GENERAL KNOWLEDGE I GRADE 5

THE BOOK OF EVERYTHING

Our vision is to transform the General Knowledge period in every school into a Global Citizenship Education (GCEd) period, that will enable schools to create the next generation of smart, world-aware, and empathetic global citizens.

This Teacher Tools document pertains to the General Knowledge module of the GCEd programme only. A final project has to be undertaken to mark the closure of the programme. Project details will be shared in due course. Global Citizenship graduation certificates for students and medals for best projects will be distributed at the end of the programme.

The Book of Everything Grade 5 is divided into 8 sections and 13 chapters. Each chapter has content followed by activities. These activities are of two types: logical ( ) and creative ( ).

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

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

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

Videos and images to be shared in classrooms that complete the learning journey

INDIA CONTEXT

Wherever necessary, book content will be supported with contextual India-based content to know more about the country

video

You can access all media resources, teacher tools, question banks via the pen drive given to your school, or our website, or google folder by scanning this QR code



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

THE INDEX

CHAPTERS		ACTIVITIES
SECTION I: THE WORLD		
Chapter 1	All about countries *(# of classes: 2)*	World quiz Design an emblem
Chapter 2	Seven natural wonders of the world *(# of classes: 2)*	Quiz time, Crossword
SECTION II: ENVIRONMENT		
Chapter 3	Unique flowers and fruits *(# of classes: 2)*	Quiz time
Chapter 4	All about insects *(# of classes: 2)*	Quiz time Create your own rodent!
SECTION III: SCIENCE AND TECHNOLOGY		
Chapter 5	All about doctors *(# of classes: 2)*	Quiz time
Chapter 6	Wizards from the world of science *(# of classes: 2)*	Quiz time
Chapter 7	The world of robots *(# of classes: 2)*	Quiz time
SECTION IV: FAMOUS PEOPLE		
Chapter 8	Women who changed the world *(# of classes: 2)*	Quiz time
SECTION V: SPORTS AND ENTERTAINMENT		
Chapter 9	All about awards *(# of classes: 1)*	Quiz time
SECTION VI: LITERATURE AND LANGUAGE		
Chapter 10	All about books *(# of classes: 2)*	My book review
Chapter 11	The Mysticals learn idioms *(# of classes: 2)*	Quiz time
SECTION VII: THE INDIA STORY		
Chapter 12	India's space story *(# of classes: 3)*	Quiz time, Word search
SECTION VIII: VALUES		
Chapter 13	Scorch learns mindfulness *(# of classes: 1)*	10-day mindfulness challenge

Total # of classes: 26 (1 for introduction to the book and settling down, followed by 25 classes of teaching)

SECTION I: THE WORLD

Chapter 1 - All about countries



LEARNING OUTCOMES

In this chapter, learners will be introduced to 31 countries, their capitals, currency, and flags. These countries are spread across continents. The questions following the content have additional facts about the countries. The learning outcome is for students to know basic facts from the book and gain the ability to draw a mental picture of the country from the facts. This chapter will help them develop their multi-dimensional learning ability.



SUGGESTED ACTIVITIES

For maximum interaction, please divide the class into teams. A quiz master (teacher) can read the quiz questions aloud. Each team refers to the content in the book to answer these questions.

The team that gets the right answer will be asked to locate the country on the Planet Earth map (given as an aid to your classroom by MysticLand).

Supplement this learning by asking them to find neighbouring countries and water bodies.

The corresponding fact of the country from Teacher Superpower can be read out as an additional “did you know!”



There is a creative task in this chapter where learners will have to design an emblem for MysticLand. You can email or WhatsApp us the best work. We will showcase it online.



TEACHER SUPERPOWER

A fact about each of the 31 countries is given. This can be discussed in class as they complete their quiz.



MEDIA RESOURCES

Image

Planet Earth map

Credits: MysticLand



THE INDIA CONTEXT

India is a country. But you will often hear the term “Indian subcontinent” used to describe the geographical region India and its neighbours occupy. This region includes Bangladesh, Bhutan, the Republic of India, Maldives, Nepal, Pakistan, Sri Lanka and, to the south, the Indian Ocean and the Bay of Bengal. The Indian subcontinent is located south of the Himalayas, one of the world’s largest ranges of tall mountains.



TEACHER
SUPERPOWER

INDIA: Mawsynram in Meghalaya, India, is the wettest place on Earth! Mawsynram receives an average rainfall of 11,000 millimetres every year. It defeated its friend Cherrapunji to become the wettest place on Earth.

ROMANIA: The Palace of the Parliament in Bucharest, Romania, is the heaviest building in the world. It weighs 4.1 billion kilograms.

AUSTRIA: St Peter Stiftskulinarium in Salzburg, Austria, is the oldest restaurant in the world. It is more than 1200 years old!

POLAND: The 13th-Century Castle of the Teutonic Order in Malbork, Poland, is the world's biggest castle!

