CLASS -6
MATHEMATICS

CHAPTER – 3
PLAYING WITH NUMBERS

Students pay attention

- Copy the notes given in the slides in your School register and then start the exercises.
- Ex – 3.1, 3.2 and 3.3 of ncert text book is provided in the slides with their answers.
- While solving the questions of exercises, you must use the proper working methods.
- Watch the videos through the given links for better understanding of the concepts.

CLICK THE VIDEO LINKS FOR THE FOLLOWING TOPICS

1. Factors and Multiples
https://youtu.be/QtcUovtOPdE

2. Prime and Composite numbers
https://youtu.be/e8fkXaLqAE4

3. Divisibility Rules
https://youtu.be/uzjVxJsEbEA

FACTORS AND MULTIPLES

- **Factors :** *A number which exactly divides a given number is called the factor of that number.*

Example1: Find the factors of 12

1×12=12
2× 6 =12
3× 4 =12

Here 12 is divisible by 1, 2, 3, 4, 6 and 12.
So, Factors of 12: 1, 2, 3, 4, 6,and 12

Example2: Find the factors of 30

1×30=30
2×15=30
3×10=30
5× 6 =30

Here 30 is divisible by 1, 2, 3, 5, 6, 10, 15 and 30.
So, Factors of 30 : 1, 2, 3, 5, 6, 10, 15 and 30

- **MULTIPLES**: *A multiple of a natural number is obtained by multiplying that number by any number.*

EXAMPLE 1: Multiples of 4 are: 4, 8, 12, ..., 40,.....etc

$4 \times 1 = 4$

$4 \times 2 = 8$

$4 \times 3 = 12$

$4 \times 10 = 40$.....etc

EXAMPLE 2 : Find first 5 multiples of 17.

Solution :

$17 \times 1 = 17$

$17 \times 2 = 34$

$17 \times 3 = 51$

$17 \times 4 = 68$

$17 \times 5 = 85$

So, the first five multiples of 17 are 17, 34, 51, 68 and 85.

POINTS TO REMEMBER

- *1 is the factor of every number.*
- *Every number is a factor of itself.*
- *Every factor of a number is an exact divisor of that number.*
- *Every factor is less than or equal to the given number.*
- *The number of factors of a given number are finite.*
- *Every multiple is greater than or equal to that number.*
- *The number of multiples of a given number is infinite.*
- *Every number is a multiple of itself.*

EXERCISE 3.1

1. Write all the factors of the following numbers :

   (a) 24 (b) 15 (c) 21

   (d) 27 (e) 12 (f) 20

   (g) 18 (h) 23 (i) 36

2. Write first five multiples of :

   (a) 5 (b) 8 (c) 9

3. Match the items in column 1 with the items in column 2.

Column 1	**Column 2**
(i) 35	(a) Multiple of 8
(ii) 15	(b) Multiple of 7
(iii) 16	(c) Multiple of 70
(iv) 20	(d) Factor of 30
(v) 25	(e) Factor of 50
	(f) Factor of 20

4. Find all the multiples of 9 upto 100.

ANSWERS

EXERCISE 3.1

1. (a) 1, 2, 3, 4, 6, 8, 12, 24 (b) 1, 3, 5, 15

(c) 1, 3, 7, 21 (d) 1, 3, 9, 27

(e) 1, 2, 3, 4, 6, 12 (f) 1, 2, 4, 5, 10, 20

(g) 1, 2, 3, 6, 9, 18 (h) 1, 23 (i) 1, 2, 3, 4, 6, 9, 12, 18, 36

2. (a) 5, 10, 15, 20, 25 (b) 8, 16, 24, 32, 40 (c) 9, 18, 27, 36, 45

3. (i) $\longrightarrow$ (b) (ii) $\longrightarrow$ (d) (iii) $\longrightarrow$ (a)

(iv) $\longrightarrow$ (f) (v) $\longrightarrow$ (e)

4. 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99

PRIME AND COMPOSITE NUMBERS

In the given table you can see that the factors of different numbers are given. Some of the numbers have one factor, and some have two factors and others have more than two factors.

On the basis of this observation the numbers can be grouped into prime and composite numbers.

Numbers	Factors	Number of Factors
1	1	1
2	1, 2	2
3	1, 3	2
4	1, 2, 4	3
5	1, 5	2
6	1, 2, 3, 6	4
7	1, 7	2
8	1, 2, 4, 8	4
9	1, 3, 9	3
10	1, 2, 5, 10	4
11	1, 11	2
12	1, 2, 3, 4, 6, 12	6

Prime Numbers: *The numbers whose factors are 1 and the number itself are called prime numbers; Eg: 2, 3, 5, 7, 11,... are prime numbers.*

Composite Numbers: *The numbers having more than two factors are called composite numbers; Eg: 4, 6, 8, 9, 10, 12,... are composite numbers.*

- *1 is neither a prime nor a composite number.*
- *Two is the smallest prime number which is even.*
- *All prime number except 2 are odd numbers.*

Co-prime Numbers : A pair of two numbers which has no common factor other than 1 are called Co-primes.

For example- (2 ,3) Here, 2 and 3 have no common factors other than 1.

So, (2,3) are co-prime.

Similarly, (4,9), (5,6), (20,21),...etc are also coprime numbers

Twin Primes : A pair of prime numbers that differ by two are called twin primes .

For example- (3, 5) , 5 – 3 = 2

(11,13) , 13 – 11 = 2

(29,31) , 31 – 29 = 2 ... and so on

So, (3, 5), (11, 13), (29, 31) are twin primes.

Perfect Number : *A number is called a perfect number if the sum of all its factors is equal to twice the number.*

For example- *Factors of 6 are 1, 2, 3 and 6*

sum of factors = 1 + 2 + 3 + 6 = 12 (which is twice of 6)

So, 6 is a perfect number.

