CLASS -VII

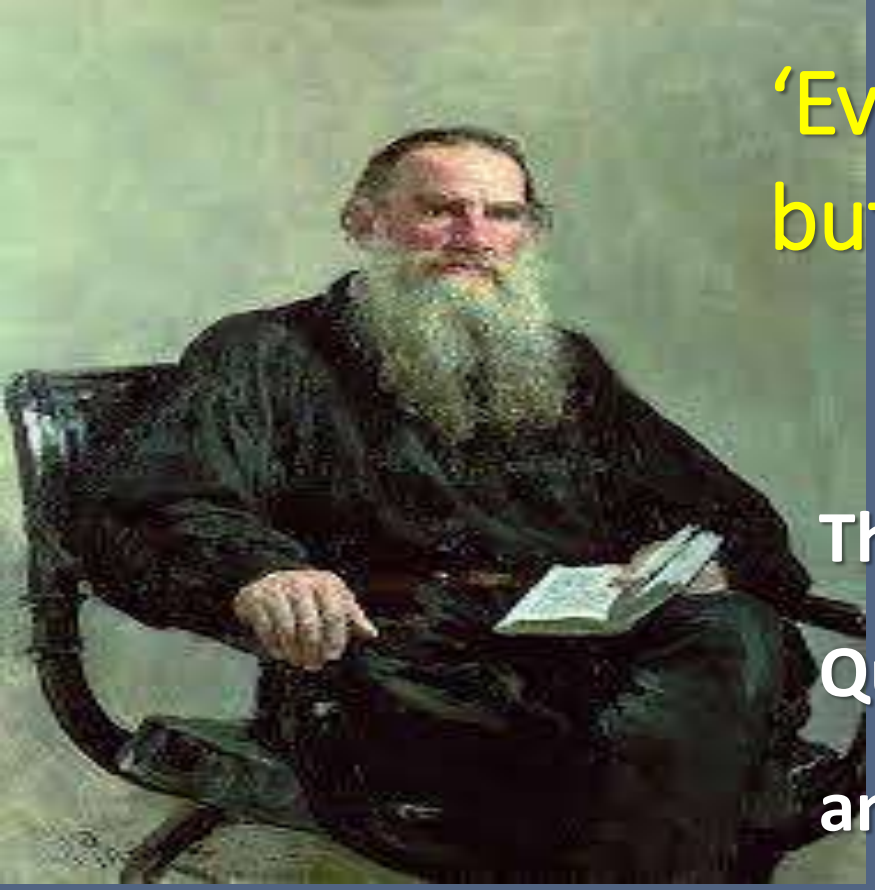
ENGLISH

READER L-1

THE THREE QUESTIONS

THE THREE QUESTIONS

by Leo Tolstoy



LEO TOLSTOY

‘Everyone thinks of changing the world, but no one thinks of changing himself.’

Leo Tolstoy

This story is adapted from Leo Tolstoy’s ‘The Three Questions’. Tolstoy was regarded as one of the greatest and most influential authors of all time. He was born on 9 September 1828 in Russia. In the 1860s, he wrote his first great novel, War and Peace. He has written many novels depicting realistic life of Russian society. He died on 20 November 1910.

SUMMARY OF THE STORY

Once there was a king. He gets a thought that he would never fail if he knew three things. These three things were:

1. How can I learn to do the right things at the right time?
2. Who are the people I need the most to help me with the work?
3. How do I know which is the most important thing to do?

He announced that the ones who give the right answers shall be rewarded. Many learned men attempted to answer the king's questions, but they all came up with different answers.

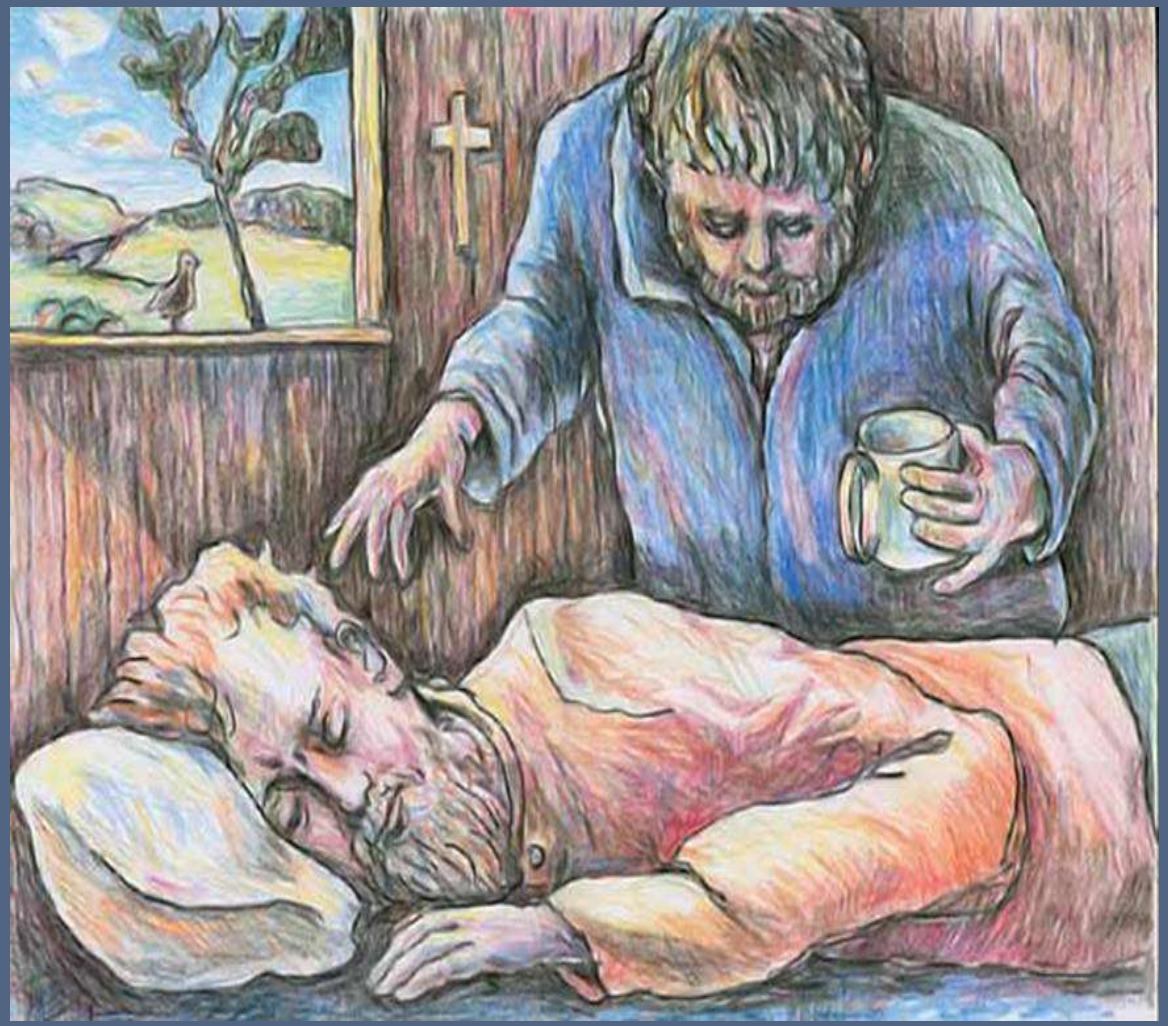
In reply to the first question, some said that to know the right time for every action, one must draw up in advance, a table of days, months and years, and must live strictly according to it. Only thus, could everything be done at its proper time. Others declared that it was impossible to decide beforehand the right time for every action.

Many suggested that king needs his councillors the most, some said doctors, priest or soldiers. The third answer ranged from focusing on science to warfare to religious worship.

King got confused with so many different answers. So he decided to meet a wise hermit in a nearby village. He disguised as a common man and went to meet the hermit. The hermit lived in the wood and would only see common people. When the King approached, the hermit was digging the ground in front of his hut.

The king asked his questions, but the hermit went on digging. The king offered to dig for him for a while. After digging for some time, the king again asked his questions.

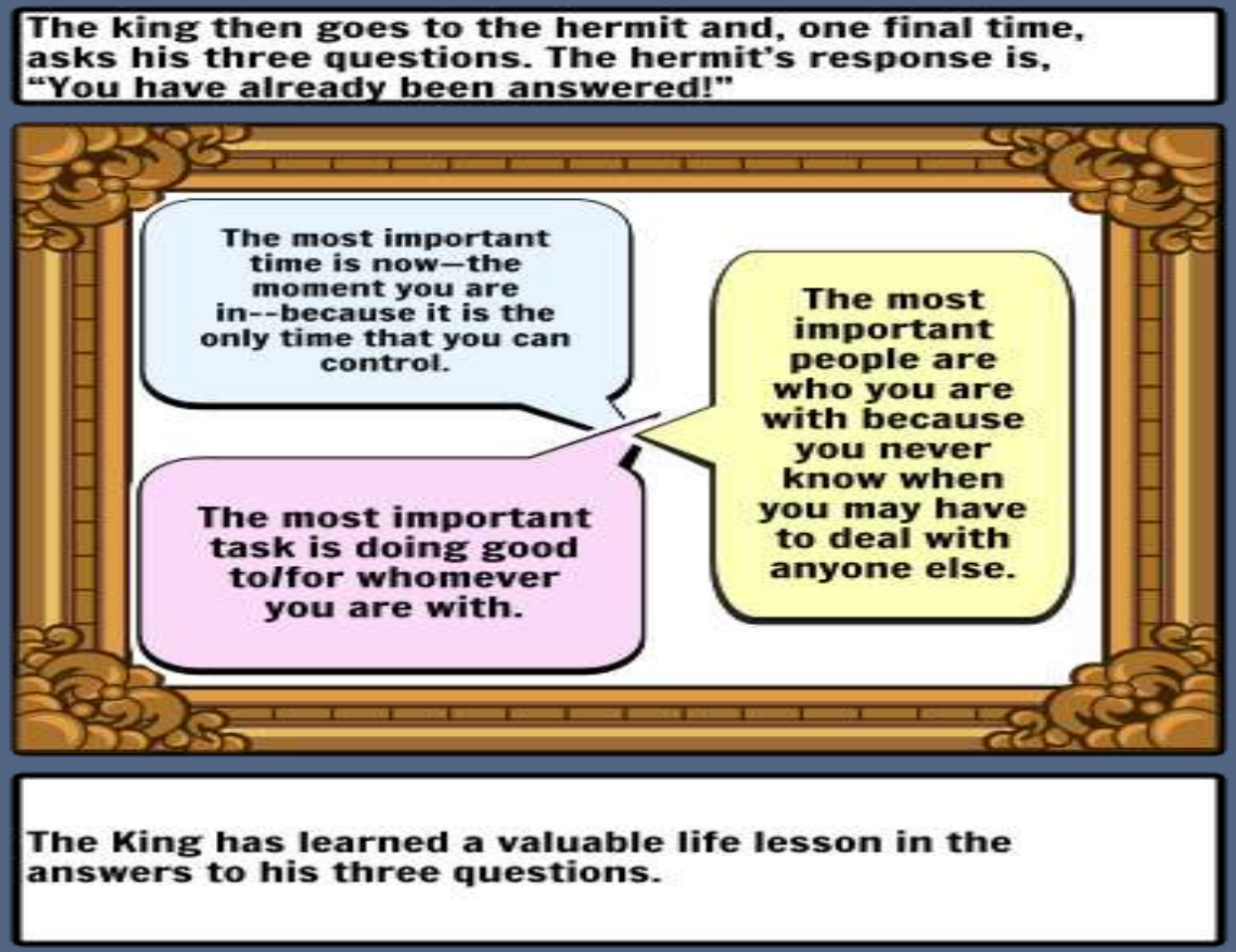
Before the hermit could answer, a man emerged from the woods. He was bleeding from a terrible stomach wound. So, the king and hermit washed the wound and bandaged till the blood ceased.



The king stayed that night in the hermit's hut. Next morning the wounded man was doing better and was gazing intently at the king. He confessed to the king that he is the enemy from the neighbouring kingdom and the king had killed his brother in a battle. He had come to kill the king, but the king's guards had wounded him. He thanked the king for taking his care all night and pleaded to forgive him.

The king forgives him and makes peace with his enemy.

The king asked the hermit again for his answers, and the hermit responded that he had just had his questions answered.



Hermit says that the king had pitied his weakness and had dug those beds for him. If the king hadn't decided to stay and help the hermit, he would have been killed by the enemy on the way back home.

So, the most important action was helping the hermit. And the most important person was someone the king was helping, first the hermit then the enemy.

Therefore,

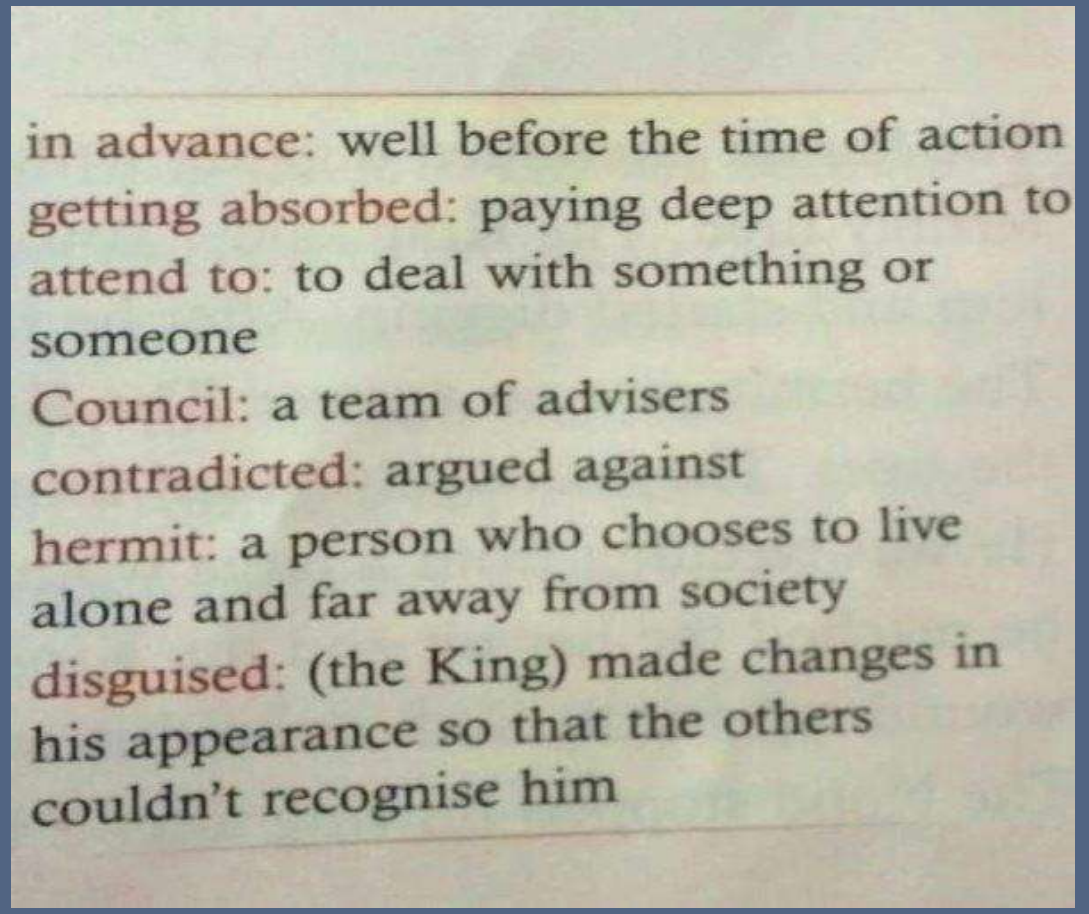
1. The most important time is always NOW
2. The most important PERSON is the one who needs your help.
3. The most important ACTION is to comfort the person who needs help.

EXERCISE TIME

DEAR STUDENTS

- Hope you have understood the story properly.
  Please read the chapter from your Reader book.

- Write word meanings from your book in the English copy.
  (The same picture of word meaning is also given here)


in advance: well before the time of action
getting absorbed: paying deep attention to
attend to: to deal with something or someone
Council: a team of advisers
contradicted: argued against
hermit: a person who chooses to live alone and far away from society
disguised: (the King) made changes in his appearance so that the others couldn't recognise him

READING COMPREHENSION

A. Write the correct answer: (Do this work in your English copy)

1. This story tells us that kings-

Ans- Also need to learn.

2. This story is about how-

Ans-A hermit imparts wisdom to a king.

3. The scholars who came to the king-

Ans- Confused him more than he already was.

4. The king went to meet the hermit because-

Ans- The hermit was known for his wisdom.

-

B. Answer these questions briefly. (Do this work in the English copy)

Q1. Do you think that the king was foolish? Why did he go to meet the hermit?

Ans- Yes, I think that the king was foolish. He went to meet the hermit to know the correct answers of the three questions that were puzzling him.

Q2. Do you think that the king was humble? Give reasons for your answer.

Ans- Yes, I think that the king was humble because he helped the hermit and the wounded enemy, also he forgave him of his deed.

Q3. The hermit didn't pay any attention to the king while he was digging? Why do you think he did so?

Ans- The hermit did not bother to answer every time the king asked the three questions because if he answered them, the king would have gone back home and be killed by his enemy. Through perfect timing, the hermit did not answer and the king did not go home and was not killed. Moreover, king got his answers through self realization.

Q4. How did the hermit succeed in teaching the king what he needed to learn?

Ans- The hermit taught the king to have wisdom, acceptance, kindness, and forgiveness. The hermit tells the king that all the answers are within himself. By helping the wounded man and by spending time with the hermit he gets to know the answer to his questions which he got through self-realization. He learned to do good to others without thinking about own-self.

Q5. Describe briefly the message that the hermit was trying to make the king understand.

Ans- The hermit said the most important time is always now, as the king decided to stay and help. The most important person is the one who needs your help, like first the hermit then the wounded enemy and the most important action is to comfort the person who needs help.