ISRAEL: It was the first homeland for the Jewish people in nearly 2,000 years. Judaism is the main religion followed in this country.

ETHIOPIA: Our calendars have 12 months. But the Ethiopian calendar has 13 months! This is because they follow the solar cycle. Their 13th month is called Pagumiene. While we are all in the year 2024, Ethiopia is currently in 2016!

VIETNAM: The Vietnamese play a very traditional and unique sport which isn't played anywhere else. It is called Sepak takraw, or kick volleyball. In this sport, players pass the ball by kicking it over the net.

NORTH KOREA: The North Korean men and women can cut their hair only according to the government approved 28 hairstyles!

SOUTH KOREA: Here is something we can learn from South Koreans. They follow a 3-3-3 brushing method for excellent dental hygiene. This means they brush their teeth 3 times a day, within 3 minutes of every meal, for about 3 minutes each time!

CROATIA: There is a town in Croatia called Hum. It is the smallest town in the world. Only 50 people live there.

CZECH REPUBLIC: In 1993, the Czech Ministry of Foreign Affairs decided that their country should be called Czechia. But it hasn't yet caught on!

SRI LANKA: Colombo used to be Sri Lanka's only capital. But this led to a lot of traffic congestion, pollution, and environmental damage. So they split into two capitals to make it easy.

BANGLADESH: Bangladesh is called The Land of Six Seasons. They are summer (grisma), monsoon (barsa), autumn (sarat), late autumn (hemanta), winter (shhit), and spring (basanta).

MALDIVES: This is the world's flattest country! Just about five feet above sea level with no mountains!

SEYCHELLES: Seychelles is known for their Aldabra tortoises that live a long life. The world's oldest tortoise turned 191 years of age on 4 December 2023. He was born in Seychelles and his name is Jonathan.

DR CONGO: The Democratic Republic of Congo is the second largest country in Africa. It is also called the Capital of African Music!

PERU: The largest river in the world (by volume), Amazon, begins in Peru.

ECUADOR: Ecuador's name comes from the Spanish word for the equator. The country, which straddles the equator, even has a monument built to celebrate its location in the middle of the world. This monument is called the Monument to the Equator.

THE UNITED ARAB EMIRATES: Did you know Dubai, one of the seven emirates, has more than 330 Guinness World Records? It holds the records for the world's tallest building, the world's largest mall, the largest picture frame, the world's longest handmade gold chain, most people performing burpees, and more.

SWEDEN: Sweden has over 1,00,000 lakes!

ICELAND: There are 130 words to describe wind in the Icelandic language. Each word defines how strong the wind is. This helps fishermen communicate about the weather easily.

FINLAND: According to the World Happiness Report, Finland is said to be the world's happiest country for a record six years!

CUBA: The world's smallest bird, bee hummingbird, lives in Cuba. It grows upto five centimetres!

GHANA: Ghana is the world's second largest exporter of cocoa. They also export a lot of gold.

HAITI: Haiti was the first country in the Western Hemisphere to abolish slavery in 1803. The USA abolished slavery 65 years later!

JAMAICA: Jamaica is home to one of the world's largest butterfly. The endangered Homerus swallowtail has a maximum wingspan of six inches!

ESTONIA: Estonia was the first country to adopt an online political voting system!

LAOS: Laos is the largest consumer of sticky rice (glutinous rice or sweet rice), where one person eats around 170 kilograms of sticky rice in a year!

MALI: Mali is one of the poorest countries in the world. But a long time ago, it was one of the wealthiest. Mansa Musa, who was a ruler of Mali in the 13th Century was one of the richest men in the world.

TUNISIA: Kairouan, a city in Tunisia, is an important town for Islam all over the world. It is the fourth most important city after Mecca, Medina, and Jerusalem.

URUGUAY: The national anthem of Uruguay is said to be the longest national anthem having 105 bars of music! But nowadays, they sing only the original national anthem's first verse and chorus. It was made official in 1848.

SECTION I: THE WORLD

Chapter 2 - Seven natural wonders of the world



LEARNING OUTCOMES

In this chapter, learners will be introduced to the seven wonders of the world that formed naturally. Forces of nature have come together to create each of these wonders. The outcome of this chapter is for our young learners to know, appreciate, and understand the natural wonders.



SUGGESTED ACTIVITIES

Each wonder can be slotted into earth, sky, and water. It will be an interesting activity for learners to be team earth, sky, or water and create a representation of how this wonder was formed. This is for them to truly research forces of nature.

Complete quiz time and crossword.



TEACHER SUPERPOWER



THE INDIA CONTEXT

Notes on four natural wonders of India.



MEDIA RESOURCES



Visit Earth's natural wonders

NATURAL WONDERS OF INDIA:

Living Root Bridges, Meghalaya:
You must have seen bridges made of cement and concrete. But have you ever seen bridges grown from the roots of a tree? We are talking about the living root bridges grown by the Khasi and Jaintia tribes of Meghalaya. They are known as jingkieng jri. The living root bridges are a natural wonder because they are alive!

