



GOVERNMENT OF TAMIL NADU

STANDARD FIVE
MATHEMATICS
SCIENCE
SOCIAL SCIENCE

Term - II

Volume-2

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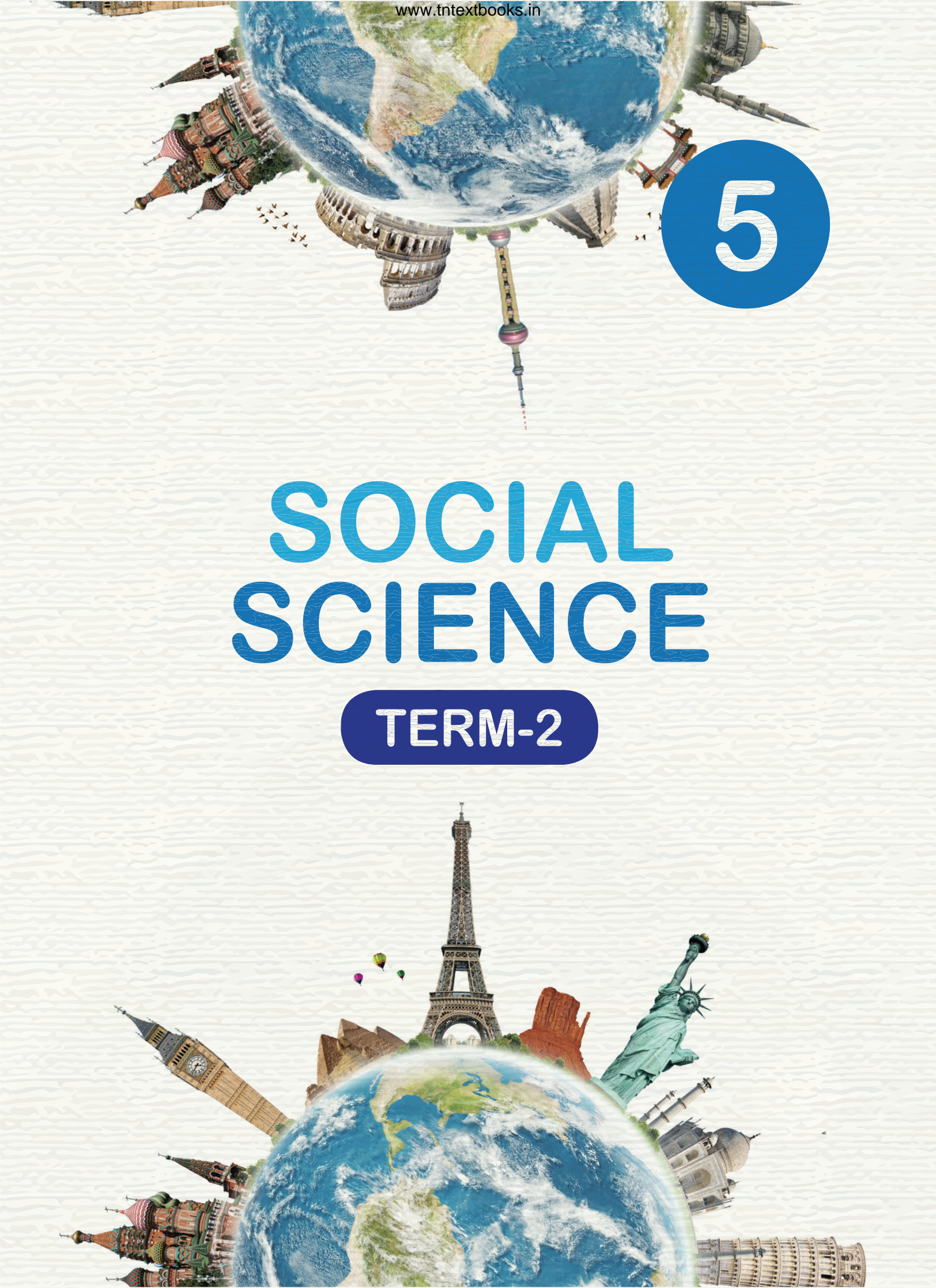
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SOCIAL SCIENCE

TERM-2



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E-Book



Evaluation



Digi Link





UNIT
1

Ancient Excavation



Learning Objectives



Students will be able to:

- ❖ understand about excavation.
- ❖ know about archaeologists.
- ❖ know some examples of excavations.



