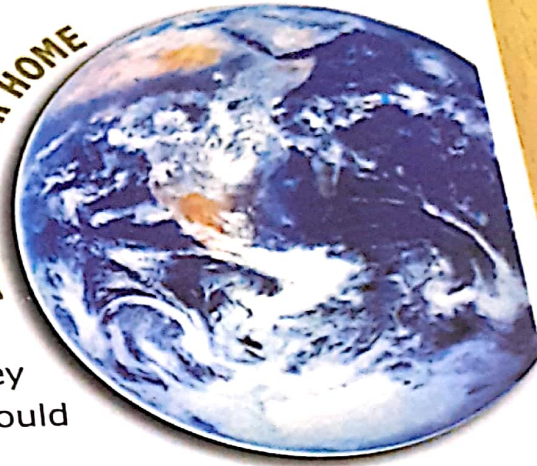


1. MAPPING THE WORLD

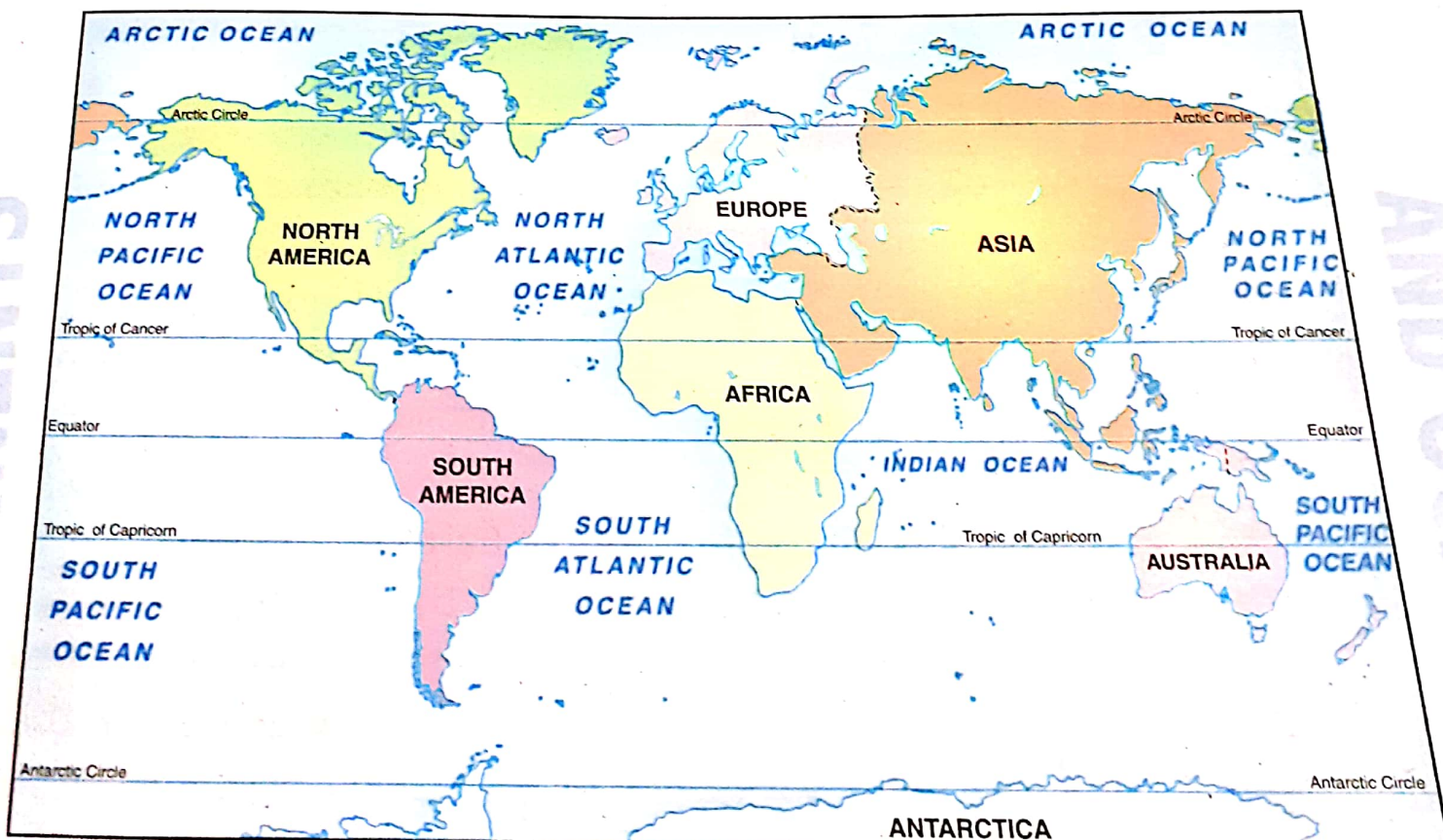
Children, do you know what is the place of our planet Earth in the solar system? Let's study about the Earth in this lesson. The Earth is the third planet from the Sun. It is a unique planet because it has land masses, water bodies and atmosphere to support life.