The living root bridges are grown from the roots of the Indian rubber tree. These roots are pulled and tied over a river. They naturally merge over time to form a bridge. It takes many years for root bridges to grow. As long as the trees remain healthy, with every year, they only grow sturdier and stronger! Living root bridges connect different villages across rivers. They can support the weight of over 50 people.

Lonar Crater, Maharashtra:
More than 52,000 years ago, a blazing ball of fire entered the Earth's atmosphere and crashed in Maharashtra's Buldhana district at the speed of 90000 kilometres per hour. The meteorite, weighing two million tonnes, formed a large crater. Today, this crater is a natural wonder called Lonar Crater.

The Lonar Crater is a saltwater lake. It is one of a kind. The lake has both alkaline and saline water. These two water regions do not mix with each other. The Lonar Crater ranks amongst the world's five largest craters. It is the only crater in Basaltic rock formed by a meteorite impact in India.

The Lonar Crater had baffled scientists for many years. Scientific organisations such as the United States Geographic Survey in America, the Geological Society of India, and the Physical Research Laboratory of India have done a lot of research on this lake.

Magnetic Hill, Ladakh:
Do you want to defy the laws of science? Then it's time to visit the Magnetic Hill in Ladakh! The Magnetic Hill is located at an altitude of 14,000 feet. It is said to defy gravity. The hill road is a downhill road. But when a vehicle moves on the road, it feels like it is going uphill, when in fact it is rolling downhill. There are many theories about this place. Some believe this happens due to a strong magnetic force. Some believe it is just an optical illusion. The local people of Ladakh believe that the road is a straight stairway to heaven!

Borra Caves, Andhra Pradesh:
The Borra Caves are one of the largest and deepest caves in India. They are located in the Ananthagiri hills of the Visakhapatnam district in Andhra Pradesh. The Borra Caves were discovered by the British geologist William King in 1807. They are believed to be a million years old!

The Borra Caves were formed because of the streams that meet the Gosthani River. They flow through the cave. The caves were carved out when the humic acid in the water reacted with the calcium carbonate in the limestones of the hills. The caves also have many stalactites and stalagmites. Some of these formations look like Shiva-Parvati, beard of a saint, human brain, mother and child, crocodile, tiger, and cow. They are a breathtaking sight!

SECTION II: ENVIRONMENT

Chapter 3 - Unique flowers and fruits



LEARNING OUTCOMES

In this chapter, learners will read about four unique flowers and four unique fruits. These range from the largest flower to stinkiest to a flower that looks like birds. The four fruits covered are very unique and indigenous to certain lands.



SUGGESTED ACTIVITIES

Once learners read about each flower and fruit, an in-class reflection session can be held:

- Has anybody seen these flowers or eaten these fruits?
- If you were given a chance to see one of these unique flowers or fruits, which one would you pick? And why?
- Do you know about any other unique flower or fruit?

Complete quiz time.



TEACHER SUPERPOWER

Notes on the most commonly seen flowers to give learners a different perspective.



MEDIA RESOURCES



Smelly or Sweet? Unique flowers and fruits in the world and India



THE INDIA CONTEXT

Q: Why is the lotus the national flower of India?

A: Lotus is an important part of ancient Indian traditions and literature. It holds a special place even in Indian mythology. It is considered a sacred flower. It symbolises knowledge and beauty while rising above worldly problems and unnecessary attachments. Lotus is widely grown across India in lakes, ponds, gardens, and homes.

Q: What is unique about mango being India's national fruit?

A: Mango is known to be the king of fruits! It belongs to the Mangifera indica species. India is the biggest producer of mangoes worldwide. More than 1,000 varieties of mango can be found in India. Even Kalidasa (the great poet) spoke about mango's speciality, including their leaves and trees. Did you know that the Mughal Emperor Akbar built the country's most extended mango farm?



TEACHER SUPERPOWER

We learnt about unusual and unique flowers from all over the world. Now, let's learn a few interesting facts about the common flowers!

ROSES:
Roses are the most popular flowers in the world. They come in so many colours - white, red, pink, yellow, and even black! Did you know that roses are 35 million years old? Fossils (remains of animals and plants that lived a long time ago) of the flower were found by the archaeologists!

SUNFLOWERS:
Sunflowers are giant flowers. A sunflower is not just a single flower. The brown middle part of the sunflower is made up of hundreds of small flowers! Did you know that sunflowers turn from east to west to follow the Sun? That's how the flower gets its name!

MARIGOLD:
Marigolds are found everywhere in India. They are an important part of Hindu traditions, rituals, and festivals in India. But marigolds are not native to India. They came to India only a few hundred years ago. Marigold originates from Mexico and South America!

NIGHT FLOWERS:
Most of the flowers bloom when the Sun rises. But did you know that some flowers also bloom at night? They do so to attract pollinators such as moths that only roam at night. The night-blooming jasmine is an example of a flower that blooms at night!