EXERCISE 3.2

1. What is the sum of any two (a) Odd numbers? (b) Even numbers?
2. State whether the following statements are True or False:
   (a) The sum of three odd numbers is even.
   (b) The sum of two odd numbers and one even number is even.
   (c) The product of three odd numbers is odd.
   (d) If an even number is divided by 2, the quotient is always odd.
   (e) All prime numbers are odd.
   (f) Prime numbers do not have any factors.
   (g) Sum of two prime numbers is always even.
   (h) 2 is the only even prime number.
   (i) All even numbers are composite numbers.
   (j) The product of two even numbers is always even.
3. The numbers 13 and 31 are prime numbers. Both these numbers have same digits 1 and 3. Find such pairs of prime numbers upto 100.
4. Write down separately the prime and composite numbers less than 20.
5. What is the greatest prime number between 1 and 10?
6. Express the following as the sum of two odd primes.
   (a) 44 (b) 36 (c) 24 (d) 18

7. Give three pairs of prime numbers whose difference is 2.
   [Remark : Two prime numbers whose difference is 2 are called twin primes].
8. Which of the following numbers are prime?
   (a) 23 (b) 51 (c) 37 (d) 26
9. Write seven consecutive composite numbers less than 100 so that there is no prime number between them.

10. Express each of the following numbers as the sum of three odd primes:
    (a) 21 (b) 31 (c) 53 (d) 61
11. Write five pairs of prime numbers less than 20 whose sum is divisible by 5.
    (**Hint :** $3+7 = 10$)
12. Fill in the blanks :
    (a) A number which has only two factors is called a _____.
    (b) A number which has more than two factors is called a _____.
    (c) 1 is neither _____ nor _____.
    (d) The smallest prime number is _____.
    (e) The smallest composite number is _____.
    (f) The smallest even number is _____.

ANSWERS

EXERCISE 3.2

1. (a) even number (b) even number

2. (a) F (b) T (c) T (d) F
(e) F (f) F (g) F (h) T
(i) F (j) T

3. 17 and 71, 37 and 73, 79 and 97

4. Prime numbers : 2, 3, 5, 7, 11, 13, 17, 19
Composite numbers : 4, 6, 8, 9, 10, 12, 14, 15, 16, 18

5. 7

6. (a) 3 + 41 (b) 5 + 31 (c) 5 + 19 (d) 5 + 13
(This could be one of the ways. There can be other ways also.)

7. 3, 5; 5, 7 ; 11, 13

8. (a) and (c)

9. 90, 91, 92 , 93, 94, 95, 96

10. (a) 3 + 5 + 13 (b) 3 + 5 + 23
(c) 13 + 17 + 23 (d) 7 + 13 + 41
(This could be one of the ways. There can be other ways also.)

11. 2, 3 ; 2, 13; 3, 17; 7, 13; 11, 19

12. (a) prime number (b) composite number
(c) prime number, composite number (d) 2 (e) 4 (f) 2

Rules of Divisibility

Divisibility by 2 : *A number is divisible by 2, if it has any of the digits 0, 2, 4, 6 and 8 in its ones place*

Example : 2410
4356
1358

By seeing the digits at ones place we can easily understand that the given numbers are divisible by 2.

Divisibility by 3 : *A number is divisible by 3, if the sum of the digits of the number is the multiple of 3.*

Example : 40197

Sum of digits = 4+0+1+9+7 = 21
Since 21 is the multipe of 3.
Hence, 40197 is divisible by 3.

732103

Sum of digits = 7+3+2+1+0+3 = 16
Since 16 is not the multiple of 3.
Hence, 732103 is divisible by 3

- **Divisibility by 4 :** *If the last two digits of a number is divisible by 4, then the given number is also divisible by 4.*

Example : 1352

Here, 52 is divisible by 4.

So, 1352 is divisible by 4.

6270

Here 70 is not divisible by 4.

So, 6270 is not divisible by 4.

If the last two digits of a number is having double zeros then the given number is divisible by 4. For example : 300, 1500,9000 etc

- **Divisibility by 5 :** *If the digit at ones place in a number is 0 or 5, then the given number is divisible by 5.*

Example: 3875

The digit at ones place is 5.

So, 3875 is divisible by 5.

96542

The digit at ones place is neither 0 nor 5.

So, 96542 is not divisible by 5

- **Divisibility by 6** : *If a number is divisible by both 2 and 3, then the number is also divisible by 6.*

Examples:

72

Step1- 72 is an even number.
So, it is divisible by 2.

Step2-Sum of the digits = 7 + 2 = 9

9 is the multiple of 3.
So, 72 is divisible by 3.

Since, 72 is divisible by both 2 and 3.

Hence it is also divisible by 6.

926

Step1- 926 is an even number.
So, it is divisible by 2.

Step2- Sum of the digits
= 9 + 2 + 6 = 17

17 is not a multiple of 3.
So, 926 not divisible by 3.

Since, 72 is divisible by 2 but not divisible by 3.

Hence 926 is not divisible by 6.

- **Divisibility by 8 :** ***If the last three digits of a number is divisible by 8, then the entire number is divisible by 8. And if a number ends with triple zeros then also the entire number is divisible by 8.***

Examples- (1) 46128

46128

Divide 128 by 8, then Remainder = 0

It means 128 is divisible by 8.

Hence, the number 46128 is also divisible by 8.

(2) 6342

6342

Divide 342 by 8, then Remainder = 6

It means 342 is not divisible by 8.

Hence, 6342 is not divisible by 8.

(3) 7000

In this number the last three digits are zeros.

So, 7000 is divisible by 8.

- **Divisibility by 9 :** ***If the sum of all digits of a number is divisible by 9, then the entire number is also divisible by 9.***

Example - 40734

Sum of digits = 4 + 0 + 7 + 3 + 4 = 18

Since ,18 is divisible by 9.