Long ago, people thought that the Earth was flat. They thought that if they would reach its edges, they will fall off. This was the reason why they never wanted to travel too far. But, with progress in the field of science they came to know that the Earth is not flat but is round. They would never fall off even if they kept travelling continuously.

EARTH - OUR HOME



WATER COVERS MORE THAN 70 % OF THE EARTH : More than 70% of the total surface area of the Earth is covered by water bodies. It looks blue when seen from the space. The largest land masses on the Earth are called **continents** and the largest water bodies are called the **oceans**.



There are seven continents. These are Asia, Europe, North America, South America, Africa, Australia and Antarctica. The largest continent is Asia and the smallest is Australia. All the continents have many countries in them. India is an Asian country.



Did You Know?

Russia is the largest country in size, while the Vatican city is the smallest one.

There are four major oceans on the Earth — Pacific Ocean, Indian Ocean, Atlantic Ocean and Arctic Ocean. Water surrounds Antarctica from all sides. Some geographers have named the water body that surrounds Antarctica as Southern

Ocean. Pacific Ocean is the largest ocean.

STUDYING THE EARTH

To study the Earth and its features we use a model of the Earth known as globe. We can see shape, size and location of various continents, countries, oceans and seas on the globe. But, due to its spherical shape, we can see only half of the Earth's surface at a time. We have to rotate the globe to see the other half. Moreover, we can not carry the globe always.



Globe

Due to such difficulties, we use maps. A map is the drawing of the whole or a part of the Earth's surface on a flat sheet.

AMAZING FACT



The word "globe" comes from the Latin word "globus" which means round mass or sphere.

We use maps of the Earth, continents, countries, cities and even our neighbourhood. The book which contains only maps is called an Atlas.

Maps can show plains, valleys, mountains and water bodies. It can also show forests, wild life, railway line,

industries, roadways, etc. We must refer the maps while reading about lands and people on the Earth.

The map is too small to show all the features of Earth on it. Therefore, different colours, signs and symbols are often used in maps by the map-makers to show different things. These colours, signs and symbols are the language of the map. Usually, map-makers follow a common scheme of colours to show various things on a map. They use blue colour to show water bodies and green colour to show plains. Further to distinguish shallow and deep water in water bodies, they use light blue and



World Map

dark blue, respectively.