END

Click this video link to understand the story 'The Three Questions' clearly.

https://youtu.be/g8BMqLDHMhQ

NOTE: If you are unable to open the given link in mobile device, kindly copy the link in Google browser, else try to browse in Internet Explorer, Mozilla Firefox.

HEAT

CLASS- 7th
SCIENCE

TOPICS TO BE COVERED

HEAT

- EFFECTS OF HEAT
- EXPANSION IN SOLIDS, LIQUIDS AND GASES
- TEMPERATURE AND ITS MEASUREMENT
- FLOW OF HEAT: CONDUCTION, CONVECTION AND RADIATION

Teacher's Explanation : https://youtu.be/rYOAKy7Kd8g

https://youtu.be/aCtlog_0cGw

- Note- If you are unable to open the given link in mobile device, kindly copy the link in google browser, else try to browse in internet explorer, Mozilla Firefox....

HEAT

Heat is a form of energy which gives you the sensation of hotness or coldness. It is also called thermal energy.

- Effects of heat

1. Change in temperature
2. Change in state
3. Thermal expansion
4. Chemical change

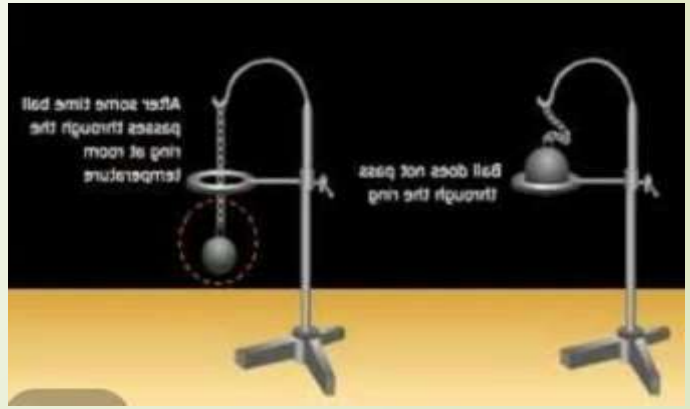
- Heat causes expansion

When a solid, liquid or gas is heated, its molecules start moving faster. Therefore volume of the substance increases and causes expansion.

- Expansion in solids

Activity

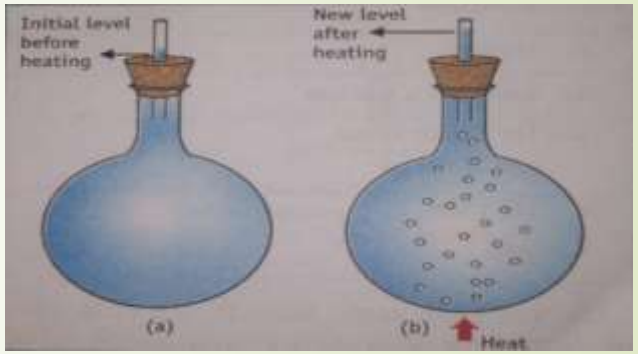
Take a metal ring and a metal ball. When we heat the metal ball, the ball expands and it does not pass through the ring. While on cooling it passes through the ring.



EXPANSION IN LIQUIDS

Activity

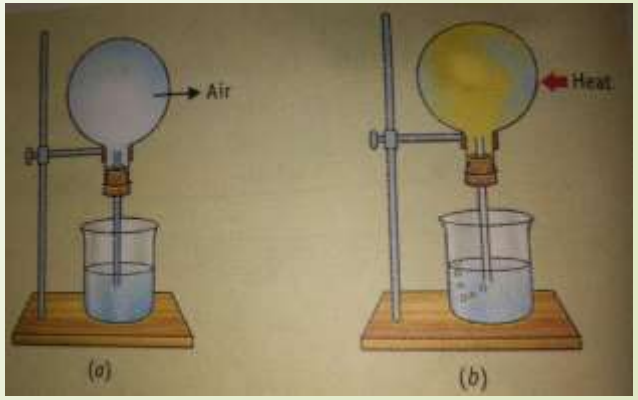
Fill a flask upto brim with water. Fix a rubber cork with glass tube in it. When it is at room temperature the liquid will rise a little In the tube. When flask gets heated, water expands and its level in the glass tube goes up.



EXPANSION IN GASES

Activity

Take an empty flask and fix it to a stand in an upside- down position over a beaker of water. Fix a rubber cork with glass tube in it. The liquid will rise a little in the tube. On heating flask, the air in flask expands. The level of water in the glass tube falls and air escapes out of the flask in the form of bubbles.



TEMPERATURE

The degree of hotness or coldness of a body is called its temperature.

MEASUREMENT OF TEMPERATURE

There are three scales of measurement of temperature –

- Kelvin scale (K)

  The SI unit of temperature is kelvin.

- The Celsius scale (°c)

  On the Celsius scale, the freezing point of water is 0°c whereas its boiling point is 100°c. Therefore the lower and upper fixed points in the Celsius scale are 0°c and 100°c.

- The Fahrenheit scale (°F)

  Its lower fixed point is 32°F and the upper fixed point is 212°F.

Conversion

°C to °F : $F = (°C \times 9/5) + 32$

Or

°F to °C : $C = (°F - 32) \times 5/9$

THERMOMETER

The instrument used to measure the temperature is called a thermometer.

Construction

A thermometer is made – up of a thin long and uniform glass tube called capillary tube. It has a bulb at one end. A silver – coloured liquid called mercury is filled in the bulb, is used for measuring temperature.

Working

Thermometer works on the principle that heat energy causes expansion.

Why do we use mercury?

We use mercury because

- The expansion of liquid is usually better as it is very low in solids and quite high in gases.
- It has shine and does not stick to the inner surface of capillary tube.
- But it cannot be used at very low temperature because it freezes at -38.87°C.

Alcohol thermometer

- It is used to measure lower temperature upto -115°C.
- It is generally used to measure room temperature.

LABORATORY THERMOMETER

The laboratory thermometer has a long narrow glass tube. It has a bulb at one end containing mercury. The range of laboratory thermometer is generally from -10°C to 110°C.

- The longer mark normally reads 1°C.
- There are 5 divisions between the longer marks.
- Each small division reads 1/5th of a degree or 0.2°C.

PRECAUTIONS TO BE TAKEN WHILE USING IT –

- Always wash the thermometer before and after use.
- Should not be hold by the bulb while reading the temperature.
- The bulb should not touch the sides of the container.

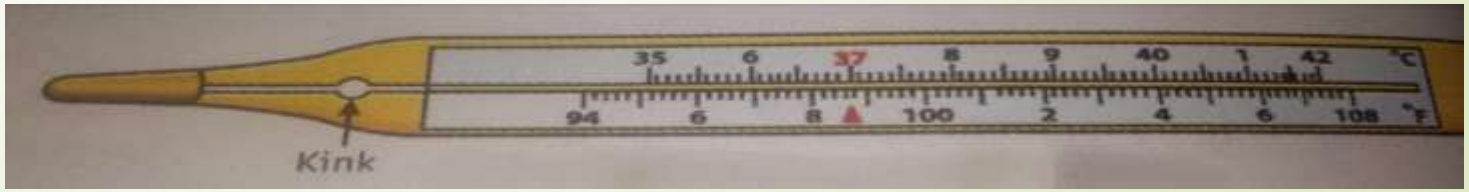
CLINICAL THERMOMETER

The thermometer that is used to measure the body temperature is called clinical thermometer or Doctor's thermometer.

The normal body temperature of a healthy person is 37°C or 98.6°F.

Construction of clinical thermometer

A clinical thermometer has a long narrow glass tube. It has a bulb at one end containing mercury. It has a scale called Celsius scale marked in °C. A clinical thermometer reads temperature from 35°C to 42°C. A clinical thermometer has a small kink near the bulb to prevent the mercury level from falling down in the stem.



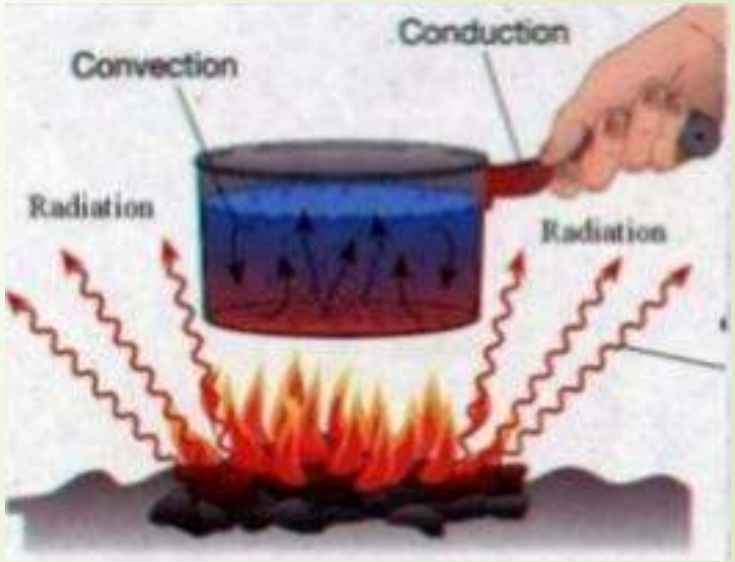
DIGITAL THERMOMETER

- Digital thermometer is easy to read because it gives electronic display of the temperature.
- They are mercury free because mercury is toxic in nature.
- If a thermometer breaks mercury is difficult to dispose.

- **FLOW OF HEAT**

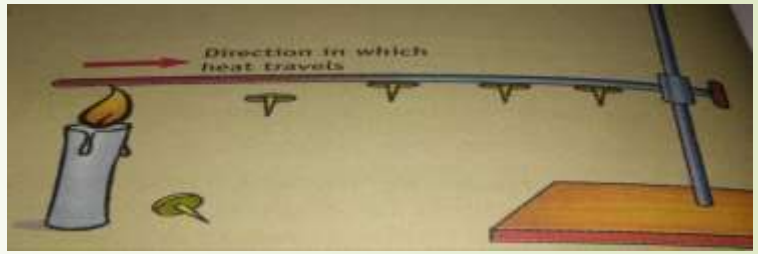
Heat flows from a body at a higher temperature to a body at a lower temperature. This is called flow of heat.

- Heat is transferred in 3 different ways. They are-
- Conduction
- Convection
- Radiation



CONDUCTION

Conduction is the process by which heat is transferred in solids from the hotter end to the colder end.



Activity

Take an iron or aluminium rod or strip. Fix a few wax pieces at equal distances. Clamp the rod to the stand. Heat the other end to the rod. The wax pieces begin to melt and fall down from the heated end. This shows that heat is transferred from the hotter end to the colder end by conduction.

- **Good conductors of heat**

  They allow heat to pass through them easily.

  For e.g. Iron, aluminium, copper etc.

- **Bad conductors of heat**

  They do not allow heat to pass through them easily. They are also called insulators.

  For e.g. Wood, plastic, rubber, glass, air, water etc.

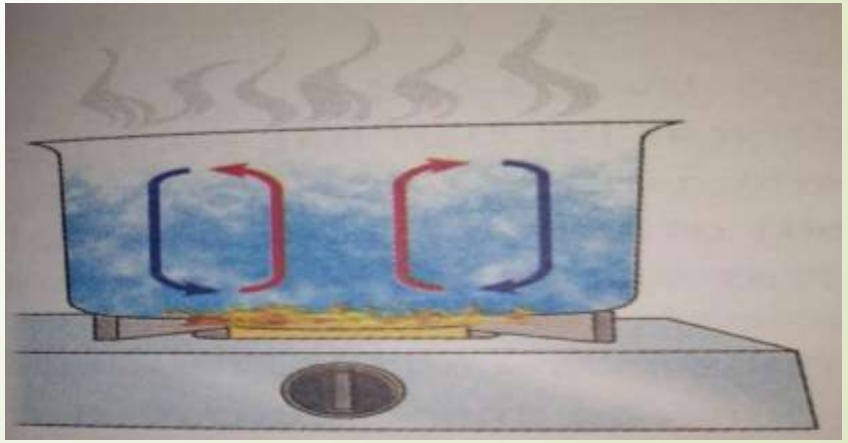
CONVECTION

Convection is the process by which heat is transferred in liquids and gases from the hotter part to the colder part.

ACTIVITY

Take some water in a vessel. Keep it on the flame.

The water at the bottom becomes hot and rises up and cold water from the top moves down. This water becomes hot and rises up and cold water from the top moves down and the process continues till all the water gets heated. This shows that heat is transferred by convection.



CONVECTION IN AIR

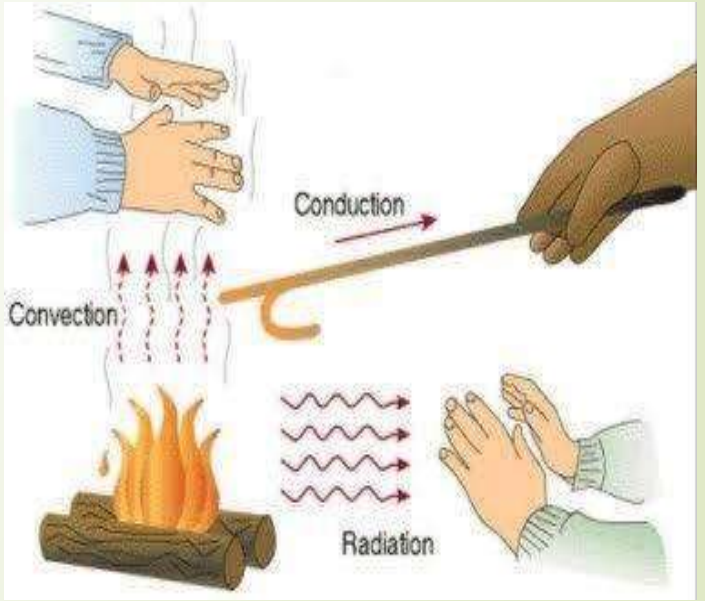
The air near the heat source gets heated and rise up. The air from the sides move in to take its place.

In this way the air gets heated. If you keep one hand above a flame and one hand on the side

of the flame, the hand at the top feels hot because the air above is heated by convection.

The hand at the side does not feel as hot

because there is no convection.



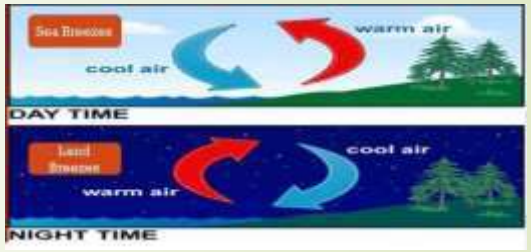
SEA BREEZE AND LAND BREEZE

- **SEA BREEZE**

  During the day, the land gets heated faster than the sea. So the air above the land gets heated becomes hotter and rises up and cool air from the sea moves towards the land. This is called sea breeze.

- **Land breeze**

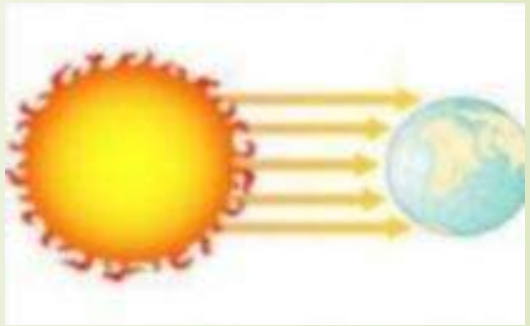
  During the night, sea cools down slowly than the land. So the hot air above the sea rises up and cool air from the land moves towards the sea this is called land breeze.



RADIATION

It is a process by which heat is transferred from one place to another without the help of any medium.

For e.g. The heat from the sun reaches the earth by radiation.



THERMOS FLASK

A thermos flask is a very good example of how heat loss by all three modes of heat transfer, namely conduction, convection and radiation is minimized.

- Heat loss due to conduction is minimized by using insulating materials (like plastic) for the outer casing and the cap of the thermos flask.
- The inner jar is a double- walled bottle made of glass. The space between the two walls is a vacuum. This reduces heat loss due to convection as there are no air molecules to carry the heat away.
- Heat loss due to radiation is minimized by making the surface of the jar highly reflective, so that heat radiations are reflected back into the jar.

TEST YOUR KNOWLEDGE

- **Answers**
- **A** Very Short Answer Questions.

1. Radiation
2. Liquid
3. Celsius scale is more convenient to use as it is easy to calculate.
4. The hotter an object is, the higher is its temperature.
5. It prevents the level of mercury from falling down in the stem.

- **E** Short Answer Questions type- I

1. Bimetallic strip consists of brass and iron.
2. To protect from damage, in steel bridge, one end is made to rest on rollers with enough space provided for expansion during summer.

3. Conditions for conduction of heat:

- The two objects should be in contact.
- The temperature of the two objects should not be the same.

4. Conductor

- They allow heat energy to flow through them.
- For eg. Metals are good conductors of heat.

Insulator

- They do not allow heat energy to flow through them.
- For eg. Wool, plastic, cotton, glass etc.

5. Cooking vessels are provided with copper bottoms. So that heat can easily get transferred to food and food cooks fast.

6. Eskimos make igloos out of snow because snow contains large amount of trapped air, which act as insulator and keeps the igloos warm inside.

- **F** Short Answer Questions type- II

1. Ventilators are placed usually near the ceiling of a room because the air we breathe out is warmer and lighter, so it goes out through the ventilators and fresh air enters in the room.

2. Wool fibres have much space between them, which get filled with air. Air is an insulator. Thus keep us warm in winter.

3. Room heaters have a polished metallic surface behind the heating coil. It reflects most of the radiant heat that falls on it and gives effective heating to the room.

4. Effects of heat –

- Heat causes increase in temperature.
- Heat causes increase in volume.
- Heat causes change in physical state.
- Heat causes chemical change.

5. In a thermometer the temperature at which pure water freezes is taken as the lower fixed point whereas the temperature at which pure water boils is taken as the upper fixed point.