PERFUMES:
Flowers have wonderful scents. For thousands of years, humans have used flowers to make perfumes. Ancient Egyptians made perfumes by extracting the scent from flower petals. There are mentions of perfume even in the Bible! Ancient Indians and Persians also developed perfumes.

SECTION II: ENVIRONMENT

Chapter 4 - All about insects



LEARNING OUTCOMES

In this chapter, learners will read about seven insects, what they do and how they help the environment.



SUGGESTED ACTIVITIES

After reading the chapter in class, reflect on:
Have you seen these insects?
Have you harmed any of these insects? Now that we know about their contribution to the environment, how do we restrict harming them?

Complete quiz time.



This chapter comes with a creative exercise where learners will have to create a rodent with superpowers! Insects and rodents are considered as pests. Mice, rats, hamsters, and guinea pigs fall under the rodent family.



TEACHER SUPERPOWER

An answer to the question 'Why do mosquitoes bite?'



MEDIA RESOURCES



Creepy crawlies around us



A world without bees
4:17 minutes

This video shows the catastrophic effect on the world if there were no bees.

Credits: History



THE INDIA CONTEXT

Dangerous insects seen in India:

Red fire ant
These red imported fire ants live in grasslands, rainforests, deserts, and within buildings and walls. They are very poisonous, having venomous stings that cause intense pain.

Asian giant hornet
The Asian giant hornet has an orange head. Its body is banded yellow-orange, black, and brown. It lives in low-level mountains and forests. When attacked, the Asian giant hornet can cripple or kill a person.

Mosquito
This might surprise you but mosquito bites can be deadly. They can make the person susceptible to malaria, dengue, and chikungunya.

Western honey bee
The western honey bee (Apis mellifera) is dangerous and is mostly found in South India. A western honey bee's sting can kill a person, especially if they are allergic to it.

Did you know, only female honey bees have stingers and die once they sting you?



TEACHER
SUPERPOWER

Why do mosquitoes bite?

Mosquitoes are so irritating, aren't they? They buzz around our ears. If that's not enough they even bite us!

Our blood is delicious supper for mosquitoes! But only the female mosquitoes bite humans. It is because they need our blood for food and to lay their eggs.

When the mosquito's proboscis (the small and pointy mouth) enters our skin, it tries to find a blood vessel. To get the blood flowing more easily, it injects its saliva into our skin. It is due to this saliva (spit) that our skin turns red and bumpy wherever the mosquito bites us. Our bodies don't react well to this saliva and hence, those bites start itching.

Why do they make the annoying buzzing or whining sound in our ears then? It's because when mosquitoes fly, they flap their wings very fast. It is said that a mosquito's wings can beat up to 1,000 times a second! The buzzing or whining is the sound of mosquitoes' wings.

SECTION III: SCIENCE AND TECH

Chapter 5 - All about doctors

LEARNING OUTCOMES

In this chapter, learners will be introduced to the concept of medicine, learn about Hippocrates, types of doctors, and the tools they use.

SUGGESTED ACTIVITIES

Class reflection:
How many of these types of doctors have you met?
Anybody keen to join the medical industry?
Complete quiz time.

TEACHER SUPERPOWER

Notes on why India celebrates National Doctors' Day on the 1st of July.

MEDIA RESOURCES

Tools and devices in a doctor's clinic

Hippocrates quotes
3:26 minutes

A collection of quotes by Hippocrates that are very relevant to our lives today.

Credits: Quote Finder

THE INDIA CONTEXT

Read about India's first female doctor:

She was Dr Anandibai Gopal Joshi from Mumbai, born in 1865. She was the first woman from the Bombay presidency of India (a province of British India) to study and graduate with a two-year degree in western medicine in the United States (US).

Her child's early death inspired her to become a physician. Then she left for the US to pursue higher studies in medicine.

Queen Victoria congratulated her when she graduated from Philadelphia. She was Albert Edward Hospital's physician-in-charge when she returned to India. She died before reaching the age of 22 due to tuberculosis.

The IRDS (Institute for Research and Documentation in Social Sciences) has been awarding the Anandibai Joshi Award for contributions to the medical industry.

NATIONAL DOCTORS' DAY

National Doctors' Day falls on the first of July. The first National Doctors' Day was celebrated in 1991. The day commemorates the life of Dr Bidhan Chandra Roy.

Dr Bidhan Roy was born in 1882. He completed his undergraduate and postgraduate degrees from Presidency College and Calcutta Medical College, respectively. After 30 admission requests in 1909, Bidhan was accepted into St Bartholomew hospital in Britain. He was a lecturer at Calcutta Medical College, Campbell medical school, and Carmichael Medical College.

Did you know, Dr Roy was Gandhi's personal doctor and friend?

Later, he ran for elections and was elected to the All India Congress Committee. Roy even became the Chief Minister of Bengal in 1948 and remained in the position till 1962.