Hence, 40734 is also divisible by 9.

- **Divisibility by 10 :** ***If the digit at ones place is 0, then the given number is divisible by 10.***

Examlpes: 6430

Here, the last digit is 0.

So, 6430 is divisible by 10.

12951

Here, the digit is not 0.

So, 12951 is divisible by 10.

- **Divisibility by 11:** *The difference between the sum of odd number of places and sum of even number of places is zero or multiple of 11 then the entire number is divisible by 11.*

Example – 1320

Sol : First mark the digits at odd places and even places separately

1 3 2 0

Sum of digits at odd places = 1 + 2 = 3

Sum of digits at even places = 3 + 0 = 3

Difference = 3 - 3 = 0

Since the difference is zero .

Hence 1320 is divisible by 11.

93038

Sol : First mark the digits at odd places and even places separately

9 3 0 3 8

Sum of digits at odd places = 9 + 0 + 8 = 17

Sum of digits at even places = 3 + 3= 6

Difference = 17 – 6 = 11

Since 11 is divisible by 11

Hence 93038 is divisible by 11.

EXERCISE 3.3

2. Using divisibility tests, determine which of the following numbers are divisible by 4; by 8:

   (a) 572 (b) 726352 (c) 5500 (d) 6000 (e) 12159

   (f) 14560 (g) 21084 (h) 31795072 (i) 1700 (j) 2150

3. Using divisibility tests, determine which of following numbers are divisible by 6:

   (a) 297144 (b) 1258 (c) 4335 (d) 61233 (e) 901352

   (f) 438750 (g) 1790184 (h) 12583 (i) 639210 (j) 17852

4. Using divisibility tests, determine which of the following numbers are divisible by 11:

   (a) 5445 (b) 10824 (c) 7138965 (d) 70169308 (e) 10000001

   (f) 901153

5. Write the smallest digit and the greatest digit in the blank space of each of the following numbers so that the number formed is divisible by 3 :

   (a) __ 6724 (b) 4765 __ 2

6. Write a digit in the blank space of each of the following numbers so that the number formed is divisible by 11 :

   (a) 92 __ 389 (b) 8 __ 9484

ANSWERS

2. Divisible by 4 : (a) , (b), (c), (d), (f), (g), (h), (i)

Divisible by 8 : (b), (d), (f), (h)

3. (a), (f), (g), (i)

4. (a), (b), (d), (e), (f)

5. (a) 2 and 8 (b) 0 and 9

6. (a) 8 (b) 6

CLASS VI
SCIENCE
L-4

Sorting Materials into Groups

For better understanding refer the following link:

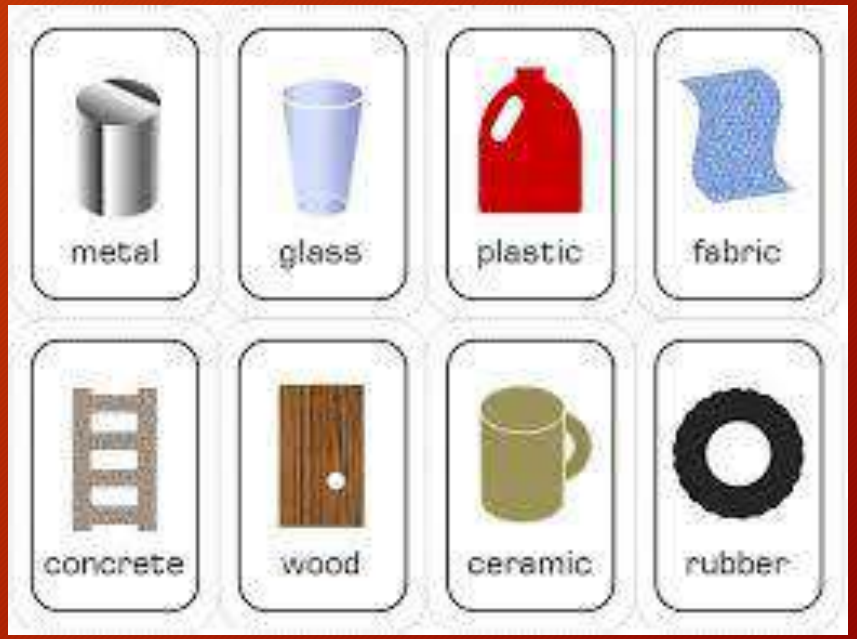
https://youtu.be/SY8FZDIPJ44

Contents

- **Materials around us**
- **Properties of materials**
- **Sorting of materials into groups**

Materials Around Us

- Look around your room. You may find a bed, chair ,table, cupboard and many more things.
- In kitchen you may find utensils, gas-stove, cylinders etc. Now look around in a playground, you may find playing children, plants, grass and many more things.
- It tells us that there are many kind of materials in the world, some of them are living while some of them are non-living. All of these have different shapes, colours and uses. These may be made of one or more than kind of materials such as steel, wood, plastic, cotton etc.
- Several objects are made by a combination of many materials. For e.g. your pencil, it is made of wood, its lead is a combination of clay and graphite and paint all these three materials together make it attractive.



Properties of Materials

- We use different things according to our requirement and also according to their properties.
- The properties of materials make them suitable for a particular use. A few properties of materials that would be important for their usage are discussed below. However, two properties are common in all types of materials, they all occupy space and have mass.

Appearance and Hardness

- Different kind of materials such as wood, metal, plastic, glass look different from each other. Even different metals such as iron, copper, aluminium and gold appear different from each other but at the same time they have some similarities too. Materials that have lustre are usually metals. Iron, copper and gold are some examples of metals. Some metals often lose their shine and appear dull, because of the action of air and moisture on them.
- Materials which can be compressed or scratched or cut easily are soft. For example, cotton and sponge are soft materials. The materials which cannot be compressed or scratched or cut easily are hard. For example, wood, a piece of stone, metal key, iron rod are hard materials. The diamond is the hardest substance.