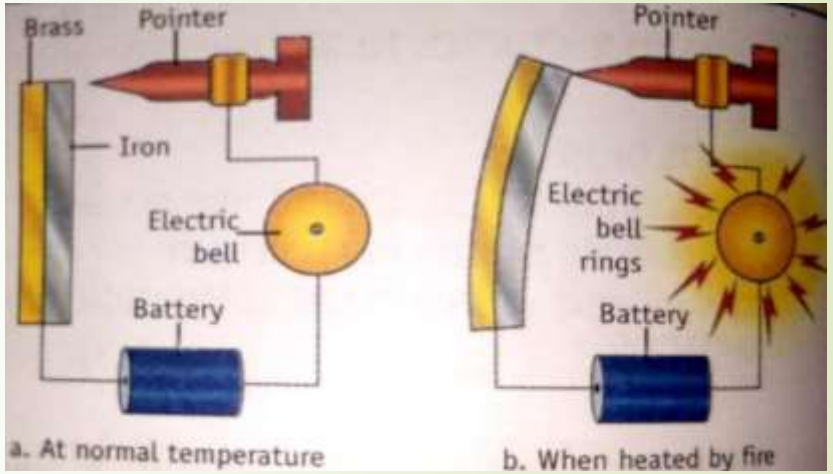
6. See the image. ☞

Differences:

Clinical thermometer	Laboratory thermometer
Temperature range is from 35°C to 42°C.	Temperature range is from – 10°C to 110°C.
It is used to measure temperature of human body.	It is used to measure temperature in experiments performed in laboratory.
It has a kink which prevents the immediate back flow of mercury.	Usually, it does not have a kink.

- **G** Long Answer Questions.

1. Expansion on heating is put to good use in fire alarm. Attach a bimetallic strip of iron and brass to the electric circuit, which is having a battery, electric bell and a metallic pointer. When this bimetallic strip gets heated up due to fire, it bends on the side of iron because brass expands more than iron. As it bends and touches the pointer, the electric circuit is completed and the bell starts ringing.☞



2. a) 30°c to °F and 80°F to °C

F= (9/5C)+32 C= 5/9 (F-32)

= 9/5×30 +32 = 5/9 (80-32)

= 54+32 = 5/9 × 48

= 86°F = 240/9

= 26.67°C

b) The normal body temperature of a healthy person is 37°C or 98.6°F.

3. **Precautions to be taken while using laboratory thermometer-**

- Always wash the thermometer before and after use.
- Should not be hold by the bulb while reading the temperature.
- The bulb should not touch the sides of the container.

4. **Sea breeze and land breeze-**

- Sea breeze

  During the day, the land gets heated faster than the sea. So the air above the land gets heated becomes hotter and rises up and cool air from the sea moves towards the land. This is called sea breeze.

- Land breeze

  During the night, sea cools down slowly than the land. So the hot air above the sea rises up and the cool air from the land moves towards the sea. This is called land breeze.

5. Black objects absorb and radiate more heat than white objects. For eg-

- Black and dark coloured clothes are more suitable in winter because they absorb most of the sun's radiant heat.
- The base of the cooking vessel is painted black so as to absorb most of the heat energy provided and cook the food in less time.

6. A thermos flask prevents the transfer of heat by conduction, convection and radiation.

- Heat loss due to conduction is minimized by using insulating materials like plastic for the outer casing and the cap of the thermo flask.

- The inner jar is a double- walled bottle made of glass. The space between the two walls is a vacuum. This reduces heat loss due to convection as there are no air molecules to carry the heat away.
- Heat loss due to radiation is minimized by making the surface of the jar highly reflective, so that heat radiations are reflected back into the jar.

Instructions

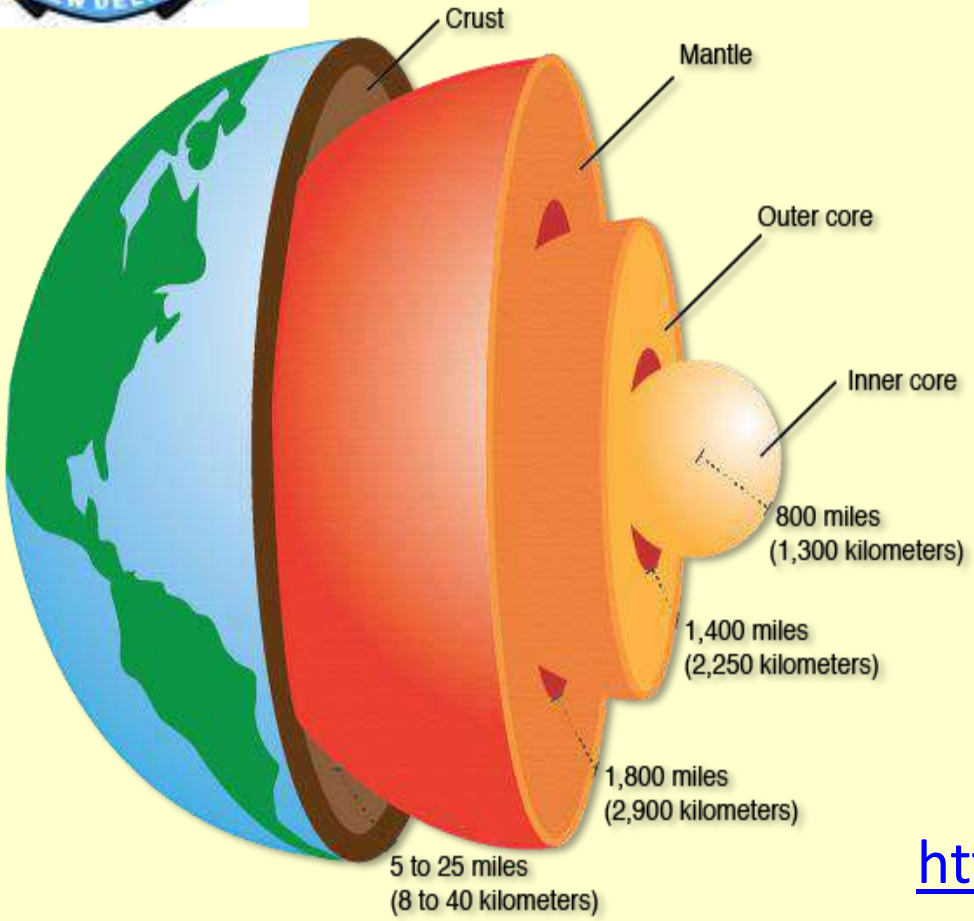
- **Read the lesson thoroughly.**
- **Under your parents guidance, do question B, C, D, and I in your science book. (Page 63, 64, 65)**
- **Do question A, E, F, and G in the science copy. (Answers given)**
- **Draw well labelled diagram of the following in the science copy.**

  Clinical thermometer, sea breeze, land breeze, thermos flask.

CLASS – VII SST

GEOGRAPHY CHAPTER 2

INTERIOR OF THE EARTH



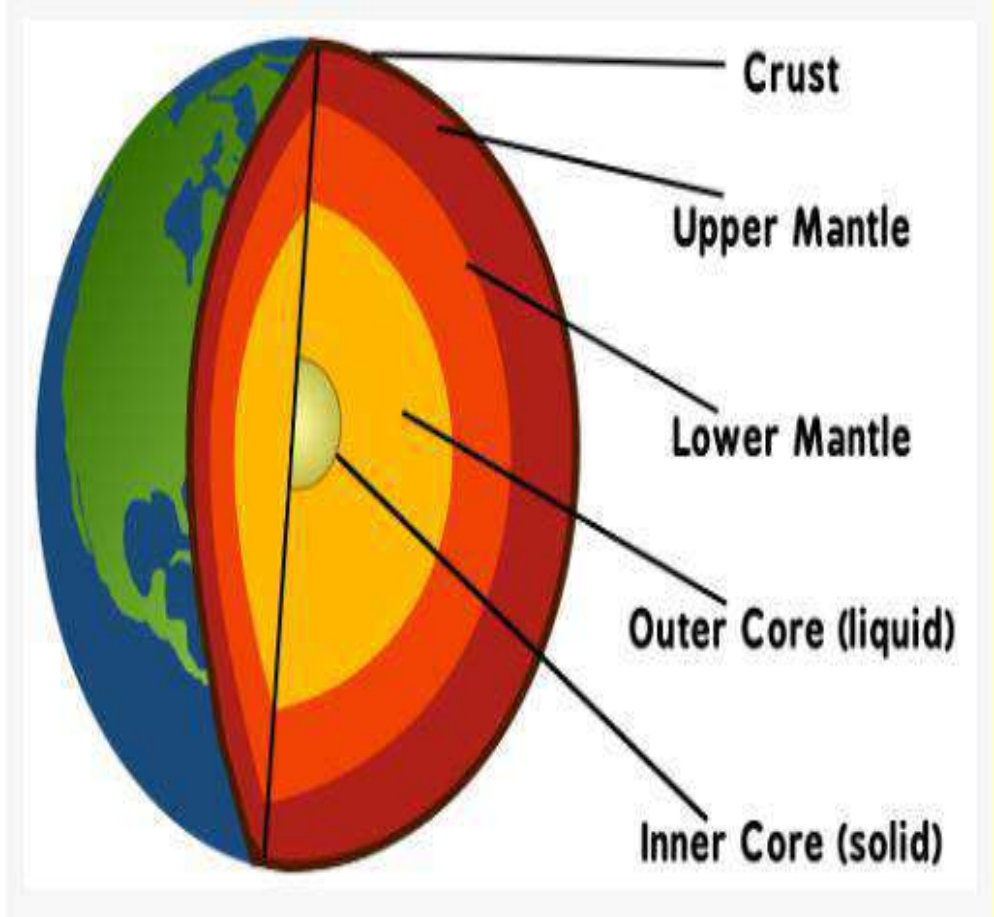
For better understanding click on the link below

https://www.youtube.com/watch?v=yrCcvZlm1sQ

INTRODUCTION

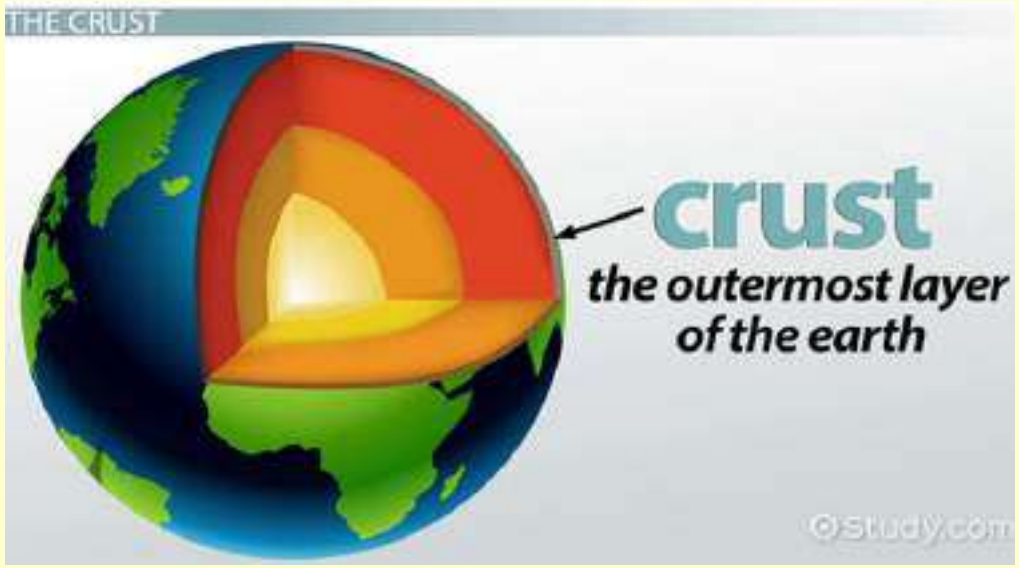
- The Earth was formed 5 billion years ago. In the beginning it was hot and molten, then slowly it cooled down to acquire the present form.
- During this cooling process, the denser materials (like iron, nickel) stayed in the center and lighter ones like silicon, aluminum stayed in the outer surface.
- Gradually the earth formed several concentric layers which look like the peels of an onion.
- The different layers are called:

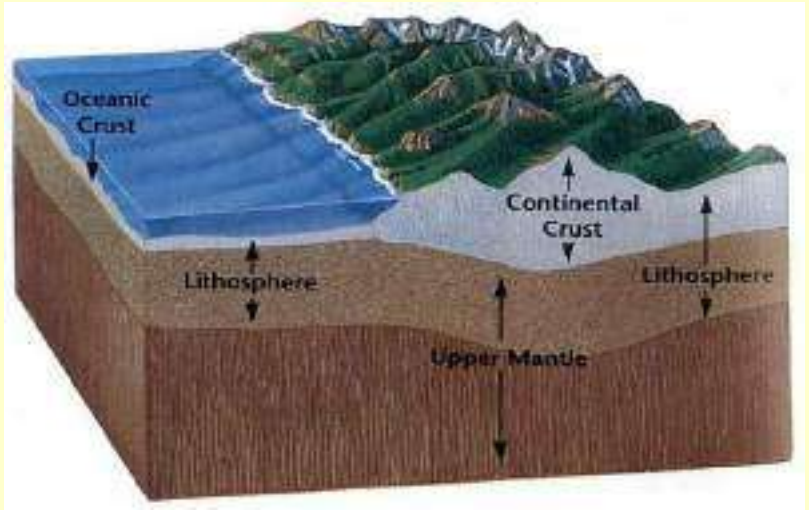
  1. Crust
  2. Mantle
  3. Core.



THE CRUST

- It is the solid, thin, uppermost layer of the earth. It consists of continents and ocean basins and is up to 35 km thick in the continental floor and 5 km thick in the oceanic floor.
- The average density of the crust is 2.7 grams per centimeter cube. The crust makes up only 0.5% of the Earth's volume.

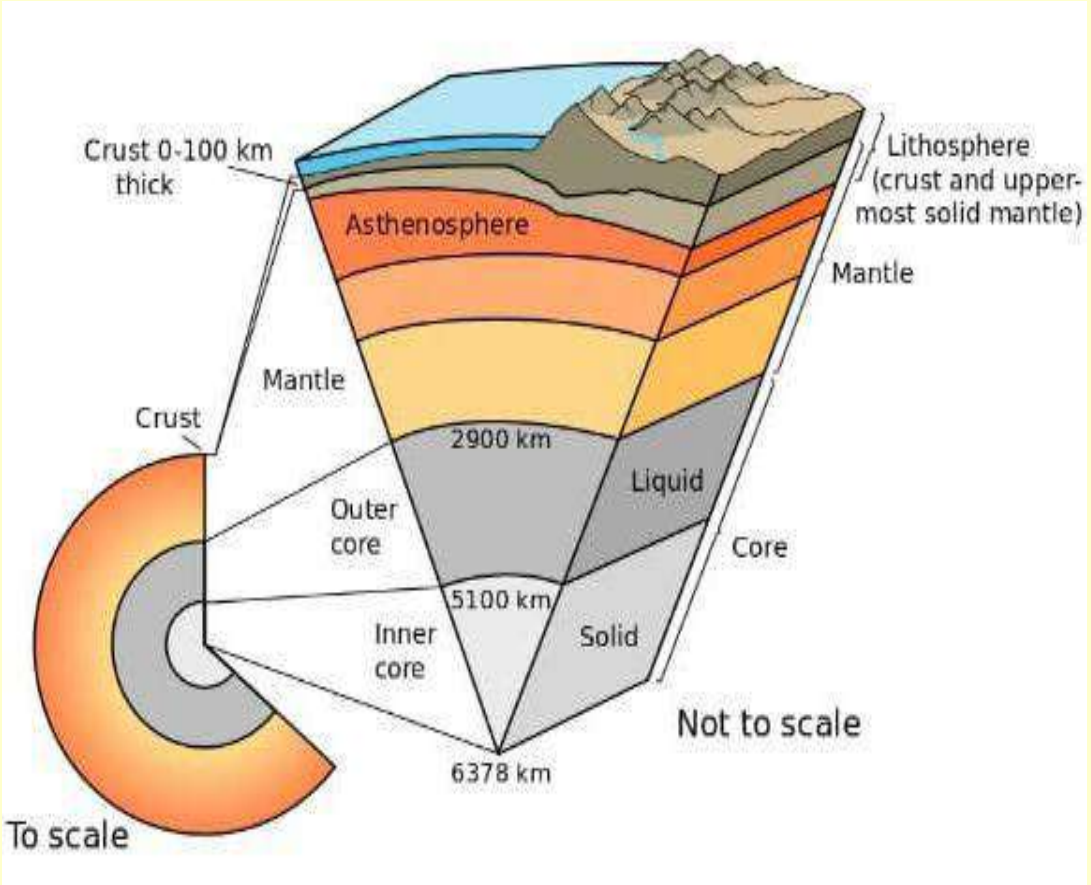




- The major elements of the continental crust are Silica and Aluminum so the continental crust is also called **SIAL.**
- The major elements of the oceanic crust are Silica and Magnesium so the oceanic crust is also called **SIMA**.