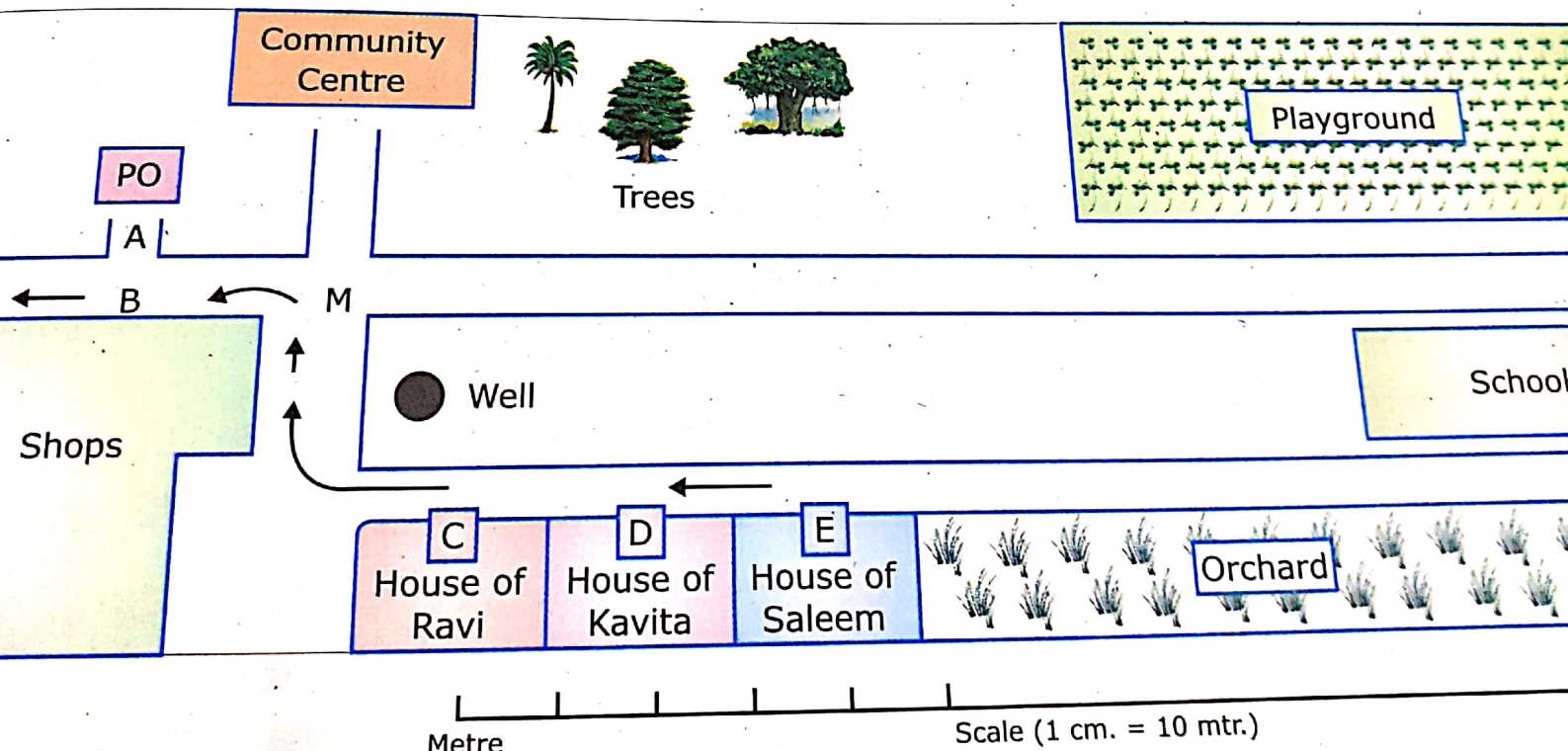
Similarly, to show highlands, they use orange and brown colour. Like colours, map-makers use sign and symbols on the maps to indicate lakes, rivers, mountains, dams, bridges, railway line, roadways, and boundary, etc.

AMAZING FACT



The study of map-making is called cartography and the one who makes maps is called cartographer.

Some of the symbols are thick dashes and dots in black that show land boundaries.



Map of a Village

The Nations of the World



World Map

dark blue, respectively.