Roy was essential in establishing many hospitals and institutions like the Chittaranjan Seva Sadan, Victoria Institution, Jadavpur T.B. Hospital, Kamala Nehru Memorial Hospital, and Chittaranjan Cancer hospital.

Did you know, Roy received the Bharat Ratna award in 1961 for his excellent contribution to medicine? The Bidhan Chandra Roy Award (BC Roy Award) came into existence in 1962. Every year, the President gives the BC Roy Award on National Doctors' Day to the most deserving doctor in the country.

SECTION III: SCIENCE AND TECH

Chapter 6 - Wizards from the world of science



LEARNING OUTCOMES

In this chapter, learners will be introduced to five highly accomplished scientists from different fields. The outcome is for them to understand and appreciate the existence of various fields in science.



SUGGESTED ACTIVITIES

Class reflection:
Which of these professions do you find most interesting? Why?
Complete quiz time.



TEACHER SUPERPOWER

Latest discoveries by astronomers, zoologists, and botanists in their respective fields.



MEDIA RESOURCES



Faces to remember in science



TEACHER
SUPERPOWER

LATEST DISCOVERIES IN THE WORLD OF SCIENCE:

• ASTRONOMY

New “Super-Earth” Planet Might Support Life

In February 2024, NASA announced the discovery of a “super-Earth” planet that might support conditions for life. A super-Earth is a planet that is larger than Earth but smaller than Neptune. The planet named TOI-715 b is one and a half times the size of Earth! It is 137 light-years away from Earth. It is orbiting a red dwarf star in a habitable zone just like Earth. This is why astronomers think the planet could support conditions for life.

• ZOOLOGY

New Lizard Species Discovered in India

In January 2024, a group of zoologists from India and abroad discovered a new species of lizard in the Western Ghats of India. It was found in the Kulamavu region of Kerala. The lizard species has been named Agasthyagama edge or the northern kangaroo lizard. The northern kangaroo lizard is very tiny. It is only 4.3 centimetres long. It looks like a small dragon.

• BOTANY

Rare Fossils of Ancient Trees Discovered

Recently, scientists unearthed rare fossils of trees with their leaves preserved. Thanks to these 350 million-year-old fossils, scientists found that some ancient trees looked really strange. They were unlike anything we have ever seen!

Fossils are remains of plants and animals that lived thousands of years ago. Usually, only the trunks of ancient trees are found preserved as fossils. But this new discovery delighted the scientists. They studied the fossils and found that each tree trunk was around nine feet tall. On the top of the tree, there was a thick canopy of 250 leaves. The leaves grew around 10 feet long. They extended out from the trunk. Scientists believe that these plants are the earliest example of smaller trees growing beneath the taller trees!

SECTION III: SCIENCE AND TECH

Chapter 7 - The world of robots



LEARNING OUTCOMES

In this chapter, learners will begin with an introduction to robots and deep dive into their role, robots in space, famous robots, smallest and largest robots.



SUGGESTED ACTIVITIES

Class reflection:
If you were to make a robot to automate a task you perform daily, what would it be?
Complete quiz time.



TEACHER SUPERPOWER

Notes on the history of robots and fun facts.



MEDIA RESOURCES



Become a fan of robots!



Tonight Showbotics_Jimmy Meets Sophia the human-like robot
9:13 minutes

Jimmy Fallon, host of the Tonight Show meets three robots including Sophia. We also get to see Sophia's little sister robot.

Credits: The Tonight Show



THE INDIA CONTEXT

Robots in India

Manav is India's first 3D-printed robot and was developed by Diwakar Vaish in 2014. Manav (weighs 2 kilograms and is powered by 21 servos) can walk, talk, and dance by receiving human voice commands.

Mitra is a humanoid robot created by an Indian startup, Invento Robotics, in Bangalore. Mitra can fold its hands and greet Namaste. It delivered a thank you speech for a college fest in 2019.

IRA (Intelligent Robot Assistant) is an interactive robot. HDFC Bank came up with this idea where IRA will greet customers at the welcome desk and direct them to their required area.

Kerala Police came up with this SI-ranked Robocop (also known as KP-Bot). The KP-Bot will greet people who enter the Kerala Police headquarters and perform all duties of a front desk police officer.

RADA is an AI-powered robot stationed at the airport. Vistara airlines have made this robot to assist customers. RADA can scan boarding passes and provide necessary information to customers boarding a flight.



TEACHER
SUPERPOWER

HISTORY OF ROBOTS AND FUN FACTS

Automation (technologies reducing human intervention) is believed to exist in ancient times. When the Greeks ruled Egypt, many engineers came up with mechanical designs. One of the greatest Alexandrian engineers, Hero of Alexandria (10 AD), made a puppet theatre that moves the stage and the figures mechanically.

Around 1080 AD, Su Song of China built a clock that chimed and rang the bells through mechanical mannequins. He placed it in a 35-foot-tall tower.

You might be surprised to know that in 1495 AD, Leonardo Da Vinci developed a humanoid robot. From his notebooks, people found drawings of a mechanical knight who could sit, wave hands, and move its head and jaw.