Hardest material : Diamond
Softest material : Talc

Soluble or Insoluble

- Water is usually used to check if different materials are soluble or not. If a substance dissolves or disappeared completely in water, it is said to be soluble (fig. 4.3) and if it does not dissolve or disappeared at all, it is said to be insoluble (fig. 4.4).
- Water and oil are immiscible liquids. Water plays important role in the functioning of our body because it can dissolve large number of substances in it. Liquids which mix with each other are called miscible liquids while liquids that do not mix with each other are called immiscible liquids (fig.4.5).
- Some gases are soluble in water whereas others are not. For example, gases such as oxygen and carbon dioxide which are slightly soluble in water are very important for the survival of plants and animals that live in water. Some gases such as nitrogen are however, not soluble in water.

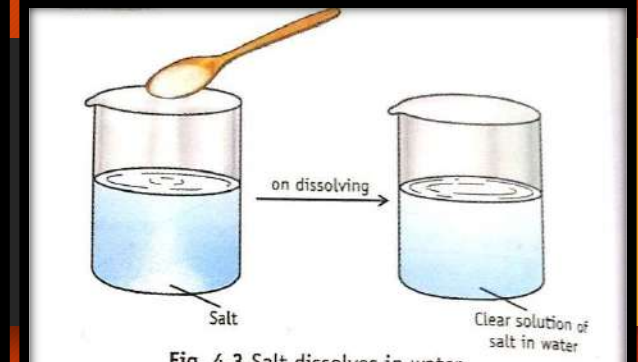


Fig. 4.3 Salt dissolves in water

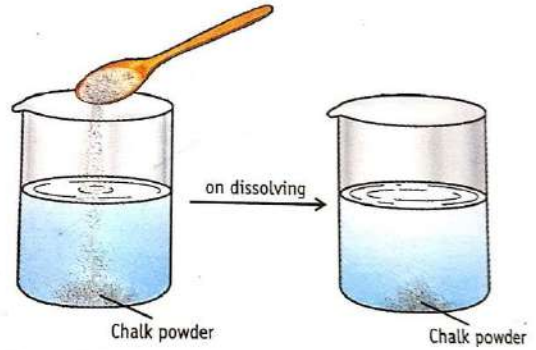


Fig. 4.4 Chalk powder does not dissolve in water

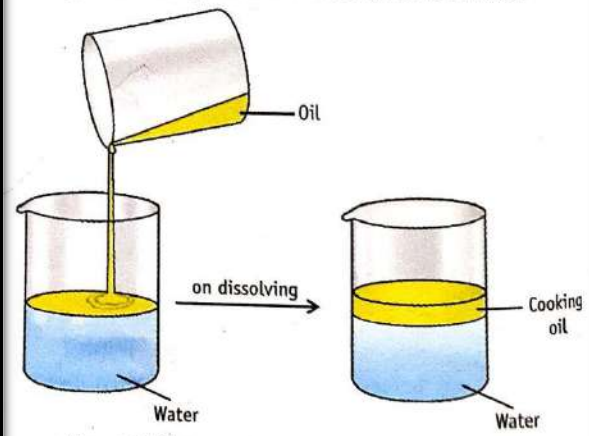


Fig. 4.5 Water and oil are immiscible liquids

Objects may float or sink in water and Transparency of objects

- If you drop an iron nail in water, it will sink but a piece of wood will float on water. The mass per unit volume is known as density. A substance which is denser than water will sink in water. A substance which is less denser than water will float in water.
- An object which allows most of the light to pass through it, is known as transparent object. Examples are clear water, thin polythene sheet etc.
- An object which allows a little amount of light to pass through it, is called translucent object. Examples are frosted glass used in bathroom windows.
- An object which does not allow light to pass through it, is called opaque object. Examples are metal, wood, notebooks, wall etc.

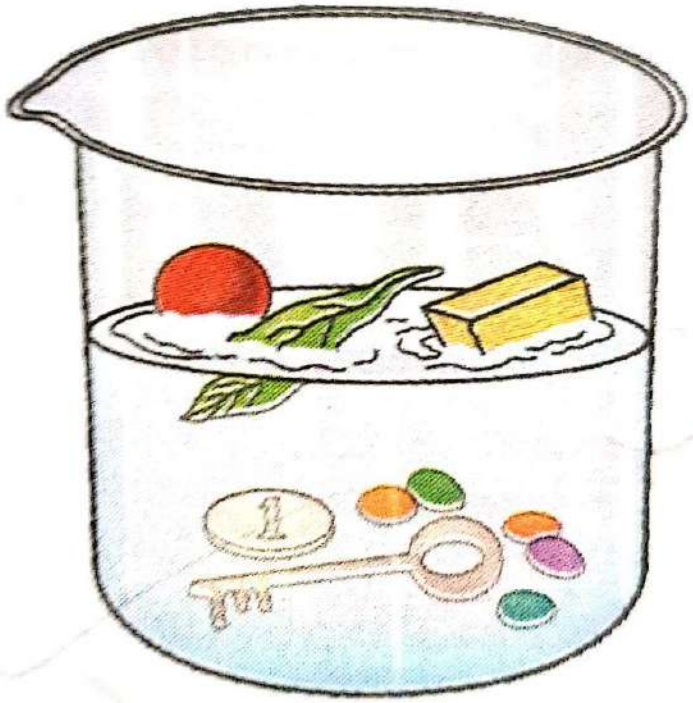


Fig. 4.6 Some objects float in water while others sink in it

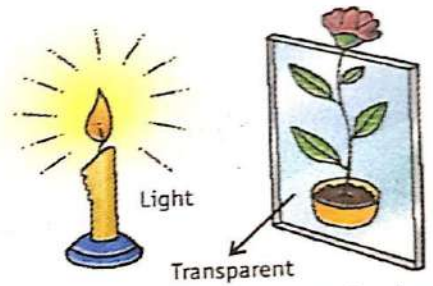


Fig. 4.7 Light passes completely through a transparent object

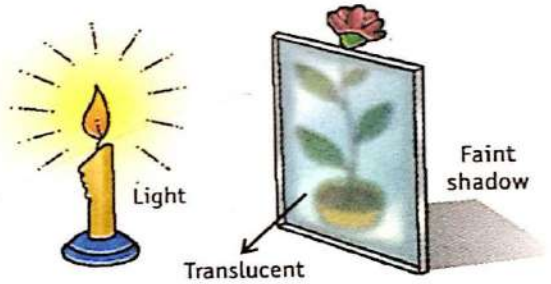


Fig. 4.8 Light passes partially through a translucent object

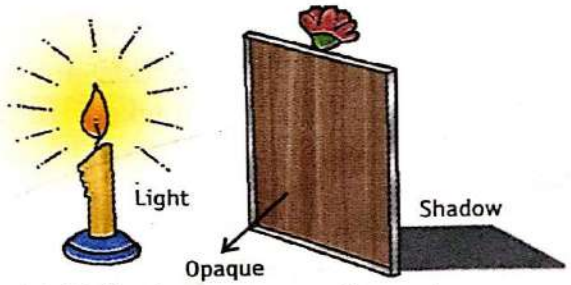


Fig. 4.9 Light does not pass through an opaque object

ILLUSTRATION OF TRANSPARENT, TRANSLUCENT AND OPAQUE MATERIALS:

Transparent	Translucent	Opaque
		

State

- Mostly materials exist in three states. These are solid, liquid and gas.
- The main difference lies in the way they change their shape and volume. Solids, generally do not easily change their shape or volume. Liquids change their shape but not volume. Gases easily change their shape and volume.
- Arrangement of molecules in solids, liquids and gasses also differ a lot. Solids are made up of particles that are closely packed in a definite manner. In liquids, particles are loosely packed and free to move. That is why liquid flow. The particle that make up gases are far apart. They move about very quickly. Gas is the lightest state of materials.

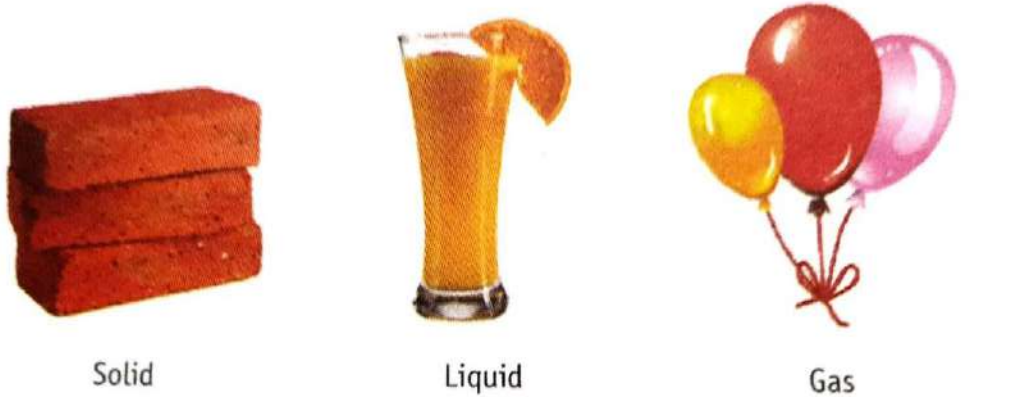


Fig. 4.10 Three states of matter

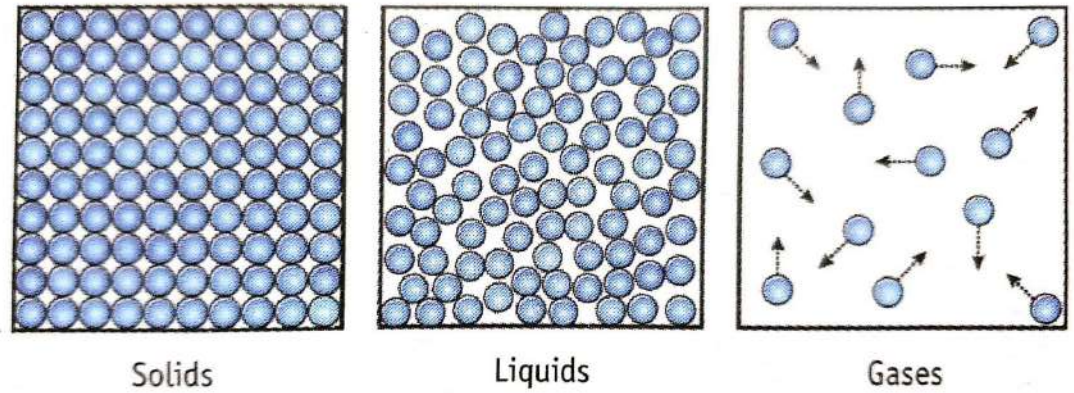


Fig. 4.11 Arrangement of molecules in three states of matter

Sorting of Materials into Groups

- Materials can be grouped on the basis of similarities or differences in their properties. Grouping together things with similar properties is called classifications. Have you ever seen how different things are arranged in a grocery shop? One kind of items say soaps are arranged at one place. Similarly, pulses, biscuits, shampoos, chips, chocolates, toothbrushes, toothpastes, etc. all are separated in shelves. This systematic way of arranging products helps you to locate a particular product very easily and quickly.

Fig. 4.12 Grocery shop

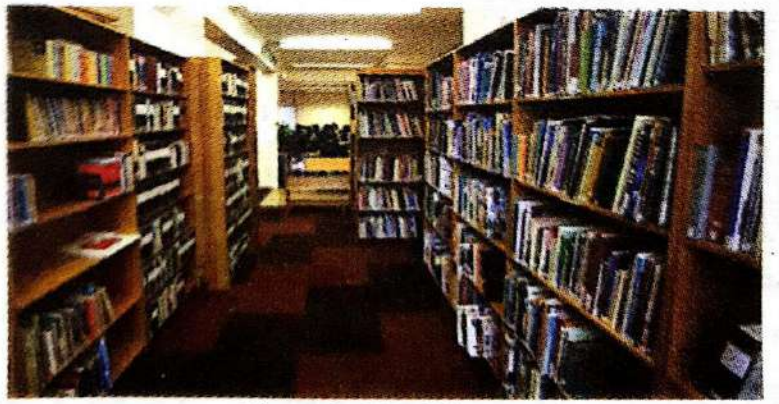


Fig. 4.13 Library

Assignments

KEY TERMS

Classification : Method of grouping things with similar properties together.
Immiscible : Liquids that are insoluble in water are said to be immiscible in water.
Matter : Anything that occupies space and has mass.
Miscible : Liquids that are soluble in water are said to be miscible in water.
Opaque : Materials that do not allow light to pass through them are called opaque materials.
Transparent : Materials that allow light to pass through them are called transparent materials.
Translucent : Materials that allow some light to pass through them are called translucent materials.

TEST YOUR KNOWLEDGE

A Very Short Answer Questions (Answer in a word or a sentence).

1. Why can't we use ordinary paper to keep liquids ?
2. Name two shiny objects.
3. Why are cutting tools mostly made of metals ?
4. Name one substance which is soluble and one substance which is insoluble in water.
5. Name the property on which floating and sinking of a substance depends.
6. Name any two objects which are made of plastics.
7. Name two things that can be made from two different materials.

B Fill in the blanks with suitable words.

1. Transparent materials allow light to pass through them.
2. Gold and Silver have a shiny appearance.
3. A substance which is denser than water will sink.

4. The particles in gases are far apart.
5. Oxygen and CO_2 are gasses which dissolve in water.

C Match the Columns.

Column A	Column B
(a) Book	(iv) Leather
(b) Shoes	(v) Plastics
(c) Toys	(vi) Paper
(d) Tumbler	(i) Glass
(e) Chair	(ii) Wood
(f) Butter paper	(iii) Translucent

D State whether the following statements are true (T) or false (F).

1. Vinegar is soluble in water and chalk is insoluble in water. T
2. All plastics are transparent materials. F
3. Classification is done only for living things. F
4. A piece of wood floats on water. T
5. Sugar does not dissolve in water. F
6. Plastics have lustre but steel does not. F

E Short Answer Questions Type-I (Answer in one or two sentences).

1. What happens when sand and sugar are added to water ?
2. How can you make a paper translucent ?
3. In what ways all matter alike ?
4. Name one solid, one liquid and one gas that are insoluble in water.
5. The density of an object is less than water. Will it float or sink in water ?

F Short Answer Questions Type-II (Answer in 30-40 words).

1. Why do solids, liquids and gases have different properties ? Pg 48
2. What do you mean by transparency ? Pg 47
3. Metals are lustrous, but iron rods used in construction sites do not shine. Explain. Pg 45
4. Shopkeepers prefer to keep biscuits, sweets etc. in glass or plastic jars. Give reason. Transparency
5. How will you identify materials based on their hardness ? Pg 45

G Long Answer Questions (Answer in 60-70 words).

1. What is classification. How is it useful ? Explain with at least two examples. Pg 48
2. Differentiate between miscible and immiscible liquids ? Give one example of each. What happens when cooking oil is added to water ? Give reason. Pg 46
3. Name three states of matter. Give two examples of each. In what ways are they different from each other ? Explain with the help of suitable diagrams. Pg 45

H Higher Order Thinking Skills Based Questions.

1. Which one property that you have learnt in this chapter would be best suitable to distinguish the following pairs ?
   (a) Iron and wood Density.

(b) A pebble and a feather density. Appearance (shiny or dull)
(c) Plastic spoon and a stainless steel spoon not same
(d) Sawdust and salt. Soluble / Insoluble in water

2. Which is heavier—ice or water ? How can you find this ? water is heavier as when ice dipped in water it floats on water's surface
3. 'Classification makes our studies easy' How ? Pg 48

I Multiple Choice Questions (Choose the correct option).

1. Which of the following is not a matter ?
   (a) Water (b) Air
   (c) Human (d) Fruits
2. The state of matter which has a definite shape and volume is
   (a) Solid (b) Liquid
   (c) Gas (d) None of these
3. The clean and clear water is
   (a) Transparent (b) Translucent
   (c) Opaque (d) None of these
4. Metals are generally exist as
   (a) Solids (b) Liquids
   (c) Gases (d) None of these
5. Gases possess neither fixed volume nor fixed shape because :
   (a) Molecules are tightly packed (b) Molecules are far apart
   (c) Molecules have strong force of attraction (d) Molecules move very slowly

J Find the odd one out from the following.

1. Sugar, sand, salt — sand
2. Chair, table, lotus — lotus
3. Copper, soil, iron — soil
4. Nitrogen, oxygen, water — water
5. Vinegar, kerosene, petrol — vinegar

NOTE : MCQ Q1 Answer is all are matter

- QA. Very Short Answer Questions:
- Ans 1. We can't use ordinary paper to keep liquids because it has ability to absorb the liquid.
- Ans 2. Gold and Silver
- Ans 3. Cutting tools are mostly made of metals because they are hard.
- Ans 4. Soluble in water–Salt and sugar
- Insoluble in water– Sand and chalk
- Ans 5. Density
- Ans 6. Chair, bucket, tub etc.
- Ans 7. Tumbler– glass, steel, silver etc.
- Bangle– glass, plastic, copper, gold, silver etc.

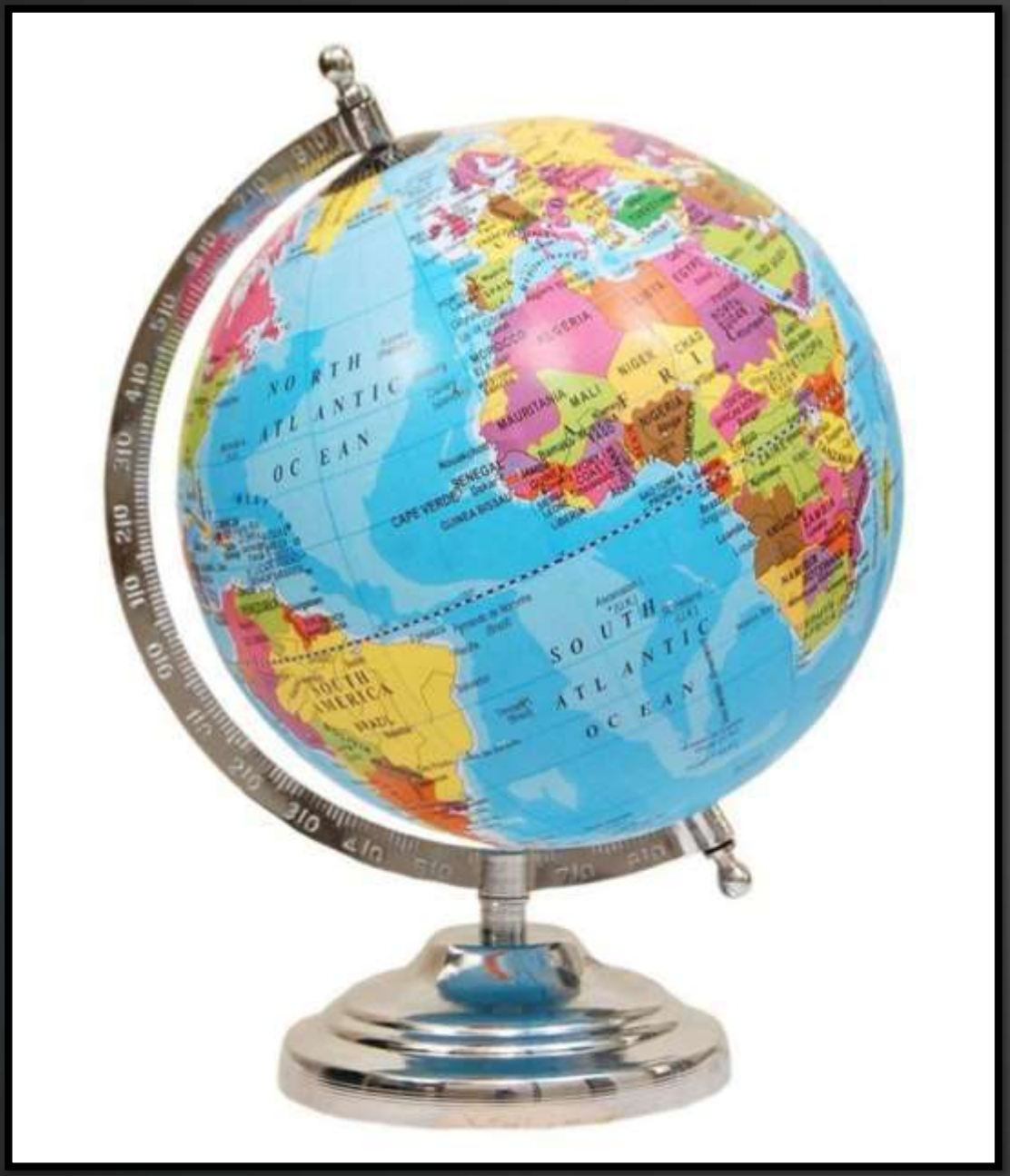
- QE. Short Answer Question Type-1
- Ans 1. When sand and sugar are added to water then sand does not dissolve in water while sugar dissolve completely in water.
- Ans 2. We can make a paper translucent by rubbing groundnut seeds on paper, and oil patch will form on the paper.
- Ans 3. All matters are alike because they all have mass and occupy space.
- Ans 4. Insoluble in water:
- i. solid-chalk
- ii. liquid-mustard oil
- iii. gas-nitrogen
- Ans 5. The density of an object is less than water then it will float on water.
- QF. Short Answer Questions Type-II:
- Ans 1. Arrangement of molecules in solids, liquids and gases differ a lot. Solid are made-up of particles that are closely packed in a definite manner. In liquids, particles are loosely packed and free to move. The particles that make up gases are far apart. They move about very quickly.
- Ans 2. An object which allows most of the light to pass through it, is known as transparent object. For example- clear water, thin polythene sheet, etc.
- Ans 3. Metals are lustrous, but iron rods used in constructions sites do not shine because of the action of air and moisture on them.
- Ans 4. Shopkeepers, prefer to keep biscuits, sweets, etc. in glass or plastic jars so that customers can see these items easily.
- Ans 5. The materials which cannot be compressed or scratched or cut easily are hard. For example wood, a piece of stone, metal key, iron rod are hard materials.

- QG. Long Answer question:
- Ans 1. Grouping things together with similar properties is called classification. Things are grouped together for convenience and to study their properties more systematically. For eg.
- All type of soaps have similar characteristics are placed in one group at a shop.
- Books are arranged in the alphabetical order of the name of the author. This systematic way of arranging books help us to locate a particular book easily and quickly.
- Ans 2. Miscible liquids : Two liquids that get mixed with each other and completely dissolves in water are called miscible liquids. For eg: milk, limejuice, vinegar etc.
- Immiscible liquids : Two liquids that do not mix with each other and form separate layer are called immiscible liquids. For eg: mustard oil, sunflower oil, kerosene etc. When cooking oil is added to water it forms two separate layer of water and cooking oil, water being heavier form the lowest layer whereas cooking oil being lighter form the upper layer. This shows that the cooking oil is immiscible liquids.
- Ans 3. Solid: Solid have definite volume. Molecules are closely packed. For eg. stone,iron, marble.
- Liquid: Liquid do not have definite shape definite volume. Molecules are less closely packed. For eg. water, milk, glycerine.
- Gases: Gas neither have definite shape nor volume. Molecules are loosely packed. For eg. oxygen, nitrogen, carbondioxide. Do diagram from book Fig:4.11
- HOTS:
- Ans 1. a.Density b. Density c. Appearance (shiny or dull)
- d. Solubility
- Ans 2. Water is heavier as when ice dipped in water it floats on water surface.
- Ans 3. Materials are grouped together on the basis of similarities and difference in their properties. Things are grouped together for convenience and to study their properties more systematically. Recall how books are arranged in a library. They are arranged subject-wise i.e Hindi, English, Maths, Science etc. Each subject's books are arranged in separate shelves.

CLASS VI-Social Science

Geography

CHAPTER – 2 GLOBE: LATITUDES AND LONGITUDES



THE GLOBE

The shape of the earth can be called a geoid.

Globe is a true model (miniature form) of the earth.

• You will notice that a **needle** is fixed through the globe in a tilted manner, which is called its **axis.** Two points on the globe through which the needle passes are two poles – **North Pole** and **South Pole.**

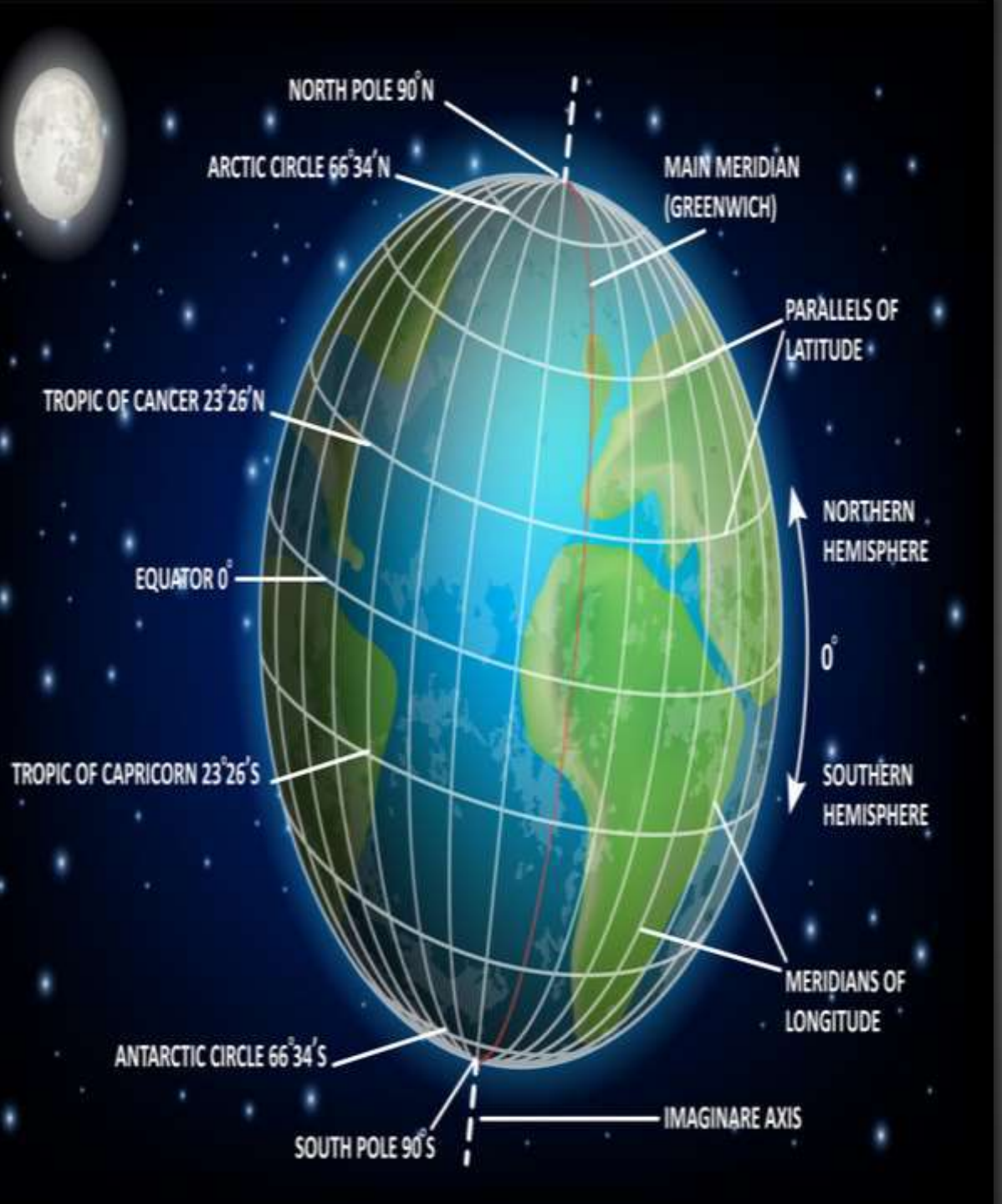
The globe can be moved around this needle from west to east just as the earth moves. The real earth has no such needle. It moves around its axis, which is an imaginary line.

Advantages of the globe:

(i) It correctly represents the shape of the earth.

(ii) It shows the North and South Poles accurately.

(iii) The shows the correct size and shape of different continents and oceans.



Disadvantages of the globe:

(i) It is inconvenient to carry.

(ii) Only a part of the earth can be seen at a time.