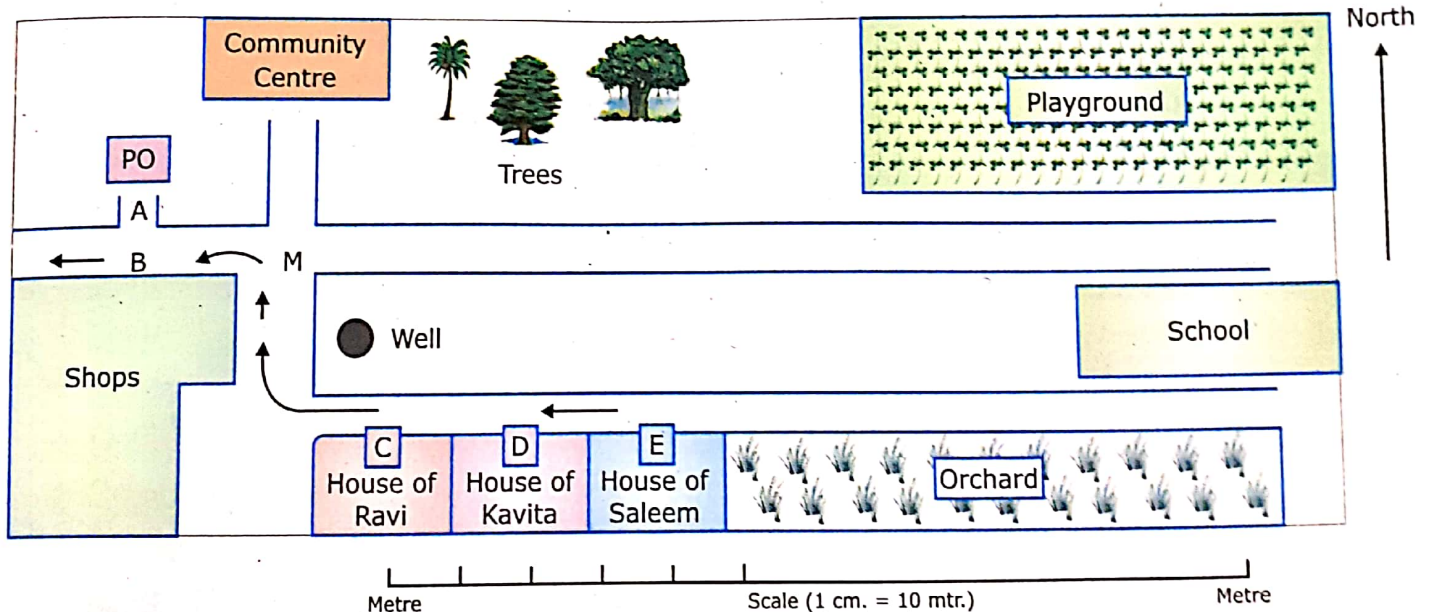
Similarly, to show highlands, they use orange and brown colour. Like colours, map-makers use sign and symbols on the maps to indicate lakes, rivers, mountains, dams, bridges, railway line, roadways, land boundary, etc.

AMAZING FACT









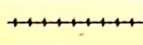


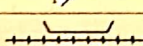


The study of map-making is called cartography and the one who makes maps is called a cartographer.

Some of the symbols are thick dashes and dots in black that show land boundary,



Map of a Village

INTERNATIONAL BOUNDARY	---	STREAM	
STATE BOUNDARY	- - - - -	RIVER	
DISTRICT BOUNDARY	TANK (perennial)	
METALLED ROAD	====	TANK (dry)	
UNMETALLED ROAD	-----	SPRING	+
FOOT PATH	WELL	o
CART TRACK	———	TEMPLE	
RAILWAY LINE	———	MOSQUE	
BROAD GAUGE		TOMB	
METRE GAUGE		CHURCH	
LEVEL CROSSING		POST OFFICE	PO
RAILWAY LINE WITH BRIDGE		POLICE STATION	PS

Some Sign and Symbols Used on Maps

and a small circle for a city. Though maps are preferred more than globes for study purposes, yet they too have some limitations.