Did you know Japan produces the most robots in the entire world?

In the 19th Century, Hisashige Tanaka from Japan developed many small mechanical toys that could serve tea, paint a Japanese character, and fire an arrow from a quiver.

The term “robot” was coined in 1921 by Karel Capek in a play called Rossum’s Universal Robots.

The first industrial robot was invented by an American inventor George Devol called Unimate, in 1954 (a hydraulic arm). Unimate could carry weights, and it was later sold to the company, General Motors.

SECTION IV: FAMOUS PEOPLE

Chapter 8 - Women who changed the world



LEARNING OUTCOMES

In this chapter, learners will deep dive into six women who changed the world - from Nobel Prize winners to activists, military leaders to a pilot, these women are celebrated for their achievements.



SUGGESTED ACTIVITIES

Read the chapter and complete quiz time.



TEACHER SUPERPOWER

Notes on two children who changed the world. It is never too early to strive for greatness.



MEDIA RESOURCES



The wonder women of all time



The incredible story of the boy who invented Braille
3:20 minutes

The story of Louis Braille

Credits: BBC Ideas



THE INDIA CONTEXT

Razia Sultana

She was born in 1205 to Shams-us-din Iltutmish. Her father became a provincial governor from a slave and taught his children good qualities.

Before passing away, Iltutmish appointed Razia as the rightful heir in 1236. After a few months of trouble with her brother, she took the throne and reigned till 1240.

She replaced her clothes with men's clothes and prepared coins in her name, proclaiming "Queen of the times" and "pillar of women". She brought many good things to her people, like constructing schools and libraries, strengthening her territories, and excellent administration.

The Turkish nobles captured her based on some rumors. Malik Altunia, the governor of Bhatinda, fell in love with Razia and wanted to marry her. They lost the battle against the Turkish nobles, fled to Delhi and later were killed.

She was the first ever woman Sultanate of India, overcoming all odds and claiming the throne!



TEACHER
SUPERPOWER

CHILDREN WHO CHANGED THE WORLD

Louis Braille

Have you heard of the Braille system? It is a system of reading and writing developed for blind people. Braille has one to six raised dots that are felt with the fingertips.

French inventor and educator, Louis Braille, is the person behind this language. Braille was playing with tools in his father's shop as a three-year-old child. An accident in the shop left him without vision. Even so, he became a renowned musician and attended the National Institute for Blind Children in Paris in 1819.

An inventor called Charles Barbier visited the institute. He had developed a system of raised dots on the cardboard where each dot stood for a sound. Soldiers used this system to communicate in the dark. A 13-year-old Braille worked on improving this system. He published this system at the age of 20 years. As a teacher at the institute, Braille introduced the system to his students who adopted it.

Now, Braille is one of the most widely used languages for visually impaired people in the world.

Claudette Colvin

On 1 December 1955, Rosa Parks made history by refusing to give up her bus seat for a white man in the United States (US). She was arrested. This incident started the Civil Rights Movement. But 15-year-old Claudette Colvin had done the same thing nine months earlier.

At that time, the US followed an unjust system called segregation. Under this system, African-American people in the US weren't allowed to study in the same schools or eat at the same restaurants as white people.

In Colvin's hometown, Montgomery, Alabama, the front seating in the city buses was reserved for white travellers while the African-American people could only sit at the back. But if there were no seats left in the front half, then the African-American travellers had to give up their seats for the white travellers.

On 2 March 1955, Colvin was taking the bus home from school. The driver asked her to get up and move to the back of the bus. When Colvin refused to give up her seat, she, too, was arrested and put in prison. Despite being only 15 years old, Colvin challenged this racist law!

SECTION V: SPORTS AND ENTERTAINMENT

Chapter 9 - All about awards

LEARNING OUTCOMES

In this chapter, learners will gain exposure to the most coveted awards in sports and entertainment- what are they, why are they given, along with few facts about them.

SUGGESTED ACTIVITIES

Read the chapter and complete quiz time.

TEACHER SUPERPOWER

How did the Oscars come to be?

MEDIA RESOURCES

Awards and trophies for the best

THE INDIA CONTEXT

Four sporting awards given in India

Major Dhyan Chand Khel Ratna Award is a lifetime achievement award (highest sporting honour) for an Indian sportsperson given by the Ministry of Youth Affairs and Sports. The award was named after the legendary hockey player Dhyan Chand.

Arjuna Award (second-highest honour in India) is given to outstanding people in sports and games by the Ministry of Youth Affairs and Sports. Did you know, swimmer Kutraleeswaran Ramesh was the youngest to receive an Arjuna Award? He was 14 years old!

Coaches deserve an award too! The Dronacharya Award is for outstanding coaches who have brought fame and glory to India through their guidance, wit, and effort. It was first awarded in 1985.

MAKA (Maulana Abul Kalam Azad) Trophy is a special award given to the university in the nation that performs best in sports. Bombay University was the first to receive this award in 1956-57.