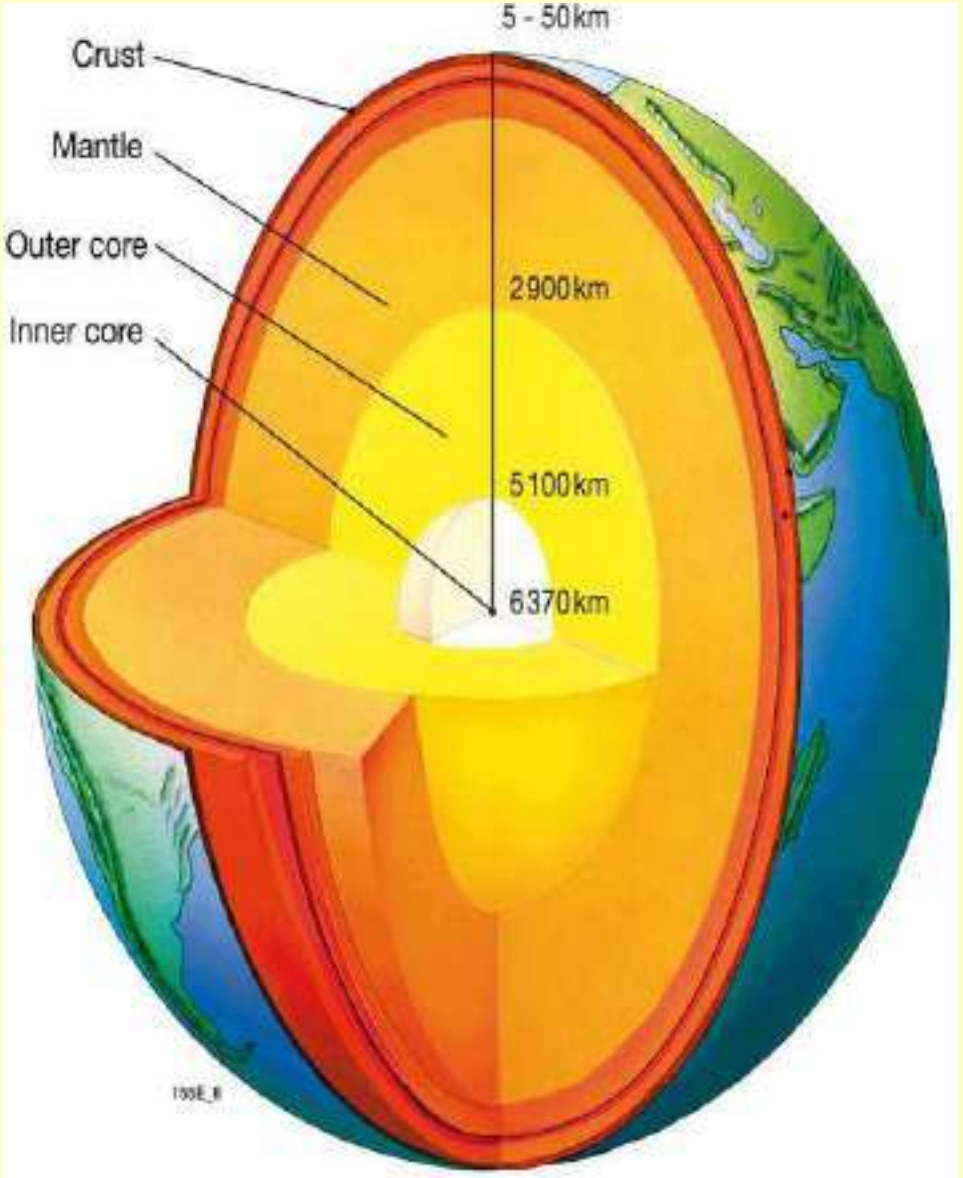
THE MANTLE

- It is the middle layer of the earth and lies between the crust and the core.
- It is approximately 2900 km deep. It's density varies from 3.5 to 5.5 gm per centimeter cube. It makes up to 16 % volume of the Earth.
- It is made up of heavy elements like basalt, granite, sodium, magnesium, sulphur. But it's main elements are silicon and magnesium, so it is also called **SIMA**.



THE CORE

- Core is the inner most layer of the earth.
- It extends from about 2900-6400 km below the crust.
- It's density varies from 9.9 to 13 gm per centimeter cube. It consists 83% of the volume of the Earth.
- It's radius is about 3500 km and has very high temperature and pressure.
- It is mainly made up of Nickel and Iron (ferrous), so it is called **NIFE.**



USEFULNESS OF THE DIFFERENT LAYERS OF THE EARTH

- The Earth is home of various continents, islands, forests, animals, etc.
- It produces seismic waves which help study earth's interior.
- When the magma from the Earth's interior cools down, it provides different types of rocks (igneous, sedimentary and metamorphic).
- Earth's interior is rich in minerals.

ROCKS

- The Earth's crust is made up of rocks, which are made up of minerals.
- Any natural mass of mineral matter that makes up the earth's crust is called a **ROCK.**
- They are solid particles made up of mixture of minerals and can be hard, soft or elastic.
- The rocks vary in color, size, texture, composition, hardness, softness, etc.
- These variations are the result of their formation process.
- On the basis of their formation (Origin or Birth) they are classified as: **1) Igneous rocks 2) Sedimentary rocks 3) Metamorphic rocks.**
- Rocks are used for making buildings, roads, bridges, houses, etc.

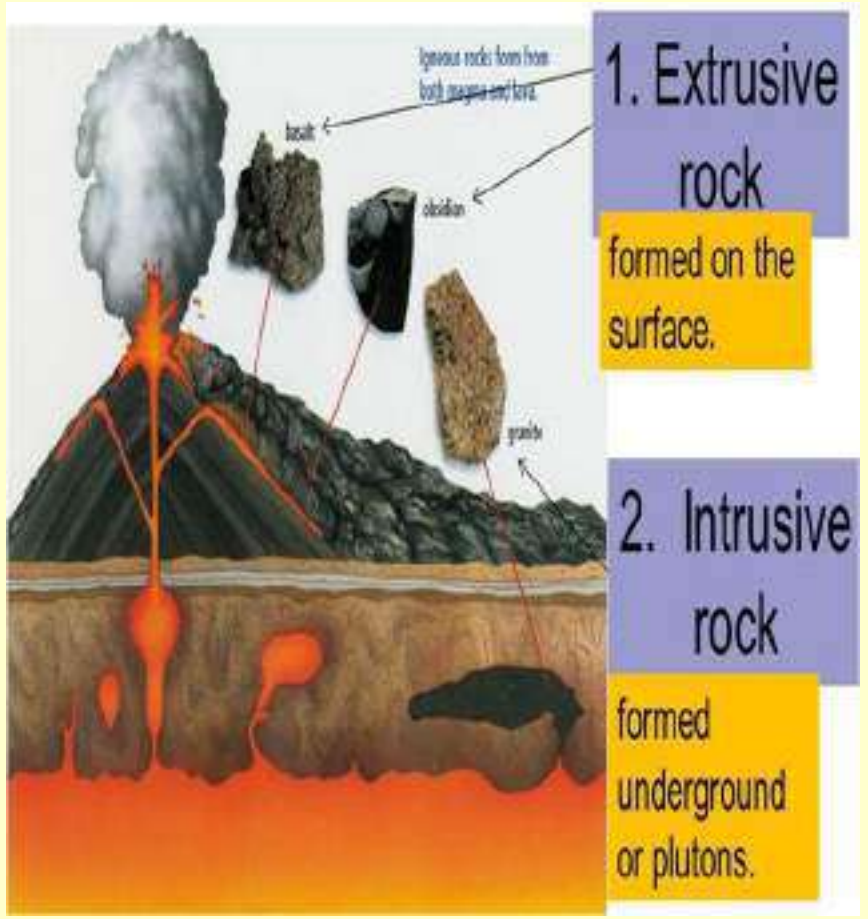
IGNEOUS ROCKS

- The word IGNEOUS comes from a Latin word **'IGNIS'** which means 'fire'.
- The fiery red hot molten material (Magma) from the earth's interior comes out to the surface in the form of Lava and cools down to form Igneous rocks.
- These rocks are called **PRIMARY ROCKS** as they are the ancestors of all other rocks.
- They occur in large shapeless masses, are crystalline and hard in structure.

TYPES OF IGNEOUS ROCKS

- Extrusive (volcanic)

- When the molten lava cools down on the earth's surface, they are called extrusive Igneous rocks.
- Example:- Basalt
- Black soil is formed from Basalt – It is good for cotton cultivation.

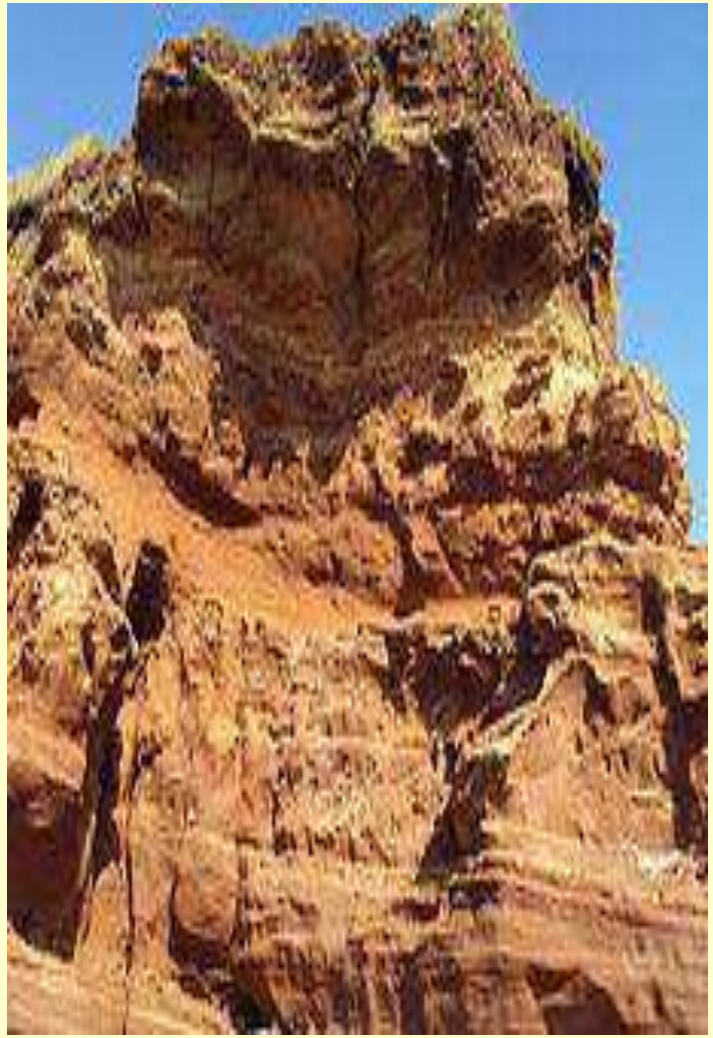


- Intrusive (Plutonic)

- Magma cools down deep inside the earth's crust forming intrusive Igneous rocks.
- Example:- Granite
- Grinding stones are made from granite.

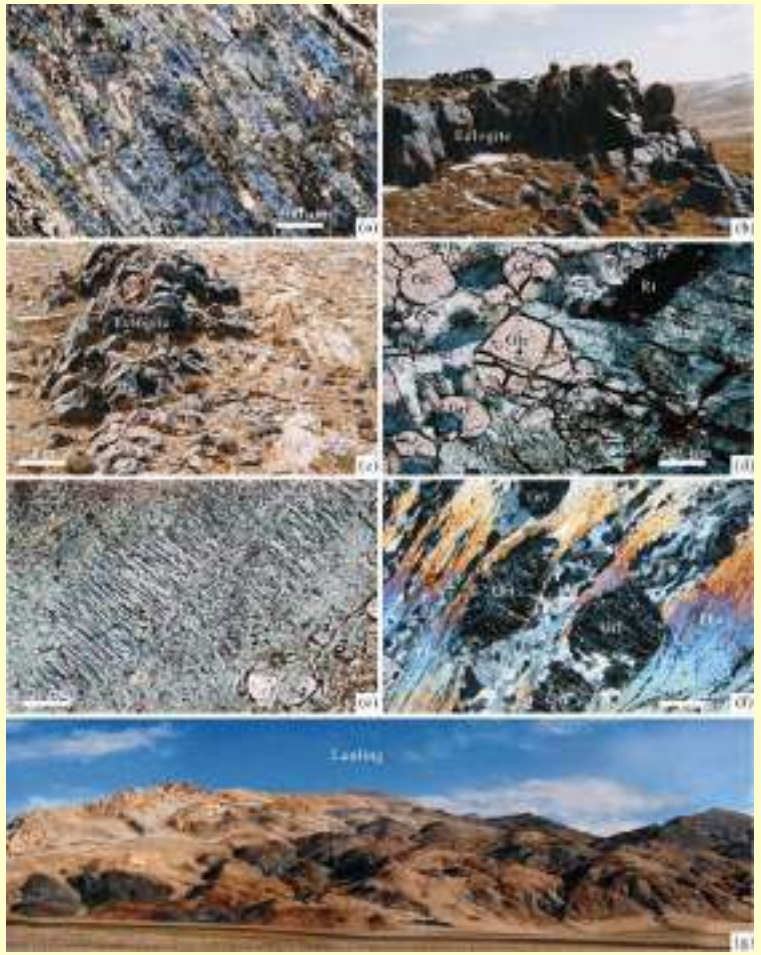
SEDIMENTARY ROCKS

- The word sedimentary comes from Latin word **'Sedimentum'** meaning 'settle down'.
- They are formed by the sediments of other rocks broken down through action of various weathering agents like running water, wind , glacier, etc.
- When rocks roll down, they crack, hit each other and are broken down into small particles called sediments.
- These sediments get transported and deposited by wind, water, etc., get compressed and hardened to form layers of rocks known as sedimentary rocks.
- It is called **Stratified Rocks** as they are deposited in different layers (strata).
- They are rich in fossils- (remains of dead plants and animals) which get trapped in between these layers. Example:- Sandstone, chalk, Dolerite, etc.



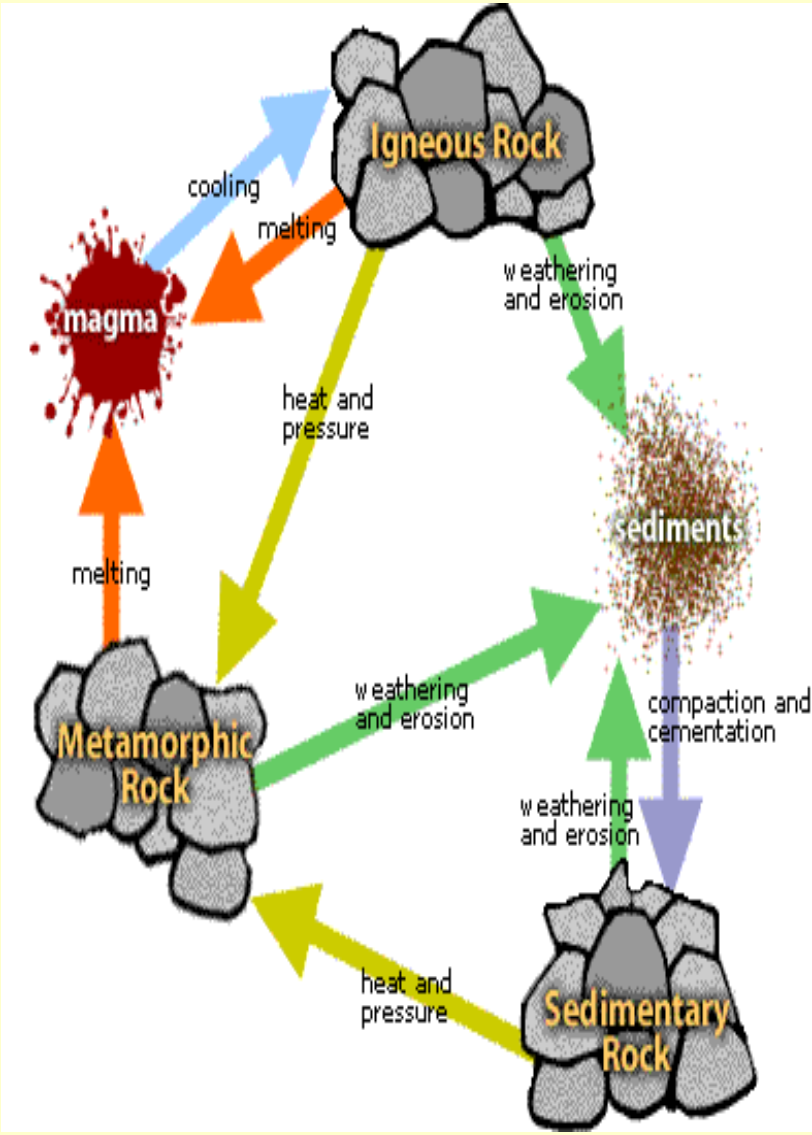
METAMORPHIC ROCKS

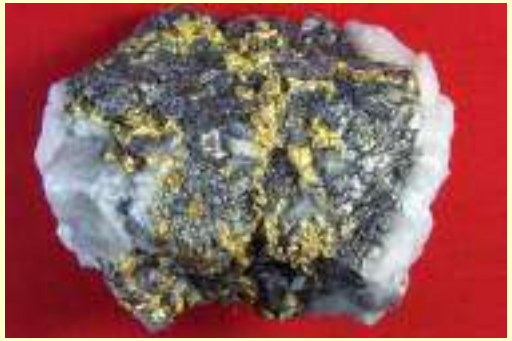
- The word Metamorphic is derived from a Greek word '**metamorphosis'** meaning 'change of form'.
- The rocks which have changed from their original form due to pressure and heat are called Metamorphic rocks. The Igneous and sedimentary rocks change under immense heat and pressure to form these rocks.
- This process takes a long period of time.
- Example:- Igneous rock **granite** and **coal** changes to Metamorphic rock **gneiss** and **graphite** respectively. Sedimentary rocks **clay** and **limestone** changes to **slate** and **marble** respectively.



ROCK CYCLE

- Like water cycle, the rocks also have a cycle.
- Igneous rocks/ Primary rocks when exposed to weather changes give birth to sedimentary rocks over a period of time.
- Both these type of rocks when exposed to excessive heat and pressure form Metamorphic rocks.
- Metamorphic rocks melt down and form molten magma when this molten magma cools down and solidifies to form Igneous rocks.
- This continuous change of one type of rock to another type of rock takes thousands of years and is called a rock cycle.





MINERALS

- **Minerals are the natural inorganic substances which have a definite chemical composition and physical properties.**
- They may be made up of single element (gold, sulphur) or more than one element (Quartz).
- They can be metallic (copper, iron) or non-metallic (mica, gypsum)
- They are very useful in our day to day life. They are used for building bridges, factories, computers, pencils, etc.
- They provide us with fuels (Coal, Petroleum, etc.) as well as resinous stones (gems, diamonds).
- They are also used in industries, medicines and fertilizers.

NOTE: Do the following exercises in your S.St (Geography) copy.

- **Q.1 Multiple choice questions :**

1. Which one of the following match is incorrect?

a) Igneous rocks- molten lava
b) Sedimentary rocks- fossil fuel
c) Metaphoric rocks-heat and pressure
d) Crust- innermost layer

- **2. Which one of the following is the thinnest layer of the earth's interior?**

a) Mantle b) Crust c) Core d) Exosphere

- **3. Which one of the following is an example of minerals?**
- a) Basalt b) Granite c) Petroleum d) Fossils

4. It is the innermost layer of the earth

a) Core b)Mantle c) Crust d) None of these

- **5. Which of the following is associated with the rocks?**
- a) Water cycle b)Rock cycle c) Business cycle d) None of these

Ans. 1. (d) 2. (b) 3. (c) 4. (a) 5. (b)

- **Q.2 Very short answer type questions:**
- **1. Name the different layers of the earth.**

Ans. Crust, mantle and core are the three layers of the Earth's interior.

- **2. What do you know about the rock cycle?**

Ans. Rock cycle is a continuous cycle of change of one type of rock to another type of rock.

- **3. Write down any two features of the different layers of the earth.**

Ans. i) Crust, Mantle and core are the three different layers of the earth's interior.
ii) Crust is the uppermost, mantle is the middle and the core is the innermost layer of the earth.

- **4. Define minerals.**
- **Ans.** Minerals are the natural and organic substances which have a definite chemical composition and physical properties.

- **Q.3 Short answer type question:**
- **1. Differentiate between the intrusive and extrusive igneous rocks.**

Ans. <u>Intrusive igneous rocks:</u>

i) These rocks are also called the Plutonic rocks.
ii) These are formed when the molten magma cools down deep inside Earth's crust.
iii) Granite is an intrusive igneous rock.

<u>Extrusive igneous rocks</u>:

i) These rocks are also known as the Volcanic rocks.
ii) These are formed when the molten lava comes on the earth surface, it cools down and becomes solid to form rocks.
iii) Basalt is an extrusive igneous rock.

- **2. Name the three types of rocks and explain any one.**

Ans. Igneous, sedimentary and metaphoric are the three types of rocks, found on the Earth surface.

<u>Igneous rocks</u>:

i) Igneous word is derived from the Latin word 'ignis' means fire.
ii) These are formed by the cooling and solidification of the molten lava.
iii)These rocks are also called the primary rocks because these are the ancestors of all other rocks.
iv)They make up 85% or more of the earth's crust
v) These are crystalline in structure.

- **3. What is a rock cycle?**
- **Ans.** It is a continuous cycle of change of one type of rock to another type of rock.

Q.4 Long answer type questions:

1. Give a brief account on different types of rocks.

Ans. The rocks are of different types. They vary in physical properties. They have different colour, size, texture, hardness, softness, etc. These are classified into three categories. These are the igneous, sedimentary and metamorphic rocks.

a) Igneous Rocks :

i) Igneous word is derived from the Latin word ignis means fire.

ii) These rocks are formed by the cooling and solidification of the molten lava.

iii) Igneous rocks are also called the primary rocks because these are the ancestors of all other rocks. Igneous rocks can be intrusive or extrusive rocks.

iv) These rocks lack in fossils and are very hard.

v) Basalt, dolerite and granite are the examples of igneous rocks.

b) Sedimentary Rocks :

i) The word sedimentary is derived from Latin word sedimentum meaning settle down.

ii) These rocks are formed by the sediments of other rocks which were broken down through action of various weathering agents such as running water, wind, glaciers, etc. These tiny particles of the rocks are called the sediments.

iii) With the passage of time the sediments transported and deposited by wind, water, etc. get compressed and hardened to form layers of rocks. These rocks are known as the sedimentary rocks.

iv) Sand stones, chalk and dolerite are the examples of the sedimentary rocks. Sedimentary rocks are rich in fossils.

- **c) Metamorphic Rocks:**
- i) The word metaphoric is derived from a Greek word metamorphosis meaning change of form.

  ii) The rocks that have been changed from their original form due to pressure and great heat are called the metamorphic rocks.

  iii)To form the metaphoric rocks, the igneous and sedimentary rocks are get changed under great heat and pressure.

  iv) The process which form metamorphic rocks take place over a long period of time.

- **2. How are the rocks and minerals useful for human beings?**

Ans. Usefulness of rocks and minerals are as follows:

i) They also play a significant role in the development of the mankind.

ii) These are used for making buildings, roads, houses etc.

iii) Minerals are used in preparing a number of things like computers, sunglasses, cans, pencils, slates, etc.

i**v)** Coal, petroleum and natural gas are used as fuel. They also provide us precious stones like gems and diamonds.

v) These are also used in industries, medicine and fertilizers

- **3. It is impossible to reach the centre of the earth. Give reasons.**

Ans. This statement is true that it is impossible to reach the centre of the earth . The earth's radius is about 6371 kilometer. We cannot go to the centre of the Earth . This is because the central core has very high temperature and pressure. To meet this purpose, we have to dig a hole with the depth of 6000 km on the ocean floor. This is not possible. Depth of known deepest mine of the world is only 4 km. It is located in South Africa. To get mineral oil, engineers have to dig a hole of about 6 km deep.

4. How are sedimentary rocks formed from sediments?

Ans. The sedimentary rocks are formed by the sediments of other rocks that were broken down through action of various weathering agents such as running water, wind, glaciers, etc. Usually the rock roll down, crack and hit each other and are broken down into small particles. These tiny particles of the rocks are called the sediments. With the passage of time, these sediments transported and deposited by water, wind, etc. get compressed and hardened to form the layers of the rocks. These rocks are known as the sedimentary rocks. These rocks are rich in fossils. Examples: sand stone, chalk, dolerite,etc.

5. Granite and limestone are changed into gneiss and marble respectively. Give reasons.

Ans. Gneiss and marble are the examples of the metamorphic rocks. The rocks that have been changed from their original form due to pressure and great heat are called the metamorphic rocks. The igneous and sedimentary rocks get changed under great heat and pressure to form various metamorphic rocks this process which forms the metamorphic rocks take place over a long period of time. Granite is an igneous rock that gets converted into a Metamorphic rock called gneiss. Similarly, a sedimentary rock called the limestone is converts into marble. This changes take place under great heat and pressure.

Q5. Draw well labeled diagram of different layers of Earth (Refer slide 2).

Q6. Draw well labeled diagram of Rock Cycle (Refer slide 12).

Q7. Match the following:

1. Mantle	a)Taj Mahal
2. Minerals	b)Materials that form rocks
3. Metamorphic rocks	c) 2900 km
4. Oceanic crust	d) Changes into slate
5. Clay	e) SIMA

ANS.: 1 (c), 2 (b), 3 (a), 4 (e), 5 (d)

THANK YOU

MATHEMATICS
CLASS -VII
CH- 5 LINES AND ANGLES(PART-1)

https://youtu.be/iyZy6EW6hvY
https://youtu.be/0IXGrBTncrk
https://youtu.be/hWwS9vZJY1k

1.Click on the above given links for better understanding of the concept of this chapter .
2. Copy all notes from the slides in mathematics register.
3. Draw diagram with pencil and label it properly.
4. One worksheet is given in the last slide do in practice copy not in register.

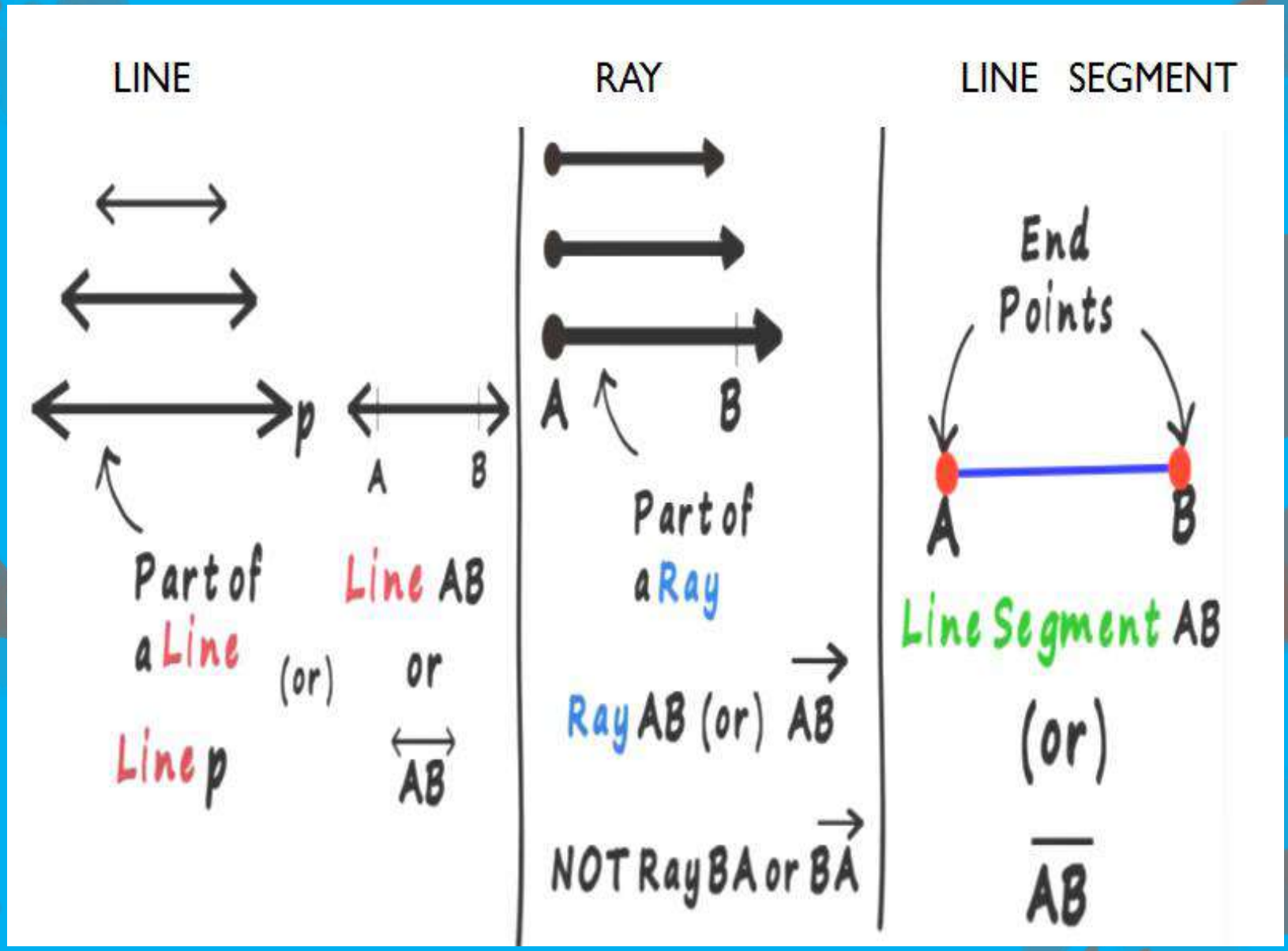
Here are some basic definitions and properties of lines and angles in

Recap Geometrical Terms

Point		An exact location on a plane is called a point.
Line		A straight path on a plane, extending in both directions with no endpoints, is called a line.
Line segment		A part of a line that has two endpoints and thus has a definite length is called a line segment.
Ray		A line segment extended indefinitely in one direction is called a ray.

Distinction between line-segment, ray and line:

Line-segment	Ray	Line
1. It has two end points.	**1.** Ray has one starting point and another near the arrowhead.	**1.** There are no end points in a line.
2. The length of a line-segment is definite. So, it can be measured.	**2.** It has a starting point but no other end point. So, its length cannot be measured.	**2.** There are no end points. So, length of a line cannot be measured.
3. The symbol of a line-segment is —	**3.** The symbol of a ray is →	**3.** The symbol of a line is ↔


LINE
RAY
LINE SEGMENT
p
A
B
Part of a Line
Line p
(or)
Line AB
or
AB
A
B
Part of a Ray
Ray AB (or) AB
NOT Ray BA or BA
End Points
A
B
Line Segment AB
(or)
AB

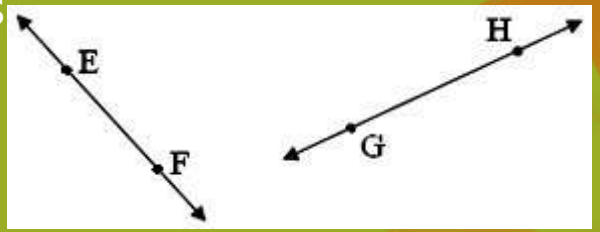
Types of Line

In Geometry there are basically four types of lines. They are :

Horizontal Lines: When a line moves from left to right direction, it is horizontal.

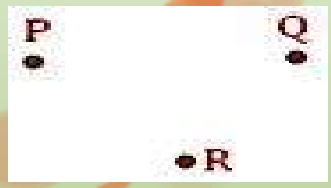
Vertical Lines: When a runs from top to bottom it is vertical.

Oblique or slanting lines: The lines drawn in a slanting position are called oblique or slanting lines.



Point:

- It is the mark of position and has an exact location.
- It has no length, breadth or thickness.
- It is denoted by a dot made by the tip of a sharp pencil.
- It is denoted by capital letter.
- In the given figure P, Q, R represents different point.

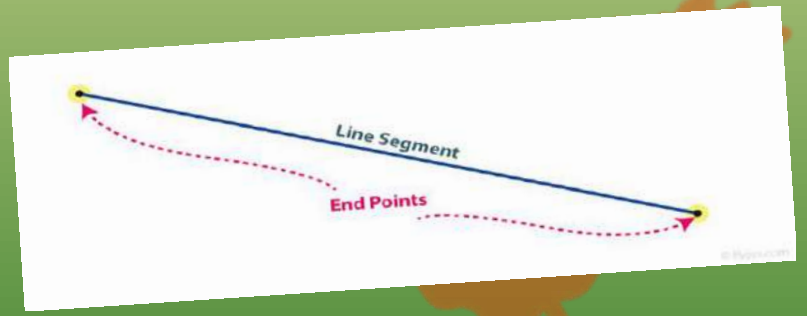


What is a Line?

A line can be defined as a straight set of points that extend in opposite directions
It has no ends in both directions(infinite)
It has no thickness
it is one-dimensional

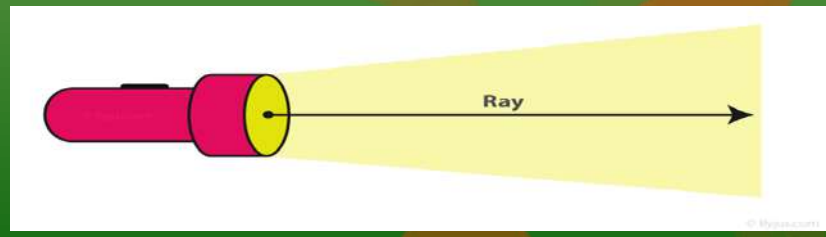
What is a Line segment?

A line segment is part of a line
It has a beginning point and an ending point

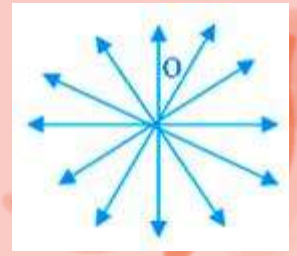


What is a Ray?

A ray is a part of a line that has one endpoint (i.e. starting point) and it extends in one direction endlessly.



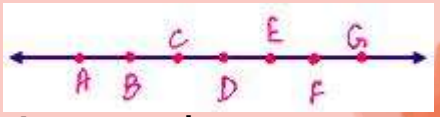
Incidence Properties of Lines in a Plane:



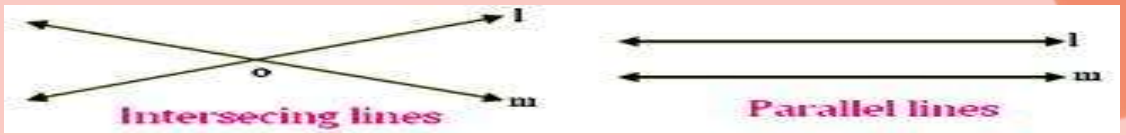
- An infinite number of lines can be drawn to pass through a given point in a plane.

- One and only one line can be drawn to pass through two given points, i.e., two distinct points in a plane. This line lies wholly in the plane.

- Infinite number of points lie on the line in a plane.



- Two lines in a plane either intersect at a point or they are parallel to each other.



Collinear Points:

Two or more points which lie on the same line in a plane are called collinear points.

Based on concepts or operation performed on lines, they are :

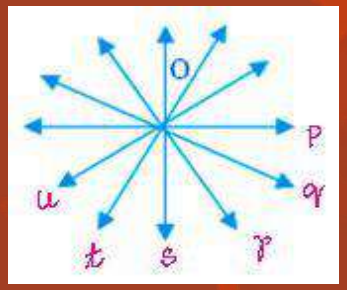
- Parallel Lines
- Perpedicular Lines
- Intersecting Lines

Based on the relation between two angles, conceptual wise, they are :

- Supplementary Angles
- Complementary Angles
- Adjacent Angles
- Vertically Opposite Angles

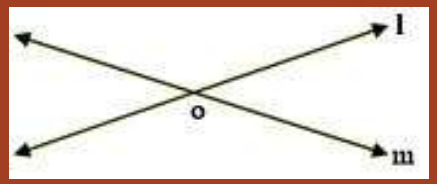
Concurrent Lines:

Three or more lines which pass through the same point are called concurrent lines and this common point is called the point of concurrence. In the adjoining figure, lines p, q, r, s, t, u intersect at point O and are called concurrent lines.

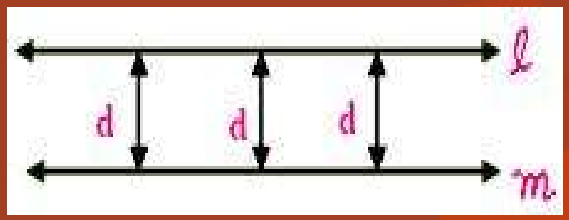


Two lines in a Plane:

Intersecting Lines: Two lines in a plane which cut each other at common point are called intersecting lines and the point is called the point of intersection. In the adjoining figure, lines l and m intersect at point O.



Parallel Lines: Two lines in a plane which do not intersect at any point, i.e., they do not have any point in common are called parallel lines. The distance between the two parallel lines remains the same throughout.



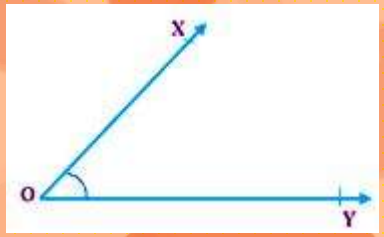
Classification of Angles

Classification of angles on the basis of their degree measures are given below:

1. Acute Angle:

An angle whose measure is more than 0° but less than 90° is called an acute angle. Angles having magnitudes 30°, 40°, 60°are all acute angles.

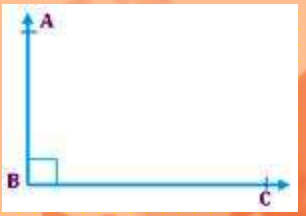
In the adjoining figure, ∠X0Y represents an acute angle. ∠X0Y < 90°



2. Right Angle:

An angle whose measure is equal to 90° is called a right angle. In the adjoining figure ∠ABC represents a right angle.

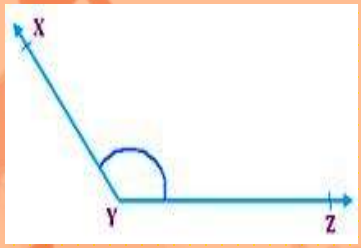
∠ABC = 90°



3.Obtuse Angle:

An angle whose measure is more than 90° but less than 180° is called an obtuse angle. In the adjoining figure, ∠XYZ represents an obtuse angle.

∠XYZ > 90° , ∠XYZ < 180°

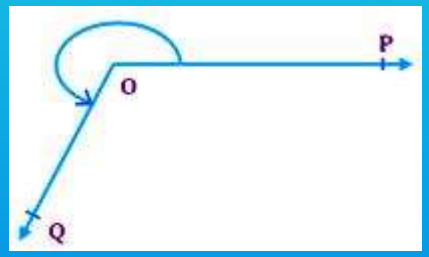


4. Straight Angle:

An angle whose measure is equal to 180° is called a straight angle. In the adjoining figure, ∠XOY represents a straight angle.
∠XOY = 180°

5. Reflex Angle:

An angle whose measure is more than 180° but less than 360° is called a reflex angle. In the adjoining figure, ∠POQ is a reflex angle. Angles having magnitudes 220°, 250°, 310° are all reflex angles.
∠POQ > 180°
∠POQ < 360°



6. Complete Angle:

An angle whose measure is equal to 360° is called a complete angle. In the adjoining figure, ∠BOA represents a complete angle.
60 minutes = 1 revolution = 1 complete angle.

Related Angles

Related angles are the pairs of angles and specific names are given to the pairs of angles which we come across. These are called related angles as they are related with some condition.

1.Complementary angles:

When the sum of the measures of two angles is 90°, such angles are called complementary angles.

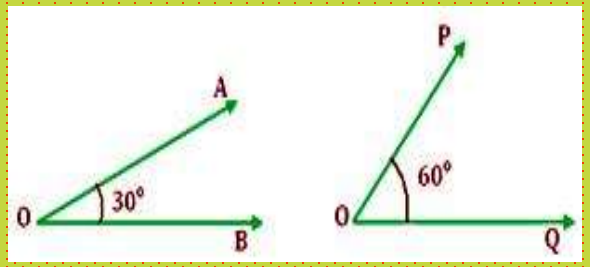
For example:

An angle of 30° and another angle of 60° are complementary angles of each other.

Also, complement of 30° is 90° - 30° = 60°.

And complement of 60° is 90° - 60° = 30°,

∠AOB + ∠POQ = 90°



2. Supplementary angles:

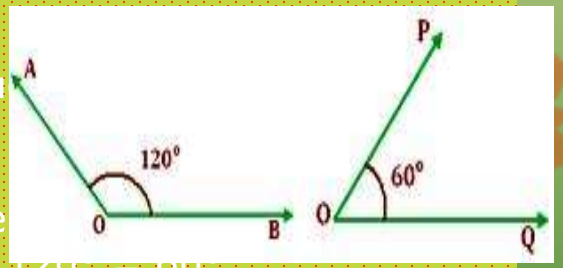
When the sum of the measures of two angles is 180°, su
called supplementary angles.

For example:

An angle of 120° and another angle of 60° are supplem
angles of each other. Also, supplement of 120° is 180° - 120° = 60°.

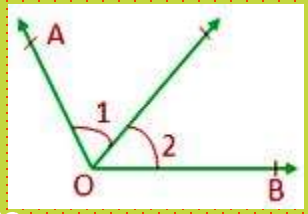
And supplement of 60° is 180° - 60° = 120° ,

∠AOB + ∠POQ = 180°



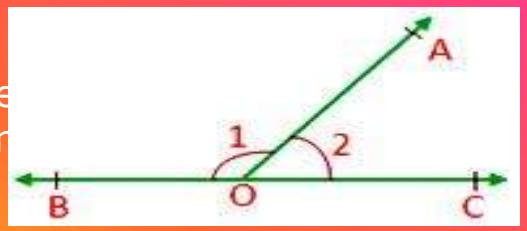
3.Adjacent angles:

Two angles in a plane are said to be adjacent if they have a common arm, a common vertex and the non-common arms lie on the opposite side of the common arm. In the given figure, ∠AOC and ∠BOC are adjacent angles as OC is the common arm, O is the common vertex, and OA, OB are on the opposite side of OC.



4. Linear pair:

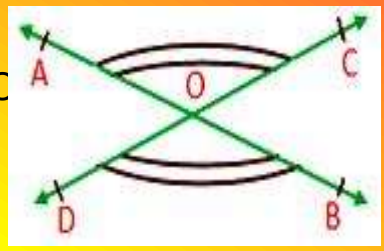
Two adjacent angles form a linear pair of angles if the
on-common arms are two opposite rays, i.e., the sum
adjacent angles is 180°.
Here, ∠AOB + ∠AOC= 180°



5. Vertically opposite angles:

When two lines intersect, then the angles having their arms in the opposite direction are called vertically opposite angles. The pair of vertically opposite angles is equal.

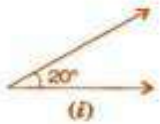
Here the pairs of vertically opposite angles are ∠AOD and ∠BC
∠AOC and ∠BOD.



Exercise 5.1

Question 1:

Find the complement of each of the following angles:



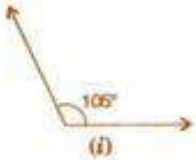
Answer 1:

Complementary angle = 90° – given angle

(i) Complement of $20^\circ = 90^\circ - 20^\circ = 70^\circ$

Question 2:

Find the supplement of each of the following angles:



Answer 2:

Supplementary angle = 180° – given angle

(i) Supplement of $105^\circ = 180^\circ - 105^\circ = 75^\circ$

Question 3:

Identify which of the following pairs of angles are complementary and which are supplementary:

(i) 65°, 115° (vi) 80°, 10°

Answer 3:

If sum of two angles is 180°, then they are called supplementary angles.

If sum of two angles is 90°, then they are called complementary angles.

(i) $65^\circ + 115^\circ = 180^\circ$ These are supplementary angles.

(vi) $80^\circ + 10^\circ = 90^\circ$ These are complementary angles.

Question 4:

Find the angle which is equal to its complement.

Answer 4:

Let one of the two equal complementary angles be x.

$\therefore \quad x + x = 90^\circ$

$\Rightarrow \quad 2x = 90^\circ$

$\Rightarrow \quad x = \frac{90^\circ}{2} = 45^\circ$

Thus, 45° is equal to its complement.

Question 6:

In the given figure, $\angle 1$ and $\angle 2$ are supplementary angles. If $\angle 1$ is decreased, what changes should take place in $\angle 2$ so that both the angles still remain supplementary?

Answer 6:

If $\angle 1$ is decreased then, $\angle 2$ will increase with the same measure, so that both the angles still remain supplementary.

Question 8:

An angle is greater than 45°. Is its complementary angle greater than 45° or equal to 45° or l
than 45°?

Answer 8:

Let the complementary angles be x and y, i.e., $x + y = 90^\circ$

It is given that $x > 45^\circ$

Adding y both sides, $x + y > 45^\circ + y$

$\Rightarrow \quad 90^\circ > 45^\circ + y$

$\Rightarrow \quad 90^\circ - 45^\circ > y$

$\Rightarrow \quad y < 45^\circ$

Thus, its complementary angle is less than 45°.

Question 12:

Find the values of the angles x, y and z in each of the following:

Answer 12:

(i) $x = 55^\circ$ [Vertically opposite angles]

Now $55^\circ + y = 180^\circ$ [Linear pair]

$\Rightarrow \quad y = 180^\circ - 55^\circ = 125^\circ$

Also $y = z = 125^\circ$ [Vertically opposite angles]

Thus, $x = 55^\circ$, $y = 125^\circ$ and $z = 125^\circ$.

(ii) $40^\circ + x + 25^\circ = 180^\circ$ [Angles on straight line]

$\Rightarrow \quad 65^\circ + x = 180^\circ$

$\Rightarrow \quad x = 180^\circ - 65^\circ = 115^\circ$

Now $40^\circ + y = 180^\circ$ [Linear pair]

$\Rightarrow \quad y = 180^\circ - 40^\circ = 140^\circ$ .....(i)

Also $y + z = 180^\circ$ [Linear pair]

$\Rightarrow \quad 140^\circ + z = 180^\circ$ [From equation (i)]

$\Rightarrow \quad z = 180^\circ - 140^\circ = 40^\circ$

Thus, $x = 115^\circ$, $y = 140^\circ$ and $z = 40^\circ$.

WORKSHEET
MATHEMATICS
CLASS : VII

1. Number of lines passing through five points such that no three of them are collinear is

   (A) 10 (B) 5 (C) 20 (D) 8

2. Number of line segments in Fig. 2.5 is

   (A) 5 (B) 10 (C) 15 (D) 20

Fig. 2.5

3. Measures of the two angles between hour and minute hands of a clock at 9 O' clock are

   (A) 60°, 300° (B) 270°, 90° (C) 75°, 285° (D) 30°, 330°

4. In Fig. 2.6, ∠XYZ cannot be written as

   (A) ∠Y (B) ∠ZXY

   (C) ∠ZYX (D) ∠XYP

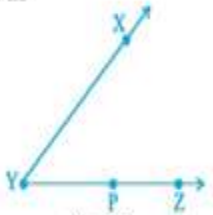


Fig. 2.6

5. In Fig 2.7, if point A is shifted to point B along the ray PX such that PB = 2PA, then the measure of ∠BPY is

   (A) greater than 45° (B) 45°

   (C) less than 45° (D) 90°

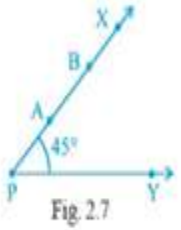


Fig. 2.7

6. The number of angles in Fig. 2.8 is

   (A) 3 (B) 4

   (C) 5 (D) 6

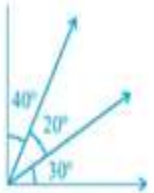


Fig. 2.8

7. The number of obtuse angles in Fig. 2.9 is

   (A) 2 (B) 3

   (C) 4 (D) 5

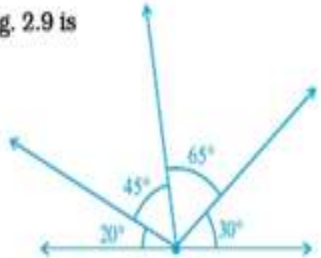


Fig. 2.9

8. If the sum of two angles is greater than 180°, then which of the following is not possible for the two angles?

   (A) One obtuse angle and one acute angle

   (B) One reflex angle and one acute angle

   (C) Two obtuse angles

   (D) Two right angles.

9. If the sum of two angles is equal to an obtuse angle, then which of the following is not possible?

   (A) One obtuse angle and one acute angle.

   (B) One right angle and one acute angle.

   (C) Two acute angles.

   (D) Two right angles.

संस्कृत
कक्षा – 7
अर्ध वार्षिक परीक्षा पाठ्यक्रम

- लङ् लकार: (मध्यम: पुरुष:)
- लङ् लकार: (उत्तम: पुरुष:)
- लोट् लकार: (आज्ञार्थकम्)
- संख्या- ज्ञानम्
- प्रत्यया: (क्त्वा , तुमुन् , ल्यप्)
- शब्दरूपाणि , धातुरूपाणि

पाठ – 3. लङ् लकार
(मध्यम: पुरुष:)

आप सब दूसरे अध्याय में लङ् लकार (भूत काल) के प्रथम पुरुष क्रियाओं के बारे में पढ़ चुके हैं।

इस पाठ में हम लङ् लकार के मध्यम पुरुष क्रियाओं का कैसे प्रयोग करते हैं यह सीखेंगें।

मध्यम पुरूष – प्रत्यय

एकवचन	द्विवचन	बहुवचन
अ+धातु+अ:	अ+धातु+तम्	अ+धातु+त
अ+पठ्+अ:	अ+पठ्+तम्	अ+पठ्+त
अपठ:	अपठतम्	अपठत

मध्यम पुरुष का कर्ता -

त्वम्	युवाम्	यूयम्

कर्ता			क्रिया		
एकवचन	द्विवचन	बहुवचन	एकवचन	द्विवचन	बहुवचन
त्वम्	युवाम्	यूयम्	अपठ:	अपठतम्	अपठत

त्वम् अपठ: । (तुम ने पढ़ा)
युवाम् अपठतम् । (तुम दोनों ने पढ़ा)
यूयम् अपठत । (तुम सब ने पढ़ा)
इसी प्रकार अन्य क्रियाओं के साथ वाक्य बना सकते हैं ।

पाठ भाग

तुम ने पढ़ा ।	त्वम् अपठ: ।
तुम दोनों ने पाठ पढ़ा ।	युवाम् पाठम् अपठतम् ।
आज तुम ने दो पाठ पढ़े ।	अद्य त्वं पाठौ अपठ:।
तुम सब खेले ।	यूयम् अक्रीडत ।
तुम सब गेंद से खेले	यूयम् कन्दुकेन अक्रीडत ।
तुम दोनों ने दो पाठ पढ़े ।	युवां पाठौ अपठतम् ।

लङ् लकार (मध्यम पुरुष)

धातु:	अर्थ:	एकवचनम्	द्विवचनम,	बहुवचनम्
पठ्	पढना	अपठ:	अपठतम्	अपठत
लिख्	लिखना	अलिख:	अलिखतम्	अलिखत
गम्	जाना	अगच्छ:	अगच्छतम्	अगच्छत
चल्	चलना	अचल:	अचलतम्	अचलत
नम्	नमस्कार करना	अनम:	अनमतम्	अनमत
स्मृ	याद करना	अस्मर:	अस्मरतम्	अस्मरत
खाद्	खाना	अखाद:	अखादतम्	अखादत
क्रीड्	खेलना	अक्रीड:	अक्रीडतम्	अक्रीडत
खेल्	खेलना	अखेल :	अखेलतम्	अखेलत
वद्	बोलना	अवद:	अवदतम्	अवदत

त्वं गीताम् अपठः। तुमने गीता पढ़ी ।
त्वं लेखम् अलिखः। तुमने लेख लिखा ।
त्वं कविताम् अस्मरः। तुमने कविता याद की ।

त्वं फलम् अखादः। तुमने फल खाया।
त्वं कविते अपठः। तुमने दो कविता पढ़ीं ।
ह्यः त्वं कुत्र अगच्छः ? कल तुम कहाँ गए ?

त्वं मधुरं वचनं अवदः। तुमने मधुर वचन बोला ।
युवां पुस्तकम् अपठतम् । तुम दोनों ने पुस्तक पढ़ी ।

युवाम् कविताम् अस्मरतम् । तुम दोनों ने कविता याद की ।
ह्यः युवां क्रीडाक्षेत्रे अक्रिडतम् । कल तुम दोनों ने खेल के मैदान में खेला ।
युवां कन्दुकेन कदा अक्रिडतम् ? तुम दोनों ने कब खेला ?

युवां पुस्तकम् अपठतम् । तुम दोनों ने पुस्तक पढ़ी ।
सायंकाले युवां स्वपाठम् अपठतम् । शाम को तुम दोनों ने अपना पाठ याद किया ।
युवां सुन्दरम् लेखम् अलिखतम् । तुम दोनों ने लेख लिखा ।

यूयम् उद्याने अक्रडत । तुम सब बगीचे में खेले ।
यूयं विद्यालयम् अगच्छत । तुम सब विद्यालय गए ।

यूयं निर्मलं जलम् अपिबत । तुम सब ने स्वच्छ पानी पिया ।
यूयं पाठम् अपठत । तुम सब ने पाठ पढ़ा ।
यूयम् अत्र किम् अलिखत? तुम सब ने यहाँ क्या लिखा ?

किम् यूयं चित्रम् अपश्यत? क्या तुम सब ने देखा ?
आम्, यूयं चित्रम् अपश्यत । हाँ, तुम सब ने चित्र देखा ।
युवाम् सूर्यम् अपश्यतम् । तुम दोनों ने सूर्य देखा ।
यूयं लेखान् अलिखत । तुम सब ने लेख लिखा ।
यूयं पत्राणि अलिखत । तुम सब ने पत्र लिखा ।

प्रातः त्वं किमर्थं चिकित्सालयम् अगच्छः? सुबह तुम किसलिए अस्पताल गए ?
युवाम् चिकित्सकं प्रति अगच्छतम् । तुम दोनों डॉक्टर के पास गए ।
यूयं मार्गे किम् अपश्यः? तुम सब ने रास्ते में क्या देखा ?
त्वं विद्यालयम् अगच्छः । तुम विद्यालय गए ।

यूयं विमानेन कुत्र अगच्छत? तुम सब विमान से कहाँ गए?
यूयं सारिकया सह कुत्र अखेलत? तुम सब सारिका के साथ कहाँ खेले?
यूयं पुस्तकालये पुस्तकानि अपठत । तुम सब पुस्तकालय में पुस्तक पढ़ी ।

युवाम् मार्गे कथम् अपततम्? तुम दोनों रास्ते में कैसे गिरे ?
हय: युवाम् कदा अस्वपतम्? कल तुम दोनों कब सोए ?
यूयं फलम् अखादत । तुम सब ने फल खाया ।

शब्द अर्थ

अनमतम्	• (तुम दोनों ने) नमस्कार किया	अक्रीडत	• (तुम सब) खेले
अस्मर:	• (तुमने) याद किया	निर्मलम्	• स्वच्छ
मधुरम्	• मीठा	विमानेन	• वायुयान से
क्रीडाक्षेत्रे	• खेल के मैदान में	किमर्थम्	• किसलिए
स्वपाठम्	• अपना पाठ	चिकित्सक:	• वैद्य, डॉक्टर
कन्दुकेन	• गेंद से	अस्वपतम्	• (तुम दोनों) सोए

नई धातुएँ

धातु (अर्थ)	एकवचन	द्विवचन	बहुवचन
स्वप् (सोना)	अस्वप:	अस्वपतम्	अस्वपत
स्मृ(यादकरना)	अस्मर:	अस्मरतम्	अस्मरत

अभ्यास कार्य

प्रश्न. 1. निर्देशानुसारेण वचन-परिवर्तनम् कुरुत ।

(क) यूयं लेखम् अलिखत ।	(द्विवचने)	युवाम् लेखम् अलिखतम् ।
(ख) यूयं पत्रं न अलिखत ।	(एकवचने)	त्वं पत्रम् न अलिख: ।
(ग) युवाम् पाठम् अस्मरतम् ।	(बहुवचन)	यूयम् पाठम् अस्मरत ।
(घ) त्वं भोजनम् अपच: ।	(द्विवचने)	युवाम् भोजनम् अपचतम् ।
(ङ) त्वं दुग्धं कुत: आनय:?	(बहुवचने)	यूयम् दुग्धम् कुत: आनयत ।

प्रश्न. 2. वाक्यानि शुद्धानि कुरुत ।

उदाहरणं – यूयं लेखम् अलिखः । *यूयं लेखम् अलिखत ।*

(क) यूयं पाठम् **अस्मरः ।** यूयं पाठम् **अस्मरत** ।
(ख) त्वं विद्यालयं कदा **अगच्छत ?** त्वं विद्यालयं कदा **अगच्छः।**
(ग) त्वं कुत्र **अगच्छतम् ?** त्वं कुत्र **अगच्छः ।**
(घ) युवाम् ह्यः किम् **अकरोत् ?** युवाम् ह्यः कीम् **अकुरुतम् ?**
(ङ) यूयं भोजनम् **अखादन् ।** यूयम् भोजनम् **अखादत ।**

प्रश्न. 3. मञ्जूषायाम् प्रदत्तैः पदैः रिक्तस्थानानि पूरयत ।
(त्वम्, अगच्छः, अखेलतम्, यूयम्, अक्रीडत, युवाम्, अगच्छत)

(क) **युवाम्** विद्यालयम् अगच्छतम् ।
(ख) त्वं पठितुम् **अगच्छः** ।
(ग) यूयं ह्यः कुत्र **अगच्छत** ?
(घ) **यूयम्** धावन-प्रतियोगितायाम् अधावत ।
(ङ) **त्वं** पाठम् अपठः ।
(च) **त्वं** किमर्थम् अनृत्यः ।
(छ) युवां क्रीडाक्षेत्रे **अखेलतम्** ।
(ज) यूयं सायंकाले **अक्रीडत** ।

प्रश्न. 4. एकपदेन उत्तरत ।

(क) त्वं **किम्** अपठ:? **गीताम्**
(ख) युवाम् **केन** अक्रीडतम्? **कन्दुकेन**
(ग) यूयं **किम्** अपिबत? **जलम्**
(घ) युवाम् **किम्** अपश्यतम्? **सूर्यम्**
(ङ) यूयं **कुत्र** अगच्छत? **विद्यालयम्**
(च) त्वं **किम्** अस्मर:? **कविताम्**

भाषा-अवबोधनम्

प्रश्न. 1. लङ्लकारस्य उचितक्रियापदै: रिक्तस्थानानि पूरयत ।

(क) त्वं वने कथम् .....? (**अतिष्ठ**:, अतिष्ठत्, अतिष्ठत)
(ख) इदानीं युवां ग्रहम् ....। (अगच्छताम्, **अगच्छतम्**, अगच्छाव)
(ग) त्वं कविताम् .....। (अस्मरतम्, अस्मरत, **अस्मर**:)
(घ) यूयं दिल्लीनगरे .....। (अवस:, **अवसत**, अवसताम्)
(ङ) युवाम् मधुरं दुग्धम् .....। (**अपिबतम्**, अपिबत्, अपिबत)

प्रश्न. 2. पदपरिचयम् कुरुत ।

	क्रियापदः	धातुः	लकारः	पुरुषः	वचनम्
	अवसत	वस्	लङ्	मध्यम	बहुवचन
(क)	अलिखत	लिख्	लङ्	मध्यम	बहुवचन
(ख)	अखादतम्	खाद्	लङ्	मध्यम	द्विवचन
(ग)	अनृत्यत	नृत्य्	लङ्	मध्यम	बहुवचन
(घ)	अपिबतम्	पा (पिब्)	लङ्	मध्यम	द्विवचन

प्रश्न. 3. निम्नधातुनाम् मध्यमपुरुषस्य रूपाणि लङ्लकारे लिखत ।

		एकवचनम्	द्विवचनम्	बहुवचनम्
(क)	भू (भव्)	अभवः	अभवतम्	अभवत
(ख)	नी (नय्)	अनयः	अनयतम्	अनयत
(ग)	दृश् (पश्य्)	अपश्यः	अपश्यतम्	अपश्यत
(घ)	स्था (तिष्ठ्)	अतिष्ठः	अतिष्ठतम्	अतिष्ठत
(ङ)	नम्	अनमः	अनमतम्	अनमत

प्रश्न. 4. संस्कृतेन अनुवादं कुरुत ।

(क) तुम दोनों ने पाठ याद किया ।	युवाम् पाठम् अस्मरतम् ।
(ख) तुम सबने कौन-सा चलचित्र देखा?	यूयम् कीदृशम् चलचित्रम् अपश्यत ।
(ग) तुम सबने अपने मित्र को पत्र लिखा ।	यूयम् स्वमित्रम् पत्रम् अलिखत ।
(घ) तुम सबने चित्र बनाए ।	यूयम् चित्रम् अरचयत ।
(ङ) तुमने फूलों का सौन्दर्य देखा ।	त्वं पुष्पाणाम् सौन्दर्यम् अपश्यः ।

याद रखें –

लङ् लकार, प्रथम पुरुष, एकवचन में 'अपठत्' में हलन्त का (्) चिह्न होता है, परन्तु लङ् लकार, मध्यम पुरुष, बहुवचन में रूप 'अपठत' होता है अर्थात् यहाँ हलन्त का चिह्न (्) नहीं होता।

सूक्तिः

॥ व्याधितस्य औषधम् मित्रम् ॥
(बीमार का मित्र दवा होती है।)

इस पाठ को अच्छे से समझें और सभी अभ्यास-कार्य को अपने संस्कृत कॉपी में करें और याद करें।

नीचे दिए गए लिंक से पाठ के सारांश पर वीडियो देखें । यदि आप लिंक पर क्लिक करके वीडियो देखने में असमर्थ हैं तो लिंक को कॉपी करें और देखने के लिए Google chrome पर पेस्ट करें।

https://youtu.be/u7_uVx0EzCg

हिन्दी

कक्षा - VII

लिंक अवश्य देखें

अन्याय का विरोध

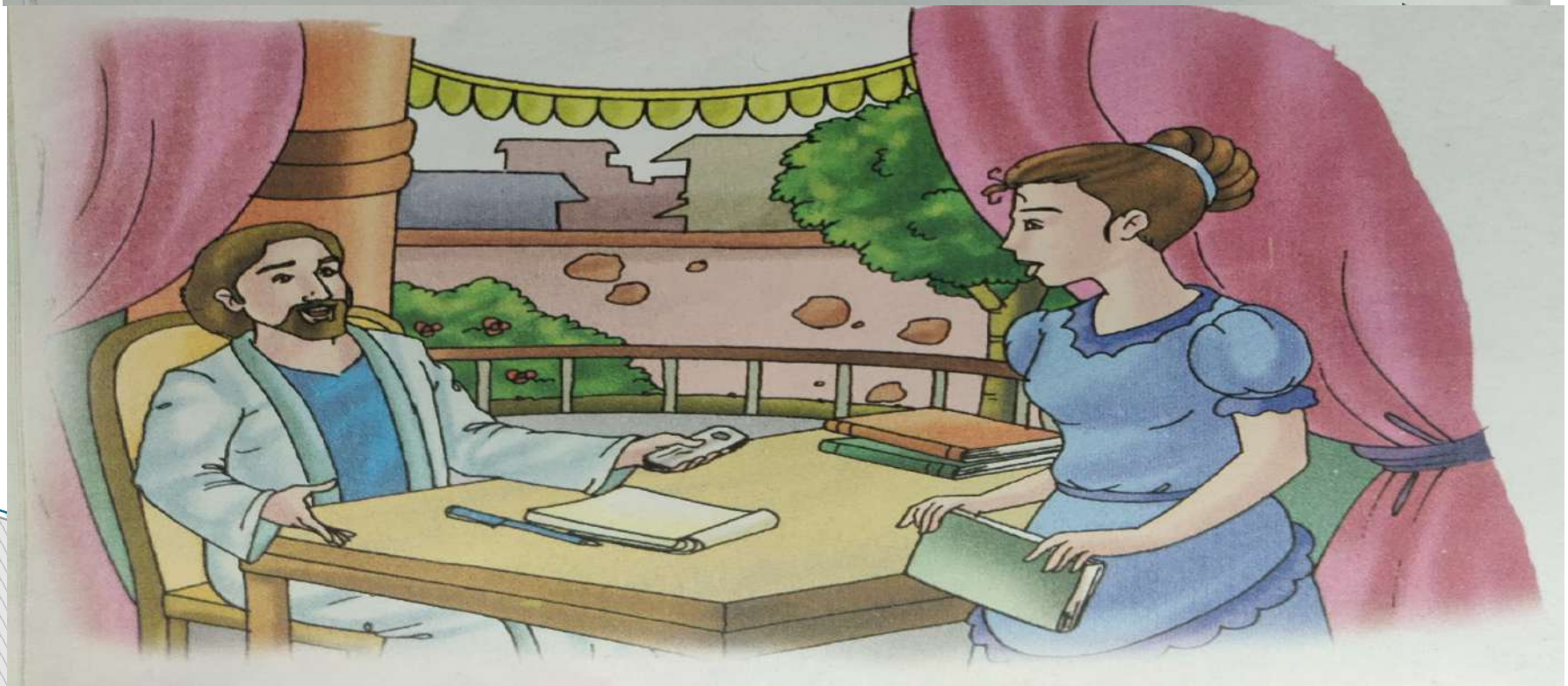
https://youtu.be/pLAkzgWiK3M

पाठ – 4

https://youtu.be/4hIB73KBVo4

4 अन्याय का विरोध

प्रस्तुत पाठ में लेखक ने यह संदेश दिया है कि अन्याय सहना तथा अन्याय करना दोनों ही गलत हैं। मनुष्य को अन्याय के खिलाफ़ आवाज़ उठानी चाहिए। यदि हम पर कोई अन्याय करे तो चुपचाप सहना हमारे लिए अनुचित है।



4. अन्याय का विरोध

पाठ का सार: इस पाठ में लेखक ने बताया है कि अन्याय को सहन करने वाला भी अपराधी होता है। अत: हमें अन्याय का खुलकर विरोध करना चाहिए। एक बार लेखक ने अपनी गवर्नेंस जूलिया की परीक्षा ली। वे देखना चाहते थे कि वह अन्याय सहन करती है या उसका विरोध करती है। लेखक उसके वेतन से कुछ रुपए काट लेते हैं क्योंकि उसने अवकाश लिया था। लेखक ने उसे बताया कि उसे काम करते हुए दो महीने पाँच दिन हुए थे और उसने तीन छुट्टियाँ की थी, और नौ इतवार वह नहीं आयी थी। यानि बारह दिन काम नहीं हुआ। लेखक ने कहा कि वह उसकी तनख्वाह में से बारह रूबल काट लेगा। जूलिया की आँखों में आँसू आ गए। लेखक ने बताया कि तुमने चाय की प्याली तोड़ी थी, जो बहुत कीमती थी। जूलिया ने सोचा कि उसके भाग्य में तो हमेशा नुकसान ही उठाना लिखा है। लेखक ने जूलिया पर कई इल्ज़ाम लगाए परंतु जूलिया ने एक शब्द भी नहीं कहा। जूलिया ने काँपते हाथों से बारह रुबल लिए और उन्हें अपनी जेब में रख लिया और धीमे स्वर में लेखक को धन्यवाद कहा। लेखक ने गुस्से से उछलते हुए कहा धन्यवाद किस बात का? जूलिया ने कहा कि लेखक ने उसे पैसे दिए, इस बात का। लेखक से अब रहा नहीं गया। उसने कहा तुम मुझे धन्यवाद दे रही हो, जबकि तुम अच्छी तरह जानती हो कि मैंने तुम्हें ठगा है। इसके बावजूद तुम मुझे धन्यवाद दे रही हो। जूलिया ने कहा कि इससे पहले उसने जहाँ-जहाँ काम किया था उन्होंने तो उसे एक पैसा नहीं दिया। लेखक कुछ तो दे रहा था। लेखक ने जूलिया से माफ़ी माँगते हुए कहा कि उसने उसके साथ क्रूर मज़ाक किया। दरअसल वह जूलिया को सबक सिखाना चाहता था। तब लेखक ने उसका एक भी रूबल नहीं काटा, परंतु लेखक ने कहा कि वह एक बात अवश्य पूछना चाहेगा, वह यह कि क्या ज़रूरी है कि इनसान भला कहलाए जाने के लिए इतना दब्बू, भीरू और बोदा बन जाए कि उसके साथ जो अन्याय हो रहा है इसका विरोध तक न करे। वह खामोश रहे और सारे अत्याचार सहन करता रहे। जूलिया तुम्हें अपने अस्तित्व को बनाए रखने के लिए इस संसार से लड़ना होगा। लेखक ने उससे कहा कि याद रखो संसार में भीरू और दब्बू लोगों के लिए कोई जगह नहीं है।

जीवन मूल्य: अपने अस्तित्व को बनाए रखना चाहिए।

अध्याय को ध्यान से पढ़ें और अध्याय को अच्छी तरह समझ लें। दिए गए अभ्यास प्रश्न अपनी नोटबुक में करें।

(ग) दिए गए संकेत गद्यांश के आधार पर प्रश्नों के उत्तर का सही (✓) विकल्प चुनिए–

1. (ख) 2. (ख) 3. (ख)

भाषा की बात

(क) विलोम शब्द के जोड़े बनाइए–

1. प्रेम 2. अन्याय 3. डरपोक 4. कठोर
5. सुबह

(ख) निम्नलिखित शब्दों के स्त्रीलिंग शब्द लिखिए–

1. विदुषी 2. प्रशासिका 3. कवयित्री 4. नारी
5. साम्राज्ञी 6. मालकिन

(ग) 'नारी का महत्व' विषय पर 50–60 शब्दों में अनुच्छेद लिखिए–

'नर से बढ़कर नारी' जी हाँ! यह कथन वास्तव में सत्य है क्योंकि नारी में दो मात्राएँ नर से ज्यादा है। नारी केवल एक जन्म देने वाली ही नहीं है वह एक माँ, शिक्षिका सेवा प्रदाता व एक सामाजिक कार्यकर्ता भी है। आज नारी नर के कंधे से कंधा मिलाकर देश की राजनीति में भी सक्रिय है। अंतरिक्ष यात्री (कल्पना चावला) बनकर भी उसने देश की प्रतिष्ठा बढ़ाई बैंकर, खिलाड़ी, वकील व कवयित्री बनकर पुरुषों की बराबरी करने में सक्षम है। हमें नारी जाति का सम्मान करना चाहिए तथा उन्हें भरपूर सम्मान देना चाहिए।

(घ) निम्नलिखित शब्दों से भाववाचक संज्ञा बनाइए–

1. हंसी 2. घबराहट 3. शत्रुता 4. भलाई
5. हार 6. मिठास 7. सज्जनता 8. सुंदरता
9. लोभ

CASTLES AND PALACES

GENERAL KNOWLEDGE

CLASS VII

THE FORBIDDEN CITY

- The Forbidden City is a palace complex in central Beijing, China.
- The Forbidden City served as the palace for both the Ming and Qing emperors Zhu Di between 1406 and 1420.
- The Forbidden City served as the home of Chinese emperors and their households and was the ceremonial and political centre of the Chinese government for almost 500 years.
- Most of the buildings in this palace complex face south to honour the sun.

THE BUCKINGHAM PALACE

- Buckingham Palace is the London residence and administrative headquarters of the monarchy of United Kingdom.
- Buckingham House, the building at the core of today's palace was a large townhouse built for the Duke of Buckingham in 1703 on a site that had been in private ownership for at least 150 years. It was acquired by King George III in 1761 as a private residence for Queen Charlotte and became known as *The Queen's House*.
- Queen Victoria was the first member of the royal family to formally live in the Buckingham Palace.

SCHLOSS SCHONBRUNN

- Schonbrunn Palace was the main summer residence of the Habsburg rulers, located in Hietzing, Vienna.
- The 1,441-room Rococo palace (originally built by Johann Bernhard Fischer von Eriach in 1711) is one of the most important architectural, cultural, and historic monuments in the country.
- The palace houses, perhaps, the oldest zoo in Europe, the Schonbrunn Tiergarten, which was established in 1752.

THE NYMPHENBURG PALACE

- The Nymphenburg Palace is situated in Munich's western district in Bavaria, southern Germany.
- The construction of the palace began in 1664.
- The gardens of the palace were designed by Carbonet, a French designer, who has also designed the gardens in the Palace of Versailles.
- The Nymphenburg served as the main summer residence for the former rulers of Bavaria of the House of Wittelsbach.
- The palace, together with its park, is now one of the most famous sights of Munich. The baroque facades comprise an overall width of about 700 metres. Some rooms still show their original baroque decoration while others were later redesigned in rococo or neoclassical style.

INSTRUCTIONS

- Read the topic thoroughly.
- For better understanding of the topic open the following link: https://youtu.be/XBiTb3g_GKI
- Find out the information about Apostolic Palace, Rashtrapati Bhavan and Royal Palace of Amsterdam and write it on a separate sheet.

Computer
Class - VII

Chapter – II

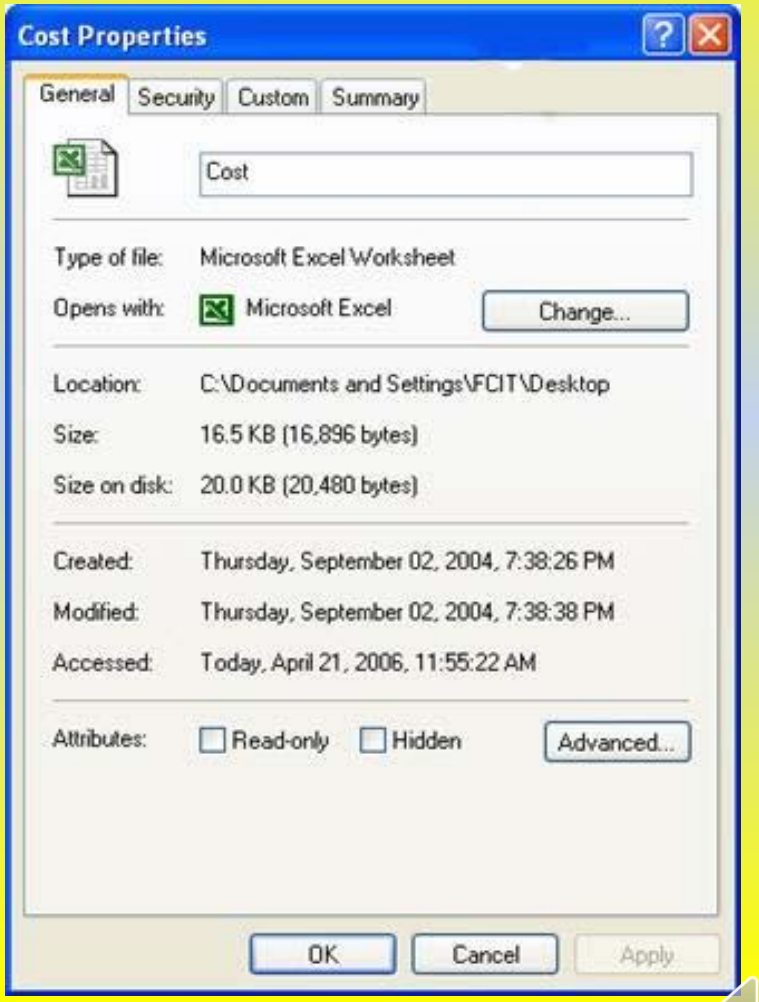
More on MS Window 7

SEE BELOW LINK

https://youtu.be/VecZZwk50Qo

Viewing properties of File/ Folder

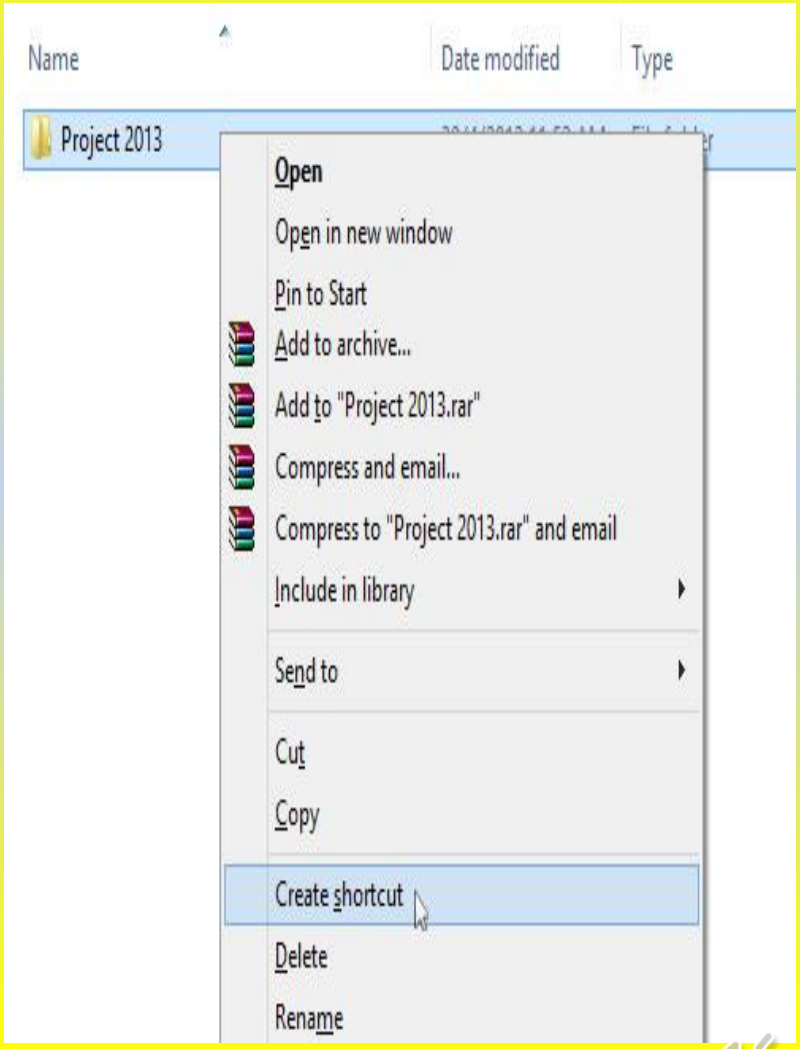
- To **view** information about a **file** or **folder**, right-click it and select **Properties**. You can also select the **file** and press Alt + Enter . The **file properties** window shows you information like the type of **file**, the size of the **file**, and when you last modified it.



Creating Shortcut of File/ Folder

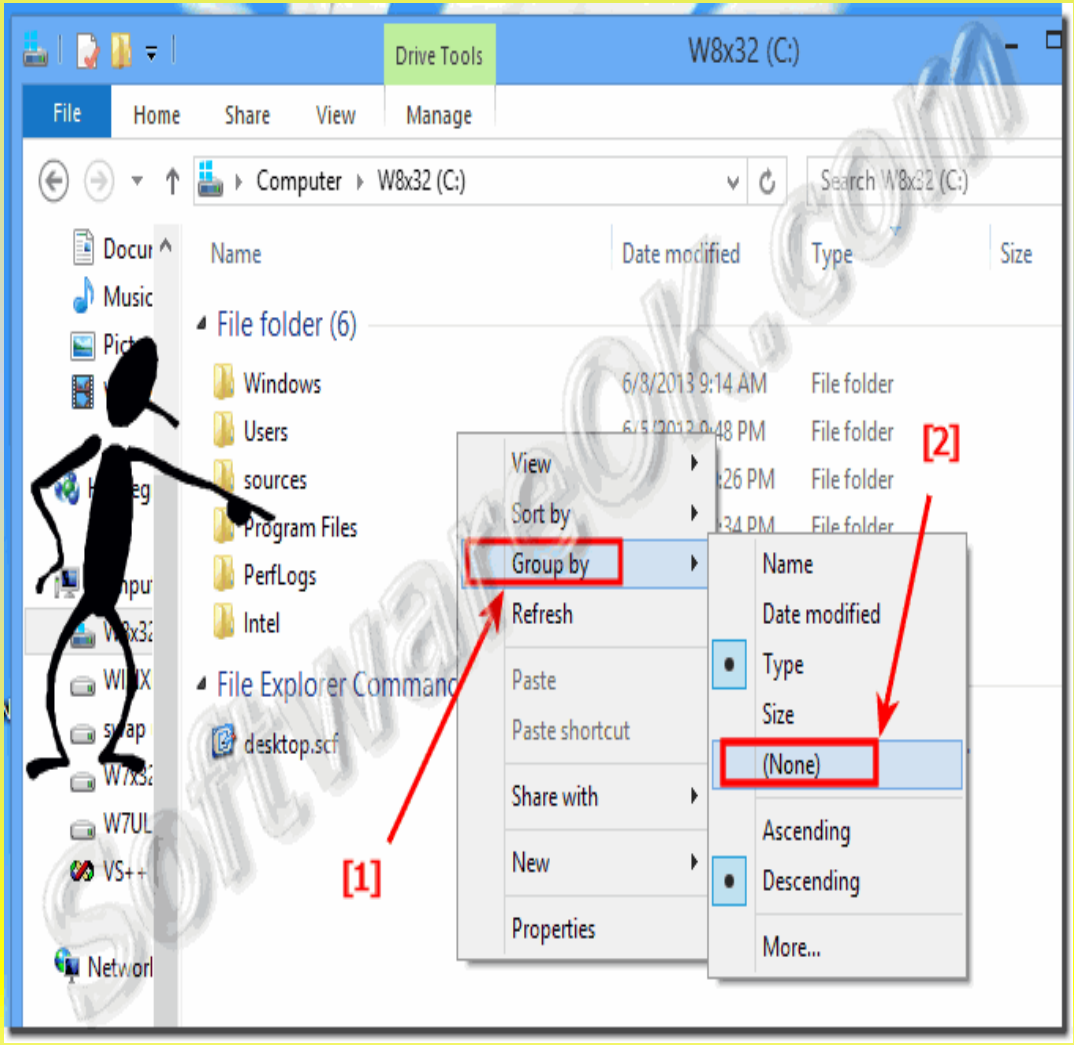
To create a desktop icon or shortcut, do the following:

- Select the file / folder for which you want to **create** a **shortcut**.
- Right-click the file for which you want to **create** a **shortcut**.
- Select **Create Shortcut** from the menu. ...
- Drag the **shortcut** to the **desktop** or any other folder.



Grouping File/ Folder

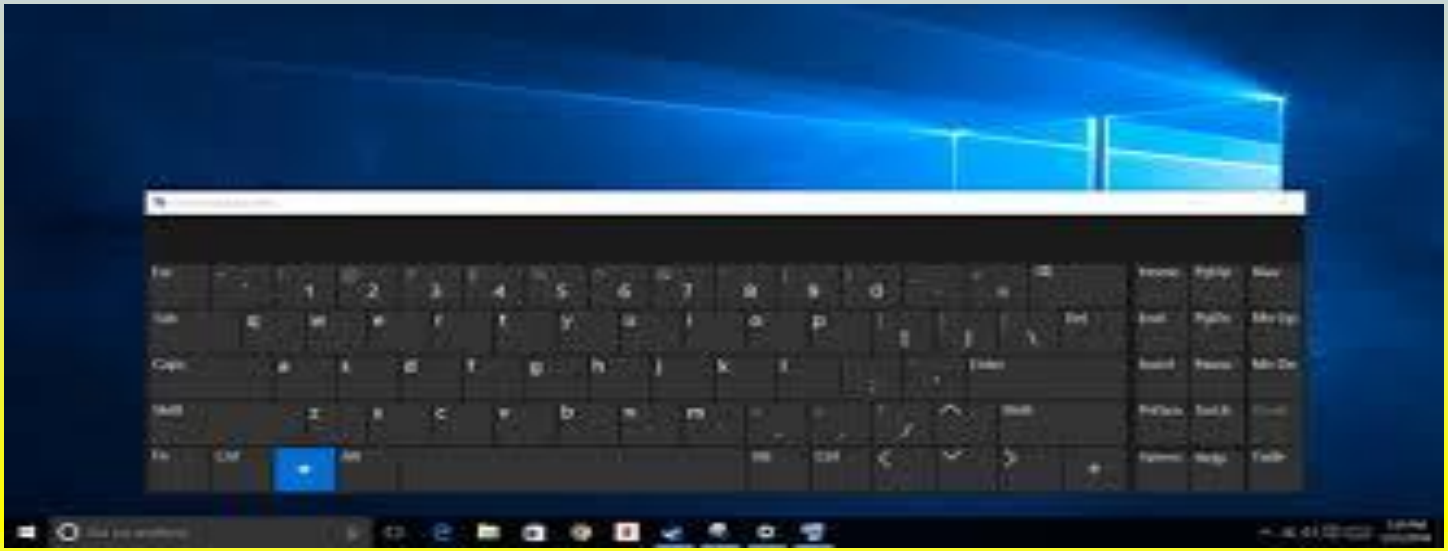
- Name
- Date
- Type
- Size



Onscreen keyboard

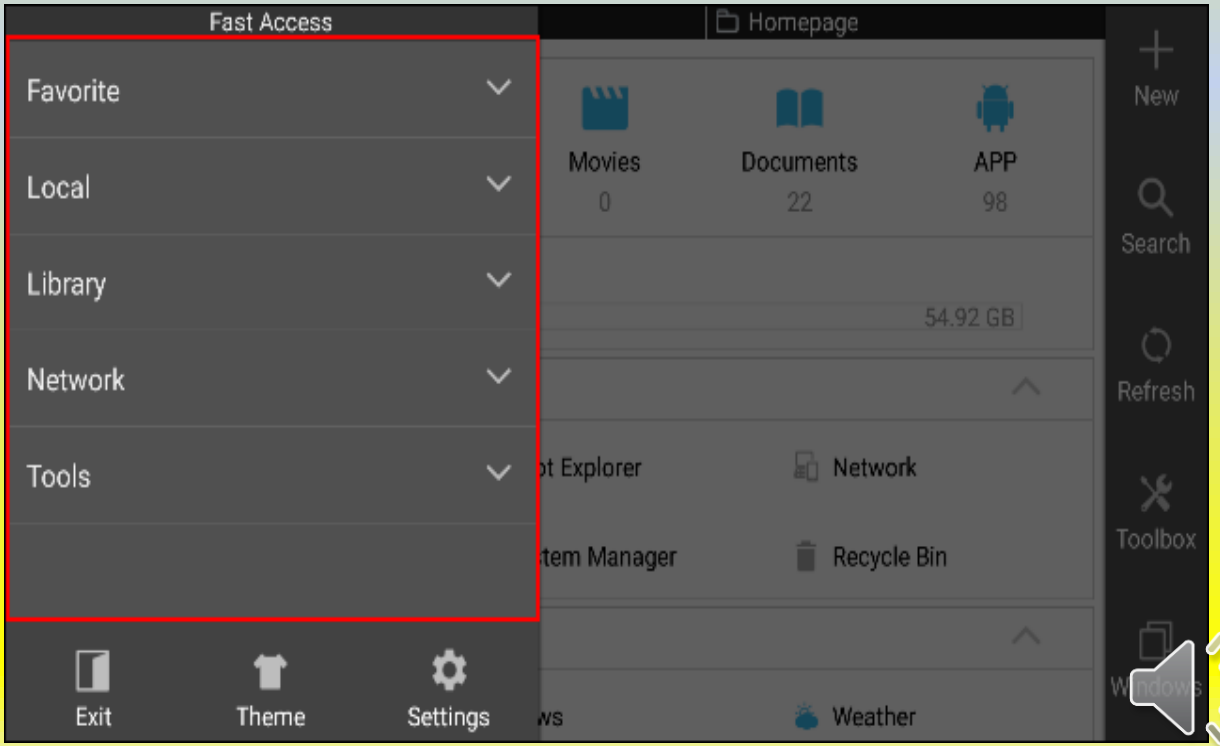
To open the On-Screen Keyboard

- Go to **Start** , then select **Settings** > **Ease of Access** > **Keyboard**, and turn on the toggle under **Use the On-Screen Keyboard**. A keyboard that can be used to move around the screen and enter text will appear on the screen. The keyboard will remain on the screen until you close it.



Organising files and Folder with ES File Explorer

ES File explorer is a file manager application to organise files and folders on a tablet/ phone or PC.



CD BURNING

- **CD**-ROM, depending on the specific **disc**, can run from about 650 MB to 700 MB of **data capacity**. A **DVD**, by comparison, can contain 4.7 GB of **data** on a single layer **disc**. Dual layer discs (most Hollywood movies released on **DVD** use dual-layer **DVDs**) can contain up to 8.5 GB of **data**.

- Open the Nero CD-burning program
- Choose Data CD, Click Add to browse for your file
- Select the file (or files) you want to add and then click add (when you are finished adding files, click close)
- Click next, Click Burn and let the process finish
- Click Done and your CD will automatically eject.

Worksheet
(Do worksheet in Notebook)

1. Rahul is a student of class 7. During the lockdown he prepares a science project using computer. He decides to copy the project in a CD. Suggest the software he should use o perform the same.

2. Moving an item across the screen with the mouse.
   a). Web browser c). Recycle bin d).Drag

3. _____is the set of instruction given to the computer to perform a specific task.
a). Monitor b).Hardware c). Software

Worksheet
(Do also worksheet in Notebook)

3. _____ creates a link between a user and the computer.

a).Device Driver b) Utilities c) Operating System

4. _____ is the most famous type of Operating System for personal computer.

a). Linux b). Unix c). Microsoft Windows

5. Windows explorer serves as a _____.

a). System Manager b). File Manager c). Web Browser