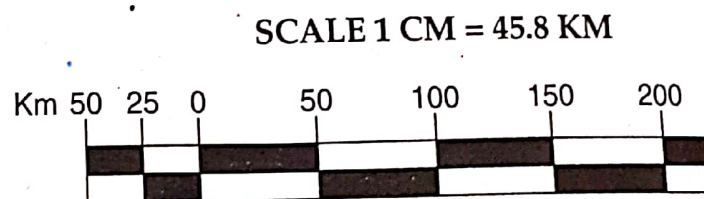
Since the Earth is spherical in shape, the curved surfaces of the Earth are not properly depicted on a map as it has flat surface.

So, we cannot say that the map of the earth is absolutely accurate. However, we can draw accurate maps for smaller areas which do not have any curved surface.

To know the location of a place, we have to know its direction first. The maps indicate different directions. The top of the maps indicate North and the bottom South. West lies in between North and South on the left side and East on the right in between North and South. North-East lies between North



The Directions on a Map



Linear Scale

and East and North-West lies between North and West. Similarly, South-East lies between South and East and South-West between South and West. Once we know one direction on a map, we can easily find out the other directions. Usually, the North is indicated on maps with N.

Globe and maps are models and drawings of the Earth yet these. These models or drawings cannot show the actual size of the Earth.

However, we can make a map of the Earth by using different scales. If you look at a map, you will find a scale on the top or bottom of the map. In the picture below is also shown a map scale.

A map scale is the ratio of the distance between two places on the map to the actual ground distance. A map scale of 1cm: 100 km states that a distance of 1cm on a map between two places is actually 100 km. Such scales help us to know the distance between two places. All the maps are drawn according to a scale.

Glossary



Atlas - The book which contains only maps.

Map Scale - Ratio of distance between two places on the map to the actual ground distance.

Symbol - Mark or sign which indicates a particular thing.

Quick Glance



- ❖ Land masses, water bodies and the surrounding atmosphere make the Earth a unique planet.
- ❖ Earth is spherical in shape.
- ❖ There are seven continents and four major oceans on the Earth.
- ❖ Two third of the Earth's surface is water and one third is land.
- ❖ Globe is a model of the Earth used to study shape, size and location of continents and oceans.
- ❖ Map is the drawing of the whole or a part of Earth's surface on a flat sheet.
- ❖ Atlas is the book of maps.
- ❖ Different colours, signs and symbols are used to show different things on a map.
- ❖ Symbol is a mark or sign which indicates a particular thing.
- ❖ Map scale is the ratio of the distance between two places on the map to the actual ground distance.

A. BRAIN GAME

Guess my name?

1. I am the largest continent.
2. I am a miniature form of the earth.
3. I am a book of maps.
4. I am the largest ocean.

B. Multiple Choice Questions:

1. The _____ is the third planet from the sun.
(a) mercury (b) earth (c) neptune
2. _____ can show plains, valleys and water bodies.
(a) maps (b) globes (c) landforms
3. Atlas is a book which contains only
(a) drawings (b) graphs (c) maps

C. Fill in the blanks :

1. The largest water bodies are called _____.
2. The smallest continent is _____.
3. A _____ is a model of the earth.
4. The earth looks _____ when seen from the space.

Answer the following questions :

1. How many continents are there on the Earth and what are their names?
2. Write the names of four main oceans.
3. What is a globe and why do we use it?
4. Why is a map always preferred to a globe?
5. What is a map scale? What is the actual distance between two places which situated at a distance of 6 cm on a map and the map scale is 1 cm: 100 km.

CITY CHECK

Tell your parents to bring you a map of your city. See the symbols used in it. Draw those symbols and write what do they indicate.