TEACHER
SUPERPOWER

The Academy Awards are more popularly known as Oscars. Let's find out how the award got its name!

When the Academy Awards were founded, all that remained to be fixed was the award. What type of trophy should the winners get? The Academy of Motion Picture Arts and Sciences organisation wondered. They decided to create a majestic trophy as a symbol of film-making.

With the goal in mind, Irish-American art director Cedric Gibbons set out to design a statuette (small statue). He created the design of a knight standing on a reel of film, holding a sword. The film reel had five spokes. Each spoke represented five original branches of the Academy - actors, directors, producers, technicians, and writers. This design was then given to American sculptor George Stanley. He sculpted the trophy and brought it to life!

The statuette was officially named the Academy Award of Merit but within a few years, it was nicknamed the Oscar. There is a popular story around the name. When Margaret Herrick, executive director of the organisation, saw the trophy, she said it reminded her of her Uncle Oscar!

That's how the Oscar trophy was born!

Fun fact: Oscars are made of bronze and gold. But during World War II, there was a shortage of metals in the country. Due to this, Oscars were made of painted plaster for three years!

SECTION VI: LITERATURE AND LANGUAGE

Chapter 10 - All about books



LEARNING OUTCOMES

In this chapter, learners will read synopsis of 10 books that they should be reading at Grade 5 level. It includes an outline of the plot and name of author.



SUGGESTED ACTIVITIES

Class reflection:
How many of these books have you read?

Pick any book and write a review of the same in the template given in book.



TEACHER SUPERPOWER

Introduction to comics as a genre.



MEDIA RESOURCES

History of the golden age of comics
16:10 minutes

This video is an interview that discusses history of comics, how it originated, first superhero, and more. Can be given as a link to watch at home.
Credits: Variant comics



THE INDIA CONTEXT

About Ruskin Bond

Ruskin Bond was born in 1934. He had a close relationship with his dad while studying in a boarding school. Later, he went to his aunt's home in the UK and stayed for a while. He won the John Llewellyn Rhys Prize in 1957 for his first novel *The Room on the Roof* when he was 17 years old.

When he returned to Dehradun, he started writing short stories for magazines and newspapers. He was later invited by the prestigious Penguin Books to write some books for them. That's where the magic happened.

He wrote more than 500 short stories, novels, and essays. He also wrote 64 books for children. He won the Padma Shri award in 1999 and the Padma Bhushan award in 2014.

His best books include the *Blue Umbrella, The Room on the Roof, Cherry Tree, Angry River, The Night Train at Deoli, Delhi is Not Far,* and more.

COMICS

There are different forms of books in the world. Some books come in the form of novels. They use words to tell a story. But some use images to tell a story. Such stories are known as comics!

Comics often use a combination of pictures and words to narrate a story. They are depicted in panels. There are many types of comics. Short comics found in newspapers are known as comic strips. Thin magazines with comics are known as comic books. In Japan, comic books are known as manga.

A person who draws comics is known as a comic artist. Comic artists draw the story using different styles of art. They create different characters and draw them in different poses. They also write dialogues which are shown in word bubbles. In this way, they create different panels in comics.

Here are a few examples of famous comics from all over the world:

The Adventures of Asterix is a comic book series from France. It was written by René Goscinny and drawn by Albert Uderzo. The comic depicts the adventures of a character named Asterix. Asterix is a warrior who defends his village with the help of a magical potion that gives him strength!

Garfield is a comic strip from the United States. It was created by American cartoonist Jim Davis. The comic strips depict the adventures of Garfield the cat. Garfield is a lazy orange tabby cat who loves sleeping and watching TV!

Peanuts is a comic strip from the United States. It was created by cartoonist Charles M Schulz in 1950. The comic strip depicts the adventures of Charlie Brown, his friends, and the coolest dog on the planet - Snoopy!

Chacha Chaudhary is a comic book from India. It was created by Pran Kumar Sharma in 1971. The comic book depicts the adventures of Chacha Chaudhary, an intelligent elder person. He was so intelligent that his brain worked faster than a computer! The comic also has a character named Sabu. Sabu is an alien from the planet Jupiter!

SECTION VI: LITERATURE AND LANGUAGE

Chapter 11 - The Mysticals learn idioms



LEARNING OUTCOMES

In this chapter, learners will be introduced to idioms, the literary device. They will learn to use idioms in their daily conversations.



SUGGESTED ACTIVITIES

Read the chapter and complete the idioms activity.



MEDIA RESOURCES

25 truly shocking origins of common phrases
10:27 minutes

List of 25 idioms with their origin. A slightly long video with each idiom's story. Can be given as home resource.

Credits: List 25



TEACHER SUPERPOWER

Origin of common idioms
Let's find out how some of the common idioms originated!

ORIGINS OF COMMON IDIOMS

There are thousands of idioms in the English language, each one stranger than the other! Where did these idioms come from? How were they formed? Let's find out the origins of two of the common idioms!