Rekha: It is so hot today. I do not think that I can go out to play.

Grandma: Ah, very true. But, when I was young, I used to play outdoors all the time.





Rekha: How did you play when it was hot?

Grandma: When I was young, our neighbourhood was full of trees and I used to play in the shade of the trees.



Rekha: Wow! Really? I wonder how people lived in those days!

Grandma: Do you know, there is a way to know and understand how people lived in those days.



Rekha: How is that possible? Tell me more.

Grandma: Have you ever found a sea shell while digging in the beach?



Rekha: Yes!

Grandma: Similarly, there are people who dig the earth at various places to find things that people used before. These people are called **Archaeologists!** The process of digging the ground is called **Excavation.**



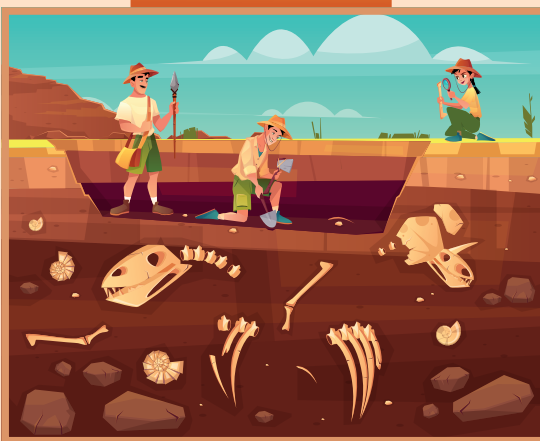
Now let us learn more about excavations.

EXCAVATION

Excavation is a controlled exploration of what lies under the surface of earth. All forms of archaeological excavation require great skills and careful preparation. Excavations can be classified based on the purpose like **planned**, **accidental** or **rescue**. Most excavations are properly pre - planned and their purpose is to find buried evidences from the site.



Excavation



Archaeologist





The things that Archaeologists find during excavation are called **artefacts**. Archaeologists can tell a lot about people who lived there by looking at their houses, clothes, bones and other artefacts.



ACTIVITY

Let us do



The class will get divided in groups of 3 and plant a sapling in the school premises. The students will clear the soil, dig the soil and plant the sapling.



If I dig the ground near my house, will I get artefacts?



Who is an Archaeologist?

Archaeologists: They study the history of humans and places through excavation and analyse the artefacts. Excavation gives us a glimpse of the past.

Some interesting examples from the world

Pyramids in Egypt : When the Pyramids were excavated it was found that the small pyramids were made for the Queens. They found huge tombs with super structures which were built for the burial of the royal family. Skeletons found in the pyramid gave information about the average height and age of the people.

Indus Civilisation : Indus Civilisation is also called **Harappan Civilisation**. This was the first site to be excavated in the early 20th century. Baked bricks were found underground. The city had a well-planned, proper sanitation systems, proper well and a way to direct waste water to closed drains. There were advanced granaries, Great bath and protective walls. It was found that the city and its civilisation were very advanced for their time.

Pyramid



Indus Civilisation excavation



Think



How do archaeologists identify the places with artefacts in it?

Some interesting examples from Tamil Nadu

There are many places in Tamil Nadu where excavations had happened and many interesting things were found.

