ENVIRONMENTAL STUDIES I GRADE 3

GUARDIANS OF THE WORLD

The world around us (Environmental Studies) if done right has the potential to become one of the most important subjects that lends itself to a highly interactive classroom. MysticLand's Guardians of the World series is an NEP 2020 and NCF 2023 aligned programme.

This teacher manual is your trusty guide to maximise the interactivity of this programme in classrooms. It will help you uncover interesting ways to teach, extra content beyond the book, classroom reflection sessions as well as ample media resources to weave a magical learning journey.

The Guardians of the World is divided into six sections and fourteen chapters. Each chapter has content followed by activities. These activities are of the following types:



Fun quizzes of different types that test concepts from the book.



Activities range from research to creation. All are based on the application of concepts learnt.



Media resources in the form of podcasts and videos are a part of multiple chapters. These are interesting and inspirational stories that have to be played aloud in class. Most of these have a listening comprehension.



This section is in accordance with the United Nations Sustainable Development Goals (UN SDG). Chapters with this type of activity bring awareness to the corresponding UN SDG and move learners into action.



To help learners develop the habit of using dictionaries, we have created the Mystical Wordfinder. Some words in the chapters are highlighted in italics. Learners must remember their numbers and check their meaning in the Mystical Wordfinder at the end of the book.

HOW TO USE TEACHER TOOLS



LEARNING OUTCOMES

A quick introduction to each chapter with expected learning outcomes



TEACHER SUPERPOWER

Additional content that can be discussed in class which is adjacent to the content in the books



SUGGESTED ACTIVITIES

Interactive ways to disseminate content in the book via activities or reflection sessions



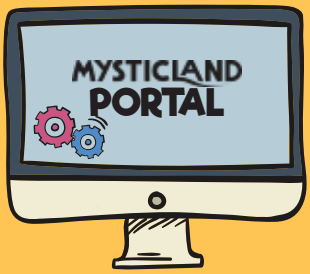
MEDIA RESOURCES

Audio / video / images to be shared in classrooms that complete the learning journey

 video

 presentation

 MysticLand media



Team MysticLand supports teachers with media resources, teacher manuals, sample assessment papers, answer keys, lesson plans, and more! You have access to all via the MysticLand portal.

1. Visit www.mysticlandinschool.com
2. Click the login link
3. Enter the school code MYSTICALS2025
4. You will then have access to all digital resources

CHAPTER	ACTIVITIES	CURRICULAR GOALS (NCF 2023)
Chapter #1 Eat well to be well	Practise mindful eating Quiz time Weekly food tracker	CG-3 (C3.1) CG-6 (C6.1, C6.2)
Chapter #2 My good water habits	Wow! The Water Woes of the World Quiz time	CG-3 (C3.1) CG-4 (C4.5, C4.6) CG-6 (C6.1, C6.2)
Chapter #3 Uniquely-abled people	The inspiring tales of Stephen Hawking, Sheetal Devi and Amrit Khurana Quiz time	CG-1 (C1.4) CG-4 (C4.6) CG-6 (C6.1, C6.2)
Chapter #4 Together, we make a family	Riddle me this Role play	CG-1 (C1.1, C1.2, C1.4, C1.5) CG-4 (C4.6) CG-6 (C6.2)
Chapter #5 All about roots	Quiz time The tree and tooth trouble	CG-1 (C1.1) CG-2 (C2.1) CG-4 (C4.1, C4.3, C4.4, C4.5) CG-6 (C6.1, C6.2)
Chapter #6 Insects go bzzz	Quiz time Become a bug detective	CG-1 (C1.1, C1.3) CG-6 (C6.2) CG-2 (C2.1, C2.2) CG-3 (C3.1) CG-4 (C4.1, C4.3, C4.5)
Chapter #7 Earth's atmosphere	Quiz time The Mystical bewitching Earth hour	CG-1 (C1.1, C1.3) CG-2 (C2.1) CG-3 (C3.1, C3.3) CG-6 (C6.1) CG-4 (C4.3, C4.4, C4.5)
Chapter #8 Our unique diets	Quiz time Meal plan	CG-1 (C1.2, C1.5) CG-6 (C6.1, C6.2) CG-2 (C2.1, C2.2, C2.3) CG-4 (C4.2, C4.4, C4.6)
Chapter #9 Crafts of India	Quiz time The Jewellery Research Project	CG-2 (C2.2) CG-4 (C4.2) CG-6 (C6.1, C6.2)
Chapter #10 Ride along on India's transport	Quiz time Map the Bruha's journey Make your sustainable vehicle	CG-1 (C1.5) CG-2 (C2.1) CG-5 (C5.2) CG-6 (C6.1, C6.2)
Chapter #11 Sign language	Quiz time Let us practise sign language	CG-1 (C1.5) CG-2 (C2.1) CG-5 (C5.2) CG-6 (C6.1, C6.2)
Chapter #12 Our guardians - The military	Quiz time Research time!	CG-3 (C3.1, C3.2) CG-6 (C6.1, C6.2)
Chapter #13 What do you do in case of an earthquake?	Quiz time Earthquake Escape Plan	CG-3 (C3.1, C3.2, C3.3) CG-6 (C6.1, C6.2)
Chapter #14 The journey of water	Quiz time Mystical Water Source Quest Felix's water hunt	CG-2 (C2.1) CG-3 (C3.1, C3.2) CG-4 (C4.3) CG-6 (C6.1)

Chapter #1

EAT WELL TO BE WELL

LEARNING OUTCOMES

The Mysticals sneak Skye into MysticLand for their annual Tasty Treats Fiesta. She decides to not only enter the Enchanted Moonberry pie eating contest, but also win it! But just before she stuffs the last piece of the very large pie into her mouth she falls sick. The story moves into a conversation between Skye, the Mysticals and a doctor who gives them advice on good eating habits.

The outcome is for learners to develop the ability to listen to their bodies and eat accordingly. It is extremely important to be conscious about what we eat. While we do not want to eliminate junk food, the outcome is to find the right balance.

SUGGESTED ACTIVITIES

The lesson includes the total number of calories to be consumed by a healthy third grader. An interesting class project / discussion can be to break down food eaten in a day and figure out the exact calories consumed. Myfitnesspal app has a free calorie counter that tracks all Indian food as well - this is an optional resource if you would like to gamify “how many calories did we eat” in class.

There are three activities in this chapter:

Quiz time

Mindful eating- The activity makes learners revisit a time when they ate too much without paying attention to their bodies’ signal. This can have a class reflection session on how we can practice mindful eating by listening intently to our bodies.

Weekly food tracker- This activity includes parents as it makes the learner the Food Monitor of the home for a week. An extension of this activity can be for the learner to make a report of their findings and discuss with parents about eating habits at home.

TEACHER SUPERPOWER

Protein is extremely important for healthy growth and development. A third grader needs about 30-34 grams of protein each day, depending on their physical activity level and growth needs.
1 cup of milk: 8 grams of protein
1/2 cup of cooked beans: 7-8 grams of protein
1 egg: 6 grams of protein
1 slice of cheese: 5-6 grams of protein
1 tablespoon of peanut butter: 4 grams of protein

Among dals (lentils), moong dal (split green gram) and urad dal (black gram) are among the top choices for high protein content. However, urad dal has slightly more protein compared to other dals.

Protein content per 100 grams (raw):
Urad dal (black gram): 25 grams of protein
Moong dal (green gram): 24 grams of protein
Masoor dal (red lentils): 22 grams of protein
Chana dal (Bengal gram): 21 grams of protein
Toor dal (pigeon peas): 19 grams of protein
Including a variety of dals in your diet can ensure a good intake of protein along with other nutrients like fiber, vitamins, and minerals.

MEDIA RESOURCES

Eat like a rainbow
3 minutes 17 seconds

A guide to healthy eating

Chapter #2

MY GOOD WATER HABITS

LEARNING OUTCOMES

The Mysticals gift Skye a hydra hocus pocus alarmus which is meant to remind her to drink water once in a few hours. After her enchanted moonberry fiasco, they want to ensure she takes care of herself. However, Skye is dangerously close to drowning the annoying alarm. The Mysticals land up in her room and explain to her why drinking enough water is important. They also draw up a water habit chart for her.

The outcome is for learners to understand the importance of drinking water, the concept of dehydration, and learning to track their water habits.

SUGGESTED ACTIVITIES

To bring awareness about water drinking habits, there can be an interesting class discussion on ***how many glasses of water did we drink yesterday?***

Also, are there certain times during the day when we drink water - example, as soon as we wake up. This is also an opportunity to address bad habits such as reaching for soda over water, which is covered in the Teacher Superpower below.

There are two activities in this chapter:

Quiz time

Wow! The Water Woes of the World- This has a story as a media resource about Roark the postman in MysticLand and the MysticLord. After listening to the story, learners are expected to write two ways in which we are wasting water. This ties back to UN SDG 6: Clean water and sanitation. Through this exercise we aim to address water wastage habits.

TEACHER SUPERPOWER

Why shouldn't we drink soda when we are thirsty?

When we are thirsty, our body needs water. Soda has sugar and other stuff that does not hydrate our body as well as water does. Too much sugar is not good for our body. It can make us feel tired later, and it is not great for our teeth either. Soda has acid and sugar, which can harm our teeth over time, causing cavities and making our teeth weaker. The sugar in soda can actually make us feel more thirsty after drinking it, because it can cause our body to lose water! When we are thirsty, water refreshes and hydrates us much better than soda. It also helps our body work better, keeps our skin healthy, and makes us feel great!

MEDIA RESOURCES

Wow! The Water Woes of the World

What does water do to our body
6 minutes 9 seconds

Chapter #3

UNIQUELY-ABLED PEOPLE



LEARNING OUTCOMES

Skye is on a class trip to meet differently-abled students in a special school. The Mysticals join her. They meet special children and are taken aback by their fantastic abilities. They debate if these children are magical!

The outcome is for learners to understand differently-abled people, what makes them lose one ability and realise that they overcome a lot in their lives. They need to exercise empathy and understand how to be inclusive in nature.



SUGGESTED ACTIVITIES

In this chapter, there are two activities:
Quiz time
The Inspiring Tales of Stephen Hawking, Sheetal Devi and Amrit Khurana- This is a listening comprehension where we tell the story of these three uniquely-abled humans who have reached the top of their respective fields (intellect, art, and sports). This activity also requires learners to have a chat with a differently-abled person and note down how they perform their daily tasks.

A great way to develop true inclusivity would be to organise a school trip to a differently-abled school or invite a guest speaker. This will give learners an opportunity to squash any associated stigma.

CLASS REFLECTION TIME: Have any of us encountered differently-abled people and we behaved badly? How should we have behaved? Make the classroom a safe space for learners to be vulnerable.



TEACHER SUPERPOWER

Once upon a time, in a small town in France, a boy named Louis Braille was born in 1809. Louis was a cheerful and curious child who loved to learn. When he was just three years old, he had a terrible accident at his father's workshop and lost his eyesight.

Louis was very determined. Even though he could not see, he did not want to stop learning. At school, he found it hard to read and write like the other children because there weren't any special books for blind people.

One day, Louis heard about a special system of writing that was used by the military. It was called "night writing," and it used raised dots on paper so soldiers could read messages in the dark. Louis thought, "What if I could use something like this to help blind people read and write?"

So, Louis got to work. He used the idea of raised dots to create a new system that was simpler and easier to use. He made a set of symbols with dots arranged in different patterns. Each pattern stood for a different letter or number. After a lot of hard work and practice, Louis created the Braille system. It was named after him because he made it. This new way of reading and writing made it possible for blind people all over the world to learn, read books, and write letters.

Louis Braille's invention changed lives and opened doors to education and independence for many blind people. Even though he didn't live a very long life (he passed away at just 43), his system continued to grow and help people everywhere.

Today, Louis Braille is remembered as a hero who used his creativity and determination to make the world a better place for others. His story teaches us that even if we face challenges, we can use our skills and imagination to find solutions and help others.



MEDIA RESOURCES



The Inspiring Tales of Stephen Hawking, Sheetal Devi and Amrit Khurana



Disability and Child Protection: UNICEF
1 minute 23 seconds



Talk to me
3 minutes 19 seconds

Chapter #4

TOGETHER, WE MAKE A FAMILY



LEARNING OUTCOMES

Skye did not pay attention in her class. Now, she is tasked with completing a set of riddles about family. She becomes hopeful when the Mysticals drop in for a visit. She convinces them to help her. But these riddles are not simple. They are about wonderfully different families. Verum brings out her crystal ball to revisit what Skye's teacher taught her in class, and they solve the riddles together.

In this chapter we discuss seven different types of families. This ranges from single-parent to adoptive and foster families. In this grade, it is important for learners to understand that families are of different types and it is crucial for all of us to be empathetic and respectful toward them.



SUGGESTED ACTIVITIES

A class reflection session on family dynamics among the learners can be conducted.
There are two activities in this chapter :
Riddle me this- This activity is intertwined within the content itself.
Role-play- This role-play can be extremely powerful to bring out roles played by members of the seven families mentioned in the chapter. Please divide the class into seven groups. Each group picks one type of family. They may write a short skit depicting the role of a member in that family and play it out. The outcome of this activity is to be able to put themselves in the role of others.



TEACHER SUPERPOWER

One famous adopted person is Steve Jobs, the co-founder of Apple Inc.

Steve Jobs was born in 1955 and was put up for adoption. He was adopted by Paul and Clara Jobs, a couple who raised him in California. Despite some challenges growing up, Jobs went on to become one of the most innovative and influential figures in the tech world. His inventions, including the iPhone, iPad, and Mac computers, changed the way people use technology.

Steve Jobs used his creativity and passion to leave a lasting mark on the world. His story shows that where we come from does not define what we can achieve.

Sushmita Sen, former Miss Universe, became a well-known personality not just for her acting career but also for her strong decision to adopt two daughters, Renee and Alisah, as a single mother.



MEDIA RESOURCES

The families song
3 minutes 22 seconds

Please note: This video also includes a family with two moms. While in India Section 377 was decriminalised in 2018, same-sex marriage / adoption are illegal in the country. Please use your discretion in showing this video. It is a simple song that touches upon family types. We have deliberately retained this in teacher resources for you to take a decision basis the school's ethos.

Chapter #5

ALL ABOUT ROOTS

LEARNING OUTCOMES

Skye joins the Mysticals on an exciting treasure hunt, with a twist. They are in Felix' secret garden. He has handed out Pink Poochy pouches to the participants who are expected to find different types of roots hidden somewhere. Felix gives out clues, and the eager participants follow them to find these roots.

The outcome of this chapter is for learners to understand different types of roots in a plant, their functions, and uses. They also understand the importance of earthworms for soil health.

SUGGESTED ACTIVITIES

A class reflection session on how many types of root vegetables have we eaten can be conducted. A visit to the vegetable market to see root vegetables and the local nursery to see aerial roots will cement their learning better.

There are two activities in this chapter:
Quiz time- which includes a word search
Treat nature with respect and kindness- This is a listening comprehension story titled The Tree and Tooth Trouble. It answers an interesting question around what will happen if forests disappear. This ties back to understanding why we should care about cutting down even a single tree. After listening to the story, learners have a heart-to-heart with nature where they write down how they think we should treat nature. This ties back to UN SDG 15.

TEACHER SUPERPOWER

Many, many years ago, there lived a boy named Jadav Molai Payeng. His house was close to a river island called Majuli. Majuli is in the northeastern state of Assam. One day, Payeng was strolling on Majuli Island. Suddenly, he saw hundreds of snakes lying in the sand. They had died due to extreme heat. The snakes did not even have tree cover for shelter. Payeng was deeply hurt to see the snakes like that.

Payeng then made a promise to himself- to plant one tree every day. He started with 20 bamboo plants. He watered them regularly. Then he began planting trees. One tree at a time, he has built an entire forest today.

To give you a rough idea, hundreds of football fields can fit into Payeng's forest. What Payeng has done is inspirational. The many trees in his forest absorb lots of carbon dioxide from the air. They help keep the island cool. The forest has brought different plant and animal species to the island. Rhinos, deer, tigers, and elephants live here!

The government of India was so proud of Payeng that it gave him the Padma Shri award! It is one of the biggest awards the citizens of India can get. The people named the forest Molai to honour his hard work. They call him the Forest Man of India! It has been 45 years now. Payeng has kept his promise. Every day, he cycles to the river, gets on a boat, and rows to his forest to plant a tree.

When one man has the ability to create an entire forest by himself, imagine how much we the Kids of MysticLand can do together! There is so much work to do to save Planet Earth. Fortunately, we are not alone. We are all together.

Let us show the world what magic the Kids of MysticLand can do!

MEDIA RESOURCES

The Tree and Tooth Trouble

Bean time lapse (taproot formation)
3 minutes 9 seconds

Types of roots

Chapter #6

INSECTS GO BZZZ



LEARNING OUTCOMES

Felix and Skye are messing around with magic. Felix gives Skye his power of hearing and talking to insects for 24 hours. The very excited Skye soon becomes anxious as she realises the many plots being hatched by insects around her. She wants to squish them! Felix stops her and tells her about insects and how important they are to us.

The outcome of this chapter is for learners to begin by understanding arthropods, and the place of insects in this group. They also learn defining features of insects, their body, behaviour, and lifecycle. They also gain insights into how insects help us.



SUGGESTED ACTIVITIES

There are two activities in this chapter:
Quiz time
Become a bug detective- The ideal way to conduct this activity is for learner to take a walk around the school or the local park. They will have to observe and spot insects. It could even be an ant. Once they locate this insect, they are expected to note down what they see, and conduct research (online or offline in a library) to find out more about this insect. The outcome is to take an offline observation into structured research to know more.



TEACHER SUPERPOWER

An interesting class reflection question is “what will happen if there are no bees in this world.”

If all the bees in the world disappeared, it would cause big problems for nature. Some plants, like special flowers called bee orchids, can only be pollinated by certain bees. Without those bees, these plants would die unless people helped them. This would change the places where they grow and affect animals that rely on them for food. Other plants can be pollinated by different insects, but bees are the best at helping them make seeds. Without bees, those plants would not make as many seeds and fewer would grow. This would bring about major changes in nature.

Some animals, like bee-eater birds, eat bees, so they would struggle to find food. This could hurt the balance of nature even more.

For humans, losing bees would change the way we grow food, but it would not cause us to starve. Most of the food we eat, like rice and wheat, does not need bees because the wind helps pollinate those plants. But many fruits and vegetables, like blueberries and cherries, depend on bees to grow. Without bees, it would be harder and more expensive to grow these foods, and there would be fewer of them in stores. People could try to pollinate plants by hand or use tiny robots, but that is very difficult and costly. So, we would have fewer fresh fruits and vegetables, and our diets might not be as healthy.



MEDIA RESOURCES



Up close with insects



Watch a caterpillar turn into a butterfly
0 minutes 42 seconds



Like fruit? Thank a bee!
3 minutes 46 seconds

Chapter #7

EARTH'S ATMOSPHERE

LEARNING OUTCOMES

The Mysticals visit Skye one day and find her quite dejected. She had an upcoming project to complete on Earth's atmosphere but she did not really understand the lesson. Orak offers to take Skye and the others for a live tour of Earth's atmosphere in his Tempus Machine.

The outcome of this chapter is for learners to understand each layer of the atmosphere, what it does, and how far it extends from the Earth's surface. We also touch upon the ozone layer and how we can protect it.

SUGGESTED ACTIVITIES

There are two activities in this chapter:
Quiz time- which includes a crossword. Most of the questions in this quiz time are application based.
Mission Mystical Bewitching Earth Hour- The Mystical Bewitching Earth Hour is an initiative to spread awareness about climate change and take action to reverse it. For one month, every Saturday night, students must turn off all lights, televisions, fans, air conditioners, and other electrical appliances for an hour. This initiative will make them think about their daily energy usage and remind them to switch off lights when not needed.

TEACHER SUPERPOWER

Protecting the Earth's atmosphere is really important because it keeps us safe and helps all living things survive. Here are some simple ways we can help protect it:

Plant trees: Trees take in harmful gases and give us clean oxygen. By planting trees or taking care of plants, we help keep the air clean.

Save energy: Turning off lights, TVs, and computers when we are not using them helps save electricity. Power plants make electricity, and some of them release pollution into the air. Using less energy means less pollution!

Walk, bike, or use less cars: Cars and buses give off gases that can hurt the atmosphere. Walking, riding a bike, or taking a bus with lots of people can help reduce the pollution.

Recycle: Recycling things like paper, plastic, and metal means fewer factories need to make new things, which also reduces pollution.

Use less plastic: Plastic bags and bottles can harm the environment. Using reusable bags and water bottles can help keep the Earth clean.

By doing these little things, we help keep the air clean and protect the atmosphere so everyone can live in a healthy world!

MEDIA RESOURCES

Mission Mystical Bewitching Earth Hour

Earth's atmosphere across layers

Climate 101: Ozone Depletion
3 minutes 25 seconds

What If All Trees Were Cut Down?
6 minutes 19 seconds

Chapter #8

OUR UNIQUE DIETS



LEARNING OUTCOMES

Skye boldly takes the Mysticals to her school for a costume party. After grooving to music, it is time to eat. Mr Chatterjee, Skye's teacher, instructs the students to eat only from pre-assigned tables. This seems unfair to the Mysticals. Why can't they eat whatever they want? Skye explains the concept of dietary restrictions to them. Some of us are vegetarian, some of us cannot digest lactose.

The outcome of this chapter is for learners to understand that we follow different diets irrespective of belonging to the same place. While we begin by eating what is customary in our house, we need to develop an internal compass that helps us evaluate the diet we follow- allergies and intolerance need to be identified for a healthy life.



SUGGESTED ACTIVITIES

There are two activities in this chapter:
Quiz time
Felix's Mysty-Tasty cooking class- Via storytelling, Felix's Mysty-Tasty Cooking Class explains the importance of following a diet. Through examples, it shows the humorous as well as serious sides of eating something we are not supposed to or something our body is not used to. It encourages students to discuss their diets with their parents/guardians.

A class reflection session on understanding if anybody in class is aware of their food allergies can be conducted. How did they learn about their dietary restrictions?



TEACHER SUPERPOWER

Allergies and intolerances are ways our body tell us it does not like something we eat, touch, or breathe in. Here is how we can recognize them:

Allergies
An allergy is when your body thinks something harmless, like a certain food, is bad and it tries to fight it. When this happens, we might notice:

Sneezing or coughing: When our body is trying to get rid of something like pollen.
Itchy skin or rash: Some people's skin gets red and itchy after touching certain things, like animals or plants.
Swelling: Our lips or face might puff up after eating certain foods like peanuts.
Runny nose or watery eyes: This often happens with things like dust or pets.

Intolerances
An intolerance is when your body has trouble digesting or handling certain foods. It does not cause an allergic reaction, but it can still make you feel bad. For example:

Tummy aches: If someone can not handle dairy (like milk or cheese), they might get a stomachache after eating it.
Gas or bloating: Some foods might make our belly feel full and gassy.
Feeling sick: We might feel tired or yucky after eating certain foods, like gluten.

How common are allergies and intolerances?
Allergies: A lot of people have allergies. About one in 13 children have a food allergy
Intolerances: Intolerances are common, too, like lactose intolerance (when someone can not drink milk). Many people around the world have it! So, if our body reacts in these ways, it is a sign we might have an allergy or intolerance!



MEDIA RESOURCES



Felix's Mysty-Tasty Cooking Class



What is veganism?
4 minutes 30 seconds

Chapter #9

CRAFTS OF INDIA

LEARNING OUTCOMES

One Sunday, the Mysticals walk in on Skye dressed in her school uniform. They are surprised! Skye tells them that she has a special skills class in her school and she is going to meet potters, weavers, and jewellery makers from all over India. The Mysticals convince her to let them tag along after they use magic to don their human avatars.

The outcome of this chapter is for learners to deep dive into three crafts known in India- pottery, weaving and jewellery making. They also learn the craftsmanship needed to achieve such high quality of work.

SUGGESTED ACTIVITIES

It will be an interesting activity for learners to bring any item representing these three crafts from home. In case they know its genesis, it will be good to discuss.

There are two activities in this chapter -
Quiz time- which includes a word search
The jewellery research project- Learners are required to pick any type of jewellery made in India and research about it. A broad discussion guide is a part of the book with questions they should answer. They are also free to explore questions beyond the book and present in class. Their research can be conducted online or offline. It will be great if they can conduct a first hand interview with an artisan. This will sharpen their interviewing skills as well.

TEACHER SUPERPOWER

Let us trace these three crafts back to when they started. Pottery, weaving, and jewellery making are ancient crafts that people from all over the world have practised for thousands of years! Here is where and how they started:

Pottery
Pottery likely began around 10,000 years ago during the Stone Age in places like China, Japan, and the Middle East (modern-day countries like Iran and Iraq). People needed strong containers to store food and water. So, they started shaping clay from the ground and baking it to make pots and bowls. The heat made the clay hard and pottery was born! Pottery spread to different parts of the world as people travelled.

Weaving
Weaving has been around for more than 8,000 years! The earliest evidence comes from places like ancient Egypt and Peru. People needed clothes, blankets, and baskets. They learned how to take fibres from plants or animals (like cotton or wool) and twist them together to make threads. These threads were woven into cloth using simple tools. Weaving spread to different cultures as people traded materials and taught others.

Jewellery Making
Jewellery making goes back about 75,000 years! Early humans in Africa and Europe made jewellery from things like seashells, bones, and stones. People made jewellery to decorate themselves or show their status (how important they were). They used natural materials like stones, and later, metals like gold and silver when they learnt how to shape them.

These crafts were important because they helped early humans create useful things, express creativity, and connect with others through trade!

MEDIA RESOURCES

Crafts of India

Traditional Indian weaving
3 minutes 7 seconds

Chapter #10

TRANSPORTATION AROUND ME

LEARNING OUTCOMES

Oh my MysticLord! The Bruha has escaped from her lair and is somewhere among humans. The Mysticals have found a series of ticket stubs in her lair. MysticLord asks the Mysticals to take Skye's help and find Bruha immediately. Looks like the Bruha has gone on a long journey in India via many modes of transport. The Mysticals and Skye trace her route.

The outcome of this chapter is for learners to know different types of transport- train, tram, metro, ferry, bus, auto and bicycle. They also learn to trace a route on a map. Through the activities we are getting them to understand a bit about sustainable transportation as well.

SUGGESTED ACTIVITIES

There are three activities in this chapter -

Quiz time

Trace Bruha's journey- Learners have to map Bruha's journey sequentially from start to finish on India's map. We have added a key for each mode of transport.

The Mysticals' Green Mission- Cities are our future. By 2050, more than half of the world's population will live in cities. But the air in our cities is polluted and unsafe. Most people who live in cities are breathing polluted air. This air pollution is caused by gases that come from cars, bikes, trucks, factories, etc. Through storytelling, the Mysticals raise awareness about this issue and inspire learners to make cities safe and sustainable for everyone. Learners will have to design a futuristic vehicle that will be in use 20 years from now.

TEACHER SUPERPOWER

The future of transportation is super exciting, and there are lots of cool new ways people might travel. Here is what it might look like:

Electric cars: In the future, more cars will be electric. Instead of using gas, they will run on batteries, like a big toy car! Electric cars are better for the Earth because they do not create as much pollution.

Self-driving cars: Imagine sitting in a car that drives all by itself! People are working on cars that will not need drivers. We just tell the car where to go, and it will take us there safely.

Flying cars: This sounds like something from a movie, but flying cars could become real! In the future, some cars might be able to lift off the ground and fly over traffic, making trips much faster.

Hyperloop: The hyperloop is a super-fast train that could travel in special tubes, going way faster than regular trains. It might zoom between cities in minutes instead of hours!

Electric planes: Just like electric cars, there could be electric airplanes. These planes would be better for the environment and make flying quieter and cleaner.

Space travel: In the far future, people might even be able to travel to space on rockets more easily! There could be vacations to the Moon or even Mars someday.

In the future, transportation will be faster, cleaner, and maybe even more fun, with new ways to travel all over the Earth and beyond!

MEDIA RESOURCES

Transportation pictures

An Animated History of Transportation
2 minutes 33 seconds

Chapter #11

SIGN LANGUAGE



LEARNING OUTCOMES

The Mysticals enter Skye's room one day and are surprised. She is making hand gestures to nobody! Skye tells them that she has a new classmate who is differently-abled. He cannot hear or speak. He is very kind and Skye is learning sign language to communicate with him.

The outcome of this chapter is for learners to understand what sign language is and the difference between Indian Sign Language (ISL) and others. To promote real inclusivity, we are also teaching them to sign a few lines.



SUGGESTED ACTIVITIES

There are two activities in this chapter:

Quiz time

Shine in Sign: Let us learn sign language- This is a video that teaches learners to sign a few phrases. While learning a few phrases is not going to help them communicate with the differently-abled, practising in open collectively will break any stigma they have about the differently-abled.

A class reflection session on how difficult it is to not be able to articulate one's thoughts verbally can be held. A person who cannot hear and speak needs the other individual to also be proficient in sign language to actually communicate.



TEACHER SUPERPOWER

Indian Sign Language has evolved over time, influenced by both native users and efforts by educators and linguists to formalise it. While no single person can be credited with its development, key contributions have shaped the ISL:

Natural evolution: ISL developed naturally within deaf communities across India as a means of communication among people with hearing impairments.

Educational contributions: Schools for the deaf, like the Helen Keller Institute for Deaf and Deafblind in Mumbai and the Indian School for the Deaf in Delhi, have played important roles in teaching and promoting the ISL.

ISL Research and Training Centre (ISLRTC): Established in 2015 by the Indian government, this centre aims to promote and standardise the ISL across the country. The ISLRTC develops dictionaries and learning materials and provides training for ISL interpreters.

Although the ISL has evolved from the grassroots, these institutions and efforts have helped formalise and spread its use.



MEDIA RESOURCES

Shine in Sign: Let us learn sign language

Deaf kids chatting in ASL
0 minutes 40 seconds

Chapter #12

OUR GUARDIANS - MILITARY

LEARNING OUTCOMES

Felix, Verum, Scorch, and Orak have invite Skye to MysticLand to celebrate MysticLand's Guardians Day. MysticLord gives a speech, honouring the guardians of MysticLand. The Mysticals are overwhelmed. But Skye does not understand why the Mysticals are overwhelmed by their guardians. She tells the Mysticals about the Indian Military which fights real wars and protects India from all harm.

The outcome of this chapter is for learners to gain an insight into the three wings of the Indian military, what they do, and how brave they need to be. The chapter also touches upon how the military is still on duty even during peacetime if the country is hit with a natural or human-made disaster and the citizens have to be rescued.
There are two activities in this chapter:

SUGGESTED ACTIVITIES

Quiz time

Rescued by the Forces (Research project)- This project requires learners to research about the Indian Military. In times of disaster, our military springs into action and conducts rescue missions that seem superhuman. Learners are required to research about any such instance and write a report.

TEACHER SUPERPOWER

The Indian Military was built from the foundation of the British Indian Army, which existed during the British rule in India. When India gained independence on 15 August 1947, the military forces that were part of the British Indian Army were divided between India and Pakistan.

Key Figures:

Field Marshal Sam Manekshaw was the first person from the Indian Army to receive the title of Field Marshall. It is the highest rank in the Indian Army. He led India to victory in the 1971 war with Pakistan.

General Bipin Rawat was India's first Chief of Defence Staff (CDS). It is the highest rank an officer in the Indian Military can get. In India, the CDS advises the government and is responsible for maintaining coordination and communication among the Air Force, Army, and Navy. General Rawat passed away in 2021.

Field Marshall is more of an honorary title while CDS is an active role.

While no single person "formed" the Indian Military, it was a result of India's independence and the efforts of both British and Indian leaders to build a strong defence force for the new nation. The military structure was inherited and then gradually transformed into the modern Indian Armed Forces.

MEDIA RESOURCES

Indian Military Ranks

Indian Army joins rescue operations at Wayanad
0 minutes 56 seconds

Chapter #13

WHAT DO YOU DO IN CASE OF AN EARTHQUAKE?



LEARNING OUTCOMES

This is a guide on how to react in case of an earthquake. It helps learners prepare step by step on what to do during and after an earthquake. It also helps them identify the safe spots in school and home to get to in case of an emergency.



SUGGESTED ACTIVITIES

A class poster should ideally be made on what to do in case of earthquakes. There are three activities in this chapter:
Safe space in school- The first activity is to identify a safe space in school where everybody should go to in case of a natural emergency.
Quiz time
Earthquake escape plan- This activity is for learners and their parents / guardians to complete together. They have to have an active discussion on what to do in case of an emergency and put down a plan. This plan can be pinned up somewhere at home for everybody to see. It also includes putting together an earthquake survival kit as well as do practice drills.



TEACHER SUPERPOWER

In 2011, there was a big earthquake in Japan. During this time, there was a girl named Yuki who was in school. When the earthquake started, she felt the ground shake and heard loud noises. Instead of panicking, Yuki remembered what her teachers had taught her.

Stay calm: Yuki took a deep breath and stayed calm, even though things were falling around her.

Drop, cover, and hold on: She quickly got under her desk, covered her head with her hands, and held on to the legs of the desk to protect herself from anything that might fall.

Wait for the shaking to stop: Yuki stayed under her desk until the shaking stopped. She didn't try to run outside because it was safer to stay in place.

Evacuate safely: After the earthquake, Yuki and her classmates calmly followed their teacher's instructions and went to an open area outside, where they knew they would be safe.

Because Yuki stayed calm and followed the earthquake safety rules, she was safe, and her whole class was too! This shows how important it is to stay calm and follow what you have learnt to do during an emergency.



MEDIA RESOURCES

Japan's earthquake real footage
1 minutes 42 seconds

How does an earthquake occur?
0 minutes 56 seconds

Chapter #14

THE JOURNEY OF WATER

LEARNING OUTCOMES

The Mysticals walk in on a very stinky Skye. There is a water shortage in Mumbai and Skye needs a bath! She suggests the Mysticals use their magic to conjure water, but they cannot summon a natural body of water. So, they decide to fly her to Kunchikal Falls, India's tallest waterfall, immediately. This triggers an interesting question in Skye's mind- where does this water come from? And how does water reach the taps in our homes?

The outcome in this chapter is for learners to understand the various natural sources of water and the process that they go through before they reach our homes.

SUGGESTED ACTIVITIES

There are three activities in this chapter -

Quiz time

Felix's Water Hunt- A listening comprehension on water-hunting. Felix and Skye were wondering why we are allowed to drink water from the tap in some countries while in other countries, the water rules are different.

Mystical Water Source Quest- This is a research based project on tracing water sources in our local areas and finding out more about the supply. It ties back to UN SDG #6.

A class reflection session on naturally available sources in our immediate local area can be conducted.

TEACHER SUPERPOWER

Desalination is a big word that means taking salt out of ocean water so that it becomes fresh water which we can drink or use for other things.

How does desalination work?
Ocean water has salt: Ocean water has a lot of salt in it, and if we drink it, it can make us sick because our body does not like too much salt.

Removing salt: In desalination, we use special machines to take the salt out of the water. One way is by boiling the ocean water and then collecting the steam (which is now fresh water without salt!). Another way is by using a filter that only lets the water pass through and traps the salt.

Fresh water: Once the salt is removed, we are left with fresh water, which is clean and safe to drink or use for cooking, cleaning, or watering plants.

Why do we do this?
Desalination is very useful in places where there is not enough fresh water, like in deserts or places near the ocean. Since the ocean has so much water, desalination helps give people water to drink when rivers or lakes do not have enough.

It is like turning salty ocean water into clean, tasty water, but it is done with special machines!

MEDIA RESOURCES

The tale of the tap
4 minutes 57 seconds

Please note: This video uses USA as an example, but the process is clearly shown.