Once in a blue moon:

A blue moon refers to the second full moon in the same month. It occurs just once every 27 years. It is considered a rare event. That's why the phrase once in a blue moon means something that occurs rarely.

Under the weather:

When sailors go to the sea, they experience many storms. In the old days, they used the phrase "under the weather bow" to describe the side of the ship that would be affected by the heavy winds. Sailors also felt seasick during the storms. So, they would go to the cabins under the deck till the storm passed. That's how the idiom under the weather came to be. It means feeling ill.

Spill the beans:

Spilling the beans means to leak a secret. It is said that the idiom came from an ancient Greek voting process. During that time, beans were used to cast votes. White beans meant a yes vote and black or brown beans meant a no vote. People had to place these beans in a vase. The results were kept a secret till the final count. But if someone spilled the vase with the beans, the secret result would be revealed! That's why the idiom spilling the beans means leaking a secret!

IDIOMS FROM OTHER LANGUAGES

Idioms are not just used in the English language. They are used in languages all over the world. But since idioms don't mean what they literally say, it is difficult to translate them from one language to another. When translated, the results are very funny!

Here are a few examples of idioms in different languages:

The idiom in German: Die Katze im Sack kaufen
Literal translation: To buy a cat in a sack
What does the German idiom mean? Die Katze im Sack kaufen means to buy something without inspecting it first. In the English language, we have an idiom that means the same- buying a pig in poke!

The idiom in French: Les carottes sont cuites!
Literal translation: The carrots are cooked!
What does the French idiom mean? Les carottes sont cuites means a situation that can't be changed. In the English language, we have a similar idiom. It is- crying over spilt milk!

The idiom in Hindi: बंदर क्या जाने अदरक का स्वाद।
Literal translation: What does a monkey know about the taste of ginger?
What does the Hindi idiom mean? बंदर क्या जाने अदरक का स्वाद means someone who doesn't appreciate something of value. In the English language, we have a similar idiom- cast pearls before swine. It means to present something valuable to someone who doesn't recognise its worth.

SECTION VII: THE INDIA STORY

Chapter 12 - India's space story

LEARNING OUTCOMES

In this chapter, learners will begin by understanding the genesis of India's space program and meet Vikram Sarabhai, the Father of the Indian Space Program, using the Mystical magic. He answers questions about ISRO, its missions and future plans.

SUGGESTED ACTIVITIES

Read the chapter and complete quiz time and word search.

Class reflection:
If you were in charge of ISRO, what space mission would you want to work on?

MEDIA RESOURCES

India shoots for space!

The rise of ISRO
3:35 minutes

Rise of ISRO from the beginning. Against all odds, ISRO has achieved milestones with a fraction of resources available to other nations.

Credits: The Secrets of the Universe

TEACHER SUPERPOWER

WOMEN WHO TOOK INDIA TO MARS

When India sent the satellite to Mars' orbit, there were hundreds of scientists involved in the mission. It was a tough mission. The team had only 18 months to complete the mission! All the scientists and engineers worked long hours every day and even worked on holidays. In this mission, many women scientists had an important role to play. Some of them were even present in the control room at the time of the launch. Let's take a look at some of the women scientists who took India to Mars:

Ritu Karidhal

When Ritu Karidhal was a little girl, she loved to watch the night sky. She used to often wonder about the size of the Moon. She wanted to know more and more about space. Growing up, she read and collected news from NASA and ISRO every day. And when she grew up, she became a space scientist and got a job at ISRO!

Karidhal worked on many projects at ISRO, including the Mars mission. She was the Deputy Operations Director of the Mars Orbiter Mission. She looked after the mission operations. She also created an autonomy system for the satellite. It was the brain of the satellite!

Nandini Harinath

Nandini Harinath also worked as the Deputy Operations Director of the Mars Orbiter Mission. She handled mission operations. She researched mission planning and operations.

When she was young, Harinath and her parents would sit together and watch Star Trek on TV. That's how she became interested in science and space!

Fun fact: The budget of India's Mars Orbiter Mission was $74 million or ₹4.5 billion! It cost less than the Hollywood space film Gravity! It is because ISRO used home-grown parts and technologies over foreign ones.

SECTION VIII: VALUE EDUCATION

Chapter 13 - Scorch learns mindfulness



LEARNING OUTCOMES

In this chapter, learners will learn to become aware of anxiety and practise mindfulness through a series of techniques.



SUGGESTED ACTIVITIES

Class reflection:
When was the last time you felt unsettled and anxious?
Were there any physical changes you felt - clammy hands, sweating?
What did you do to overcome this?



MEDIA RESOURCES

Link in book
A guide to meditation



TEACHER SUPERPOWER

Our bodies and minds are connected. When our minds go through something, it is natural to see changes in our physical state as well. “Butterflies in the stomach” is a very real feeling that starts with the mind and moves into the body. Mindfulness helps achieve balance in body and mind.