Adichanallur



Adichanallur - Thoothukudi District

- Among the artefacts unearthed were Urns, pottery of various kinds (Red Ware, Black Ware), iron implements, daggers, swords, spears and arrows, some stone beads and a few gold ornaments.
- Bronze objects representing domestic animals and wild animals like tiger, antelope and elephant have been unearthed.
- The people were skilful in making pottery and in working stone and wood.

Adichanallur





An **archaeological site** is any place where there are physical remains of past human activities.

Activity section header: "ACTIVITY Let us write" with icons of children, pencils, and a person icon.

Instruction: "Imagine yourself to be an archaeologist and list down the things that you would collect during an excavation."

A large blank white area for writing the answer.

Where are the artefacts kept after excavation?

Arikamedu

Arikamedu is an archaeological site situated near Pondicherry. The excavation revealed that it was a coastal village that traded with Rome. An archaeologist found **Roman lamps, glass, stone beads, gems, cutlery and crockery, wine containers** etc. He noted that, for the local fishermen of the village, the antiques were new.

Arikamedu



Keezhadi

Keezhadi - Sivagangai District

The Archaeological Survey of India (ASI) excavated an ancient town dating to Sangam Age in Keezhadi village at Thiruppuvanam taluk. Excavations have produced evidence for brick buildings, and well laid - out drainage system. Tamil - Brahmi inscription on pottery, beads of glass, carnelian and quartz, pearl, gold ornaments and iron objects, shell bangles, ivory dice have been unearthed. The Roman artefacts found at the site add to the evidence of ancient Indo -Roman trade relations.

Keezhadi



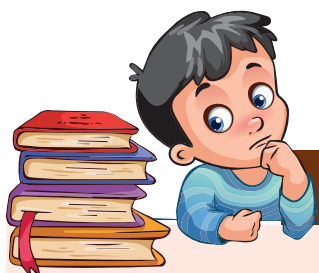
Glossary

Archaeologist: A person who learns about human history through excavation.

Excavation : Digging the earth to find building and tools made long ago.

Unearthed : Find (something) in the ground by digging.





Recap

- Excavation is the process in which people dig the Earth to find things that were used long ago.
- Archaeologists study the history of humans and places through excavation and analyse artefacts.
- Pyramids and Indus Civilisation are excavation sites in the world.
- Adhichanallur, Keezhadi and Arikamedu are important excavation sites in Tamil Nadu.



EVALUATION



I. Choose the correct answer.

1. _____ study the history of humans and places through excavation.
a) Archaeologists b) Scientists c) Excavationist
2. Small pyramids were made for the _____ in Egypt.
a) Prince b) King c) Queen



G3A4I4

3. Indus civilisation is also called as _____
Civilisation.

- a) Egypt b) Harappan c) American

4. Adichanallur is in _____.

- a) Thoothukudi b) Chennai c) Pondicherry

5. Keezhadi revealed the _____ era.

- a) Modern b) Sangam c) Middle age

II. Match the following.

1	Pyramids	Adichanallur
2	Baked bricks	Keezhadi
3	Pottery	Roman lamp
4	Sivagangai	Indus civilisation
5	Arikamedu	Egypt

III. True or False.


1. During excavations many artefacts were found. ()
2. Indus Civilisation is located in Harappa. ()
3. Adichanallur is an archaeological site in Coimbatore district of Tamil Nadu. ()
4. Keezhadi excavation revealed that it was not a developed city. ()
5. Roman lamps, glass, stone beads, gems etc. were found in Arikamedu. ()

IV. Answer the following.

1. What is excavation?
2. Who is an archaeologist?
3. Write a short note on pyramids.
4. What are the artefacts that were found in Adichanallur?
5. Where is Keezhadi located?

V. Answer the following in detail.

1. Describe the Indus Civilisation.
2. Give a detailed study of Keezhadi.
3. Write about Arikamedu in detail.



FUN WITH ACTIVITY

PROJECT:

Collect information about the latest excavations in Tamil Nadu.



UNIT
2

Hydrosphere



Learning Objectives

Students will be able to:

- ❖ describe the features of Hydrosphere.
- ❖ define each type of water body.
- ❖ list the steps to be taken to conserve water.
- ❖ explain the steps involved in the water cycle.



Rani: Sundar! Our earth is huge, isn't it?

Sundar: Yes Rani. It is huge. Do you know what does it consist of?





Rani: No, can you tell me?

Sundar: Sure! The earth consists of Lithosphere, Hydrosphere and Atmosphere.



Rani: Oh ! Such big words! What does this mean?

Sundar: This means that the earth consists of land, water bodies and air.

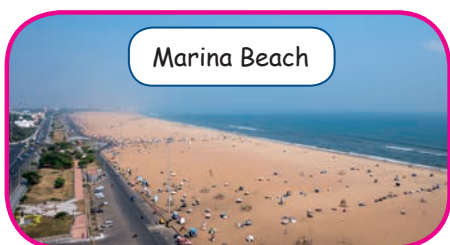


Rani: Yes! That's true.

Sundar: When we went to the Marina Beach, have you noticed how much water in the sea! The water from oceans, seas and so on become a part of the hydrosphere.



Rani: Wow! Can you tell me more about hydrosphere, Sundar?



Marina Beach

Sundar: Sure



Hydrosphere

Hydrosphere is the total amount of water present on a planet. The hydrosphere includes water that is present on the surface of the planet, underground, and in the air. Therefore, a planet's hydrosphere can be in the form of **liquid**, **vapour**, or **solid in the form of ice**.

Hydrosphere covers about **71%** of the planet Earth. This includes water in liquid and frozen forms. **97%** is salt water and rest of the **3%** water is found in ground, lakes, rivers and also frozen as ice in the form of glaciers and icebergs.

Iceberg



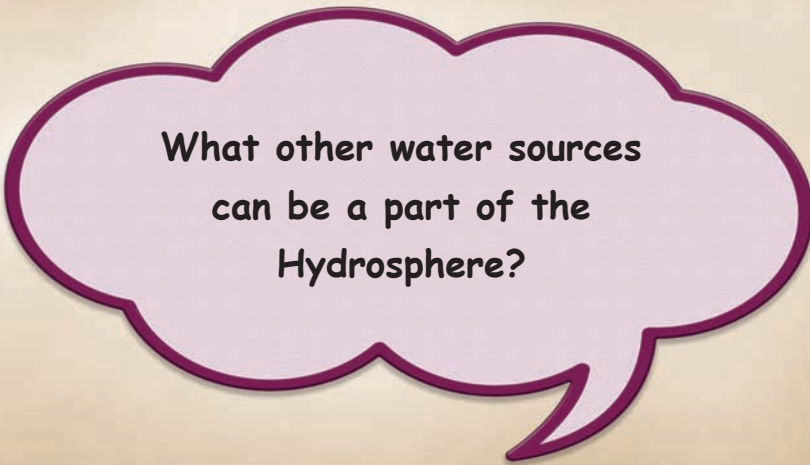
Glacier





There is no aquatic life in **Dead Sea** because it is too salty.

Think



ACTIVITY
Let us write



Construct Rain Water Harvest system at your school with the help of your teachers.

Importance of Hydrosphere

We need water to carry out many **activities** in our daily lives. We need water to drink, take bath, cook food etc. **Animals and plants** also need water for their survival. If there is no water, it cannot evaporate and form clouds. So there will not be any rain.

Lake



Pond



Stream



River



Types of water bodies

Oceans:

Oceans are vast water bodies that usually separate continents from one another. The water is salty in nature. There are five oceans on earth. They are: **the Pacific Ocean, Atlantic Ocean, Indian Ocean, Southern Ocean, and Arctic Ocean.**



Indian Ocean



Sea:

Seas are also vast water bodies but smaller than oceans in size. They are partly closed by land and opens up to the ocean. Sea water is **salty** in nature.

