference do not cross or touch each another. _____
2. This imaginary line is marked as 0° latitude. _____
3. The Arctic and the Antarctic circles are also called this. _____
4. This place was affixed as a starting point for numbering the meridians. _____
5. India is these number of hours ahead of the USA. _____

B. Write True or False.

1. Parallels are lines of latitude. _____
2. Parallels run from north to south. _____
3. Equator is the longest parallel. _____
4. The Prime Meridian divides the Earth into two equal halves. _____
5. The Arctic Circle is also a parallel. _____

C. Fill in the blanks with the correct options.

1. We use parallels and meridians to locate _____ on the Earth (places/addresses).
2. Parallels are set of circles, running from _____ (west to east/east to west).
3. The equator is _____ latitude (0°/23 ½° N).
4. The Earth takes _____ hours to complete one rotation (24/25).
5. The time difference between two places depends on their respective (_____) according to the _____ (equator/International Date line).

8

Teacher: Now, let us take a few minutes to think about the next questions and answer them. Feel free to work with a partner to discuss your answers. Afterward, we will go over the answers together. Once everyone finishes the worksheet, we will discuss the answers and ensure we understand everything clearly. Great work today, class.

Teacher: Alright, class, let us have a quick recap. Who remembers what latitude is? Can anyone give me an example of a place with a significant latitude?

Teacher: That is right. Latitude measures distances north and south of the Equator. Now, who can tell me what longitude measures?

Teacher: Excellent. Longitude measures east and west of the Prime Meridian. Let us check your memory. I will give you some coordinates andyou can tell me the location.

Clue 1:

Latitude: 0°

Longitude: 0°

(Where do you think this is?)

Student(s): (Give answers like the intersection of the Equator and Prime Meridian.)

Teacher: Great. That is the location where the Equator and Prime Meridian meet—0°N, 0°E. Let us quickly talk about the importance of latitude and longitude. Can anyone give an example of how we use these coordinates in daily life?

Teacher: Exactly. These coordinates help us navigate, find places and understand the time differences across the world.

Teacher: Awesome work today, everyone. Before we finish, let us wrap up with some interesting homework: complete creating better activity on page number 19 in which you have to make a location log of your favourite

places. Use an atlas for reference. This can include the places that you have visited or would like to visit. Write down their location in terms of lines of latitude and longitude. Bring it tomorrow, take care students

Differentiated Activity

110km/hr

list of five cities from different continents. For each city, write down its latitude and longitude coordinates and use them to describe the city's location in relation to the Equator and the Prime Meridian.

80km/hr

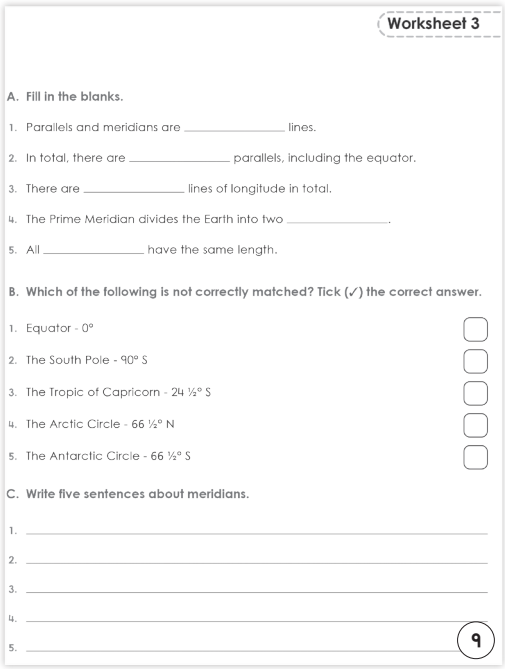
Pair up with a partner and discuss how knowing these coordinates can help someone find the city on a world map.

40 km/hr

Work in pairs with a classmate or teacher to help you identify the correct locations. You will practice matching and writing down the correct answers in your notebooks.

Homework

Complete worksheet 3 and revise the whole chapter.



Worksheet 3

A. Fill in the blanks.

1. Parallels and meridians are _____ lines.
2. In total, there are _____ parallels, including the equator.
3. There are _____ lines of longitude in total.
4. The Prime Meridian divides the Earth into two _____.
5. All _____ have the same length.

B. Which of the following is not correctly matched? Tick (✓) the correct answer.

1. Equator - 0° ☐
2. The South Pole - 90° S ☐
3. The Tropic of Capricorn - 24 ½° S ☐
4. The Arctic Circle - 66 ½° N ☐
5. The Antarctic Circle - 66 ½° S ☐

C. Write five sentences about meridians.

1. _____
2. _____
3. _____
4. _____
5. _____

9

Learning Outcomes

The students will:

Physical Development	• demonstrates improved coordination by using a grid to locate places on the globe and creating a location log.
Socio-Emotional and Ethical Development	• exhibits social responsibility by donating clothes to the community, demonstrating empathy and ethical behavior.
Cognitive Development	• applies knowledge of parallels and meridians to calculate time and locate places on the globe.
Language and Literacy Development	• develops writing skills by maintaining a location log and expressing personal reflections.
Aesthetic and Cultural Development	• enhances creativity by designing a project on the places through which major parallels pass, reflecting an appreciation for geographical diversity.
Positive Learning Habits	• cultivates organizational skills by systematically recording and reflecting in the location log and Secret Journal, fostering a proactive learning approach.

Starry Knights

How did the first class in the new session go? How are the learners-super excited or the ones who need motivation? What will be your plan of action for a successful year?

Reward yourself with a STAR. ☐