Example: Arabian Sea

Arabian Sea





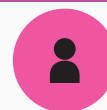
It is incredible that a wide variety of earth's living organisms exist within the oceans.



Some of the longest flowing rivers in India are the Ganges, Yamuna, Godavari, Krishna and Cauvery.



ACTIVITY
Let us write



Describe a water body that you have visited.
River/ lake/ waterfall/ sea etc.

Rivers:

Rivers are large streams that flow over the land. Rivers are fresh water bodies which generally begin at mountainous areas. They usually drain in oceans or seas.

Example: Ganga and cauvery.

Lakes:

A **lake** is a water body surrounded by land on all sides. Lakes can have salt or fresh water.

Example: Dal Lake.

Gulf:

A **gulf** is a large area of an ocean or a sea that is surrounded by land.

Example: Gulf of kuchch.

Bay:

A **bay** is a body of water, which is partially enclosed by land. It has a wide mouthed opening of land, and is joined to the sea or other large water bodies.

Example: Bay of Bengal.



Sambhar Salt Lake in Rajasthan is one of the important inland salt water lake in India.



Name some water bodies in your locality?



Lagoon:

A stretch of salt water separated from the sea by a low sand bank.

Example: Lake Chilika in Odisha.

Strait:

A **strait** is a narrow stretch of water which joins two larger water bodies.

Example: Palk Strait joining the Bay of Bengal and the Indian Ocean.

Waterfall:

Water fall forms when a river flows from a great height.

Example: Courtallam Waterfall

Courtallam Waterfall



We should be very careful about how we use the water. We have the choice to conserve water resources or pollute them further. **Water pollution** is a common phenomenon around us. We throw garbage, join sewage to rivers and so on, making river water contaminated and not fit for use. This, increases the scarcity of water for household use.



Rani: Oh! water scarcity!

Sundar: Yes, We faced it too Rani. The whole of Tamil Nadu faced a huge water crisis.



Rani: You are right. I think we should come up with step to use water thoughtfully.

Children you can easily do these.

- Take water in a bucket for bathing instead of using shower.
- After washing vessels check if the taps are closed.

Can you help **Rani** to come up with more steps?

Think

How can we save water?



Do not put plastic garbage when you go near beaches. It is very dangerous for the aquatic life.

Sundar: Rani, Do you know that water continuously moves on, below and above the surface of the earth?



Rani: Really! How?

Sundar: There is a water cycle that occurs continuously. Water changes its state from solid, liquid, gas in this cycle.



The stages involved in a complete water cycle are:

Stage I: Evaporation - The heat of the sun falls on the water bodies like oceans, seas, lakes, rivers etc. The water slowly evaporates as vapours into the air.

Stage II: Condensation - As the vapours rise high, the cooler temperatures make them cool down and turn back into liquid. This is called condensation. Wind moves the liquid around, leading to the formation of clouds.

Stage III: Precipitation - Wind movements cause the clouds particles to collide. They become rain bearing clouds and fall back onto the earth's surface by the process known as precipitation. This may occur in the form of rain, hail, snow or dew depending upon the temperature conditions.

Stage IV: Runoff and Infiltration - The water either runs off into oceans, rivers and ground surface or is absorbed into the soil (infiltration). This cycle continues.

Glossary

Continent : Main stretches of land found on earth.

Evaporate : The process by which liquid becomes gas.

Precipitation: Rainfall.



- Earth is made up of land, water and air.
- Water is necessary for all life forms.
- 3% of water is found in ground, lakes, ponds, streams and rivers .
- There are five major oceans in the world: The Pacific, Atlantic, Indian, Southern and Artic ocean.
- Waterfall forms when river falls from great height.
- We should use water carefully.


3. Water in the sea is sweet. ()
4. We should keep the tap open throughout while washing utensils. ()
5. We should save water. ()

IV. Answer the following.


1. Define hydrosphere.
2. Why is hydrosphere important?
3. Name the different types of water bodies.

V. Answer the following in detail.

1. What are the different stages of water cycle?
2. Give few steps to save water.



**FUN WITH
ACTIVITY**



PROJECT:

Collect pictures of water bodies and write one sentence about each.



UNIT

3

Continents of the world



Learning objectives



Students will be able to:

- ❖ describe the key features of each continent.
- ❖ describe some countries in each continent.

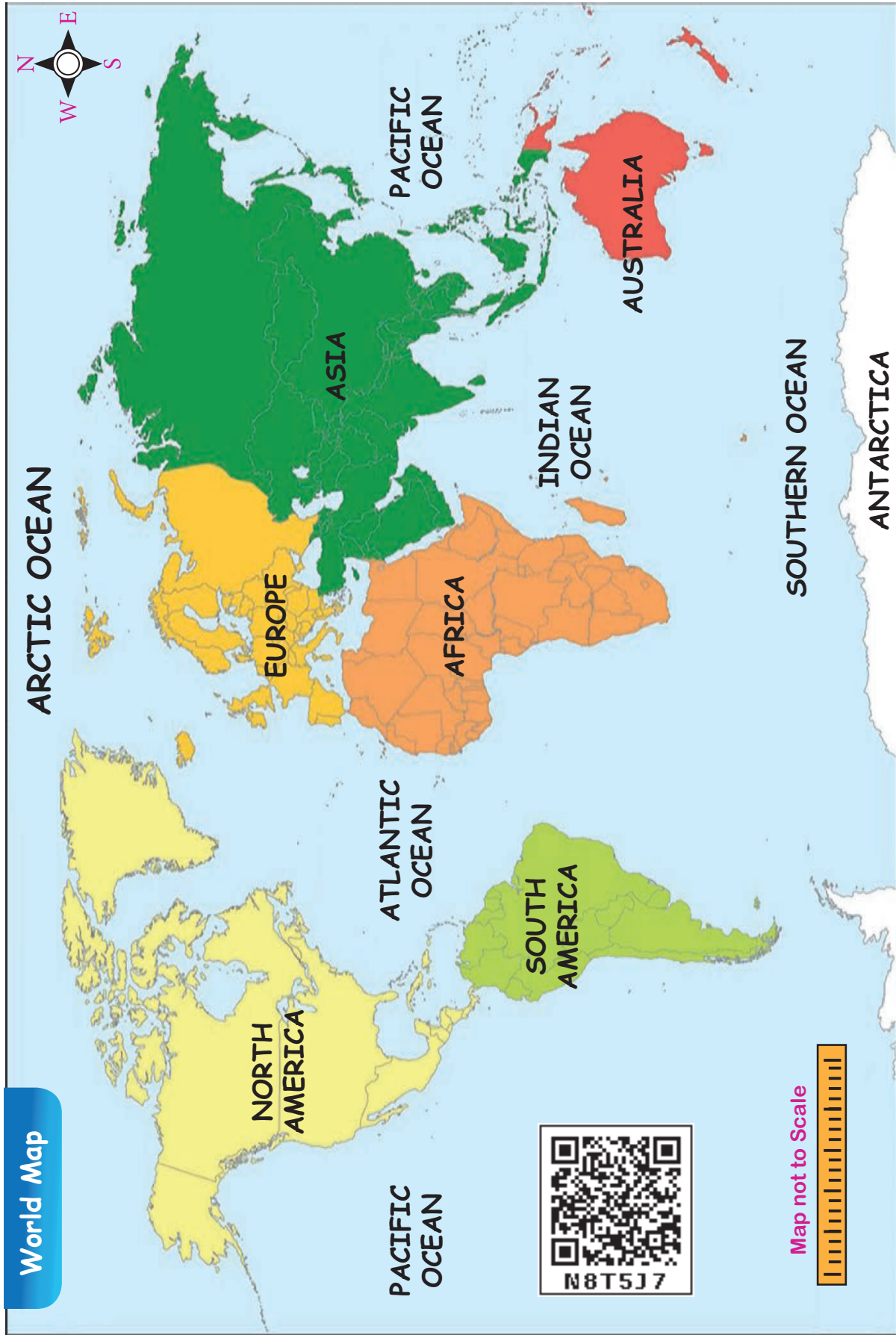


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Introduction



Where do we all live? We all live on the **Earth**. Earth is our home. The total land on the earth is formed of **seven continents** of various sizes. Some are connected to each other while others are not. Each continent has a different number of countries. The seven continents of the world are: **Asia, Africa, North America, South America, Antarctica, Europe and Australia.**



World Map

Asia

Asia is the world's largest continent in size and population. The world's two most populous countries, **China** and **India** are in Asia. Asia has the highest point on earth, the peak of Mount Everest which is in the Himalayas. Asia is the birth of great ancient civilisations: Indus civilisation, Chinese civilisation and Mesopotamian civilisation.

Himalayas



The Great Wall of China



The **Great Wall of China** is the man made structure that can be seen from space.



Thousands of years ago, the seven continents of the world were joined together as a single huge landmass called **Pangaea**. But it slowly broke apart and separated as seven continents.

Some other countries in Asian continent are **Japan, Singapore, Malaysia, Saudi Arabia, Sri Lanka, Nepal, Pakistan, Maldives, Philippines, Afghanistan, Thailand and Indonesia**. Now let us learn more about our country which is the part of Asia.

India

India is our country. India is known as the Land of **unity in diversity** as people from different religions, languages, cultures live united. India has 29 states and 7 union territories. New Delhi is the capital of India. India has several historical monuments. **Taj Mahal** is one such monument. It is situated in Agra on the banks of river Yamuna. Taj Mahal is built completely using white marble stones. This most beautiful monument is recognised as one of the seven wonders of the world.

Taj Mahal



Sanchi Stupa



GangaiKonda Cholapuram



St George Fort



Some other historic monuments in India include **India Gate** in Delhi, **Sanchi Stupa** near Bhopal, **Gateway of India** in Mumbai, **St George Fort** and **GangaiKonda Cholapuram** in Tamil Nadu.

Gateway of India



India Gate



ACTIVITY

Let us Paste



Collect and paste pictures of seven wonders of the world.

Africa

Africa is the second largest continent of the seven continents of the world, The world's longest river the **Nile** and the world's largest desert the **Sahara**, both are home in Africa. More than 50% of the world's **gold** and **diamonds** come from the mineral rich continent of Africa.

Sahara



Nile River

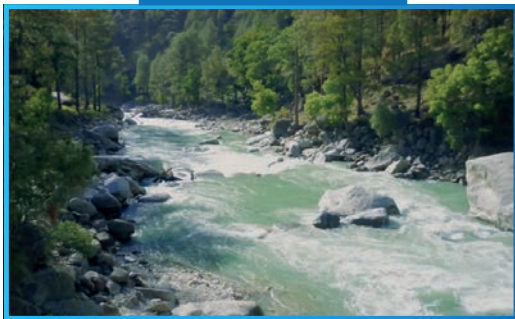


Think



Is it correct to pollute our rivers?

Clean River



Polluted River





The continent was uninhabitable (Not fit for habitation) and remained unknown for thousands of years, earning it the name of 'Dark Continent'

Some countries in African continent are: **Sudan, Libya, Egypt, Kenya, Zimbabwe, Ethiopia and Guinea.**

North America

North America is entirely within the Northern Hemisphere. North America is the third largest continent by area, following Asia and Africa. The largest fresh water lake, **Lake Superior** is located in this continent. **The Mississippi - Missouri**, is one of the longest river located in North America. The **United States of America (USA)** is a part of North America.

New York (USA)



Ottawa, Canada





North America is the only continent in the world that has **all climatic types**.

Some countries in North American continent are: **Canada, Mexico, Nicaragua, Honduras, Cuba, Guatemala, Panama** and **Costa Rica**.

South America

South America is located mostly in the Southern Hemisphere, with a relatively small portion in the Northern Hemisphere. The world's largest river which is also the second longest is the **Amazon river** in South America. **Brazil** a country in South America is one of the largest coffee producer in the world. **The Andes** is one of the longest mountain range in South America. **Andes** is an example of fold mountain. **Mt. Aconcagua** is the highest peak in the **Andes**. One of the highest volcanoes of the world, **Mt. Cotopaxi** is found in this continent.



The **Amazon rainforest** covers most of the Amazon Basin in South America.

Andes



Mt. Cotopaxi



Some countries in South American continent are **Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela.**

**ACTIVITY**

Let us write



- Write the name of the country and its continent in the table below.

Country	Continent

Antarctica

Antarctica is the coldest continent on Earth. It is also called the **White Continent** or the **Frozen Continent**. Antarctica experiences half a year of sun light and half a year of complete darkness. Penguins are found in Antarctica. There are only permanent research stations from different countries can be found there.

Penguins in Antarctica.



Europe

Europe and **Asia** are parts of the same major landmass. Europe is separated from Asia by the Ural mountains and the Caspian Sea. The world's smallest country, the **Vatican City**, is in Europe. The **Volga** is one of the longest rivers in Europe.



Finland, in Europe, is called the '**Land of Lakes**' because melting ice sheets have created a lot of lakes here.

Some countries in European continent are:
France, Spain, United Kingdom, Germany,
Norway, Austria, Greece, Spain, Portugal
and Italy.



Vatican City (Italy)



London (England)



Russia, the country stretches over a vast expanse of Eastern Europe and Northern Asia.



Ukraine's Steppe region is called the **Bread Basket of Europe** because it produces a large amount of wheat.

Think



Which state is called the **Bread Basket of India?**

Australia

Australia is an Island continent covered with unique landscapes and natural wonders. **The Great Barrier Reef**, the pride and joy of Australia is made up of nearly 2,500 individual reefs and visible from space. Australia includes the islands of **Tasmania** and **numerous small islands**.

The Great Barrier Reef



Kangaroo



Glossary

Civilisation : A society in an advanced state of social development.

Island : A piece of land surrounded by water.

Monument : A building that is of historical importance and preserved as public property.



Recap

- Earth has seven continents. Each of these seven continents is divided into countries.
- The names of the seven continents of the world are: **Asia, Africa, North America, South America, Antarctica, Europe and Australia.**



EVALUATION




I. Choose the correct answer.

- There are _____ continents in the world.
 - Five
 - Seven
 - Nine
- The largest continents is _____.
 - Africa
 - Asia
 - North America
- _____ is the longest river in the world.
 - Kaveri
 - Ganga
 - Nile
- Lake Superior is located in _____.
 - North America
 - Australia
 - Europe
- Penguins are found in _____.
 - Asia
 - Antarctica
 - Africa



II. Match the following.

1	Asia	Vatican city
2	Africa	Amazon forest
3	Europe	Sahara desert
4	South America	Kangaroo
5	Australia	Biggest continent

III. True or False.

- Asia is the third largest continent. ()
- India has one of the seven wonders of the world. ()
- Brazil is one of the largest coffee producer in the world. ()
- The great barrier reef is in India. ()
- Antarctica has half year of light. ()

IV. Answer the following.

1. Name the continents.
2. Where is the Taj Mahal is located ?
3. Describe North America's important features.
4. Where is the Great Barrier Reef located?
5. Which continent is called the Frozen continent?

V. Answer the following in detail.

1. Write a short note on any two continents.
2. Write a note on the monuments of India.
3. Give a detail study of Australia.



**FUN WITH
ACTIVITY**

**PROJECT:**

Stick the flags of any five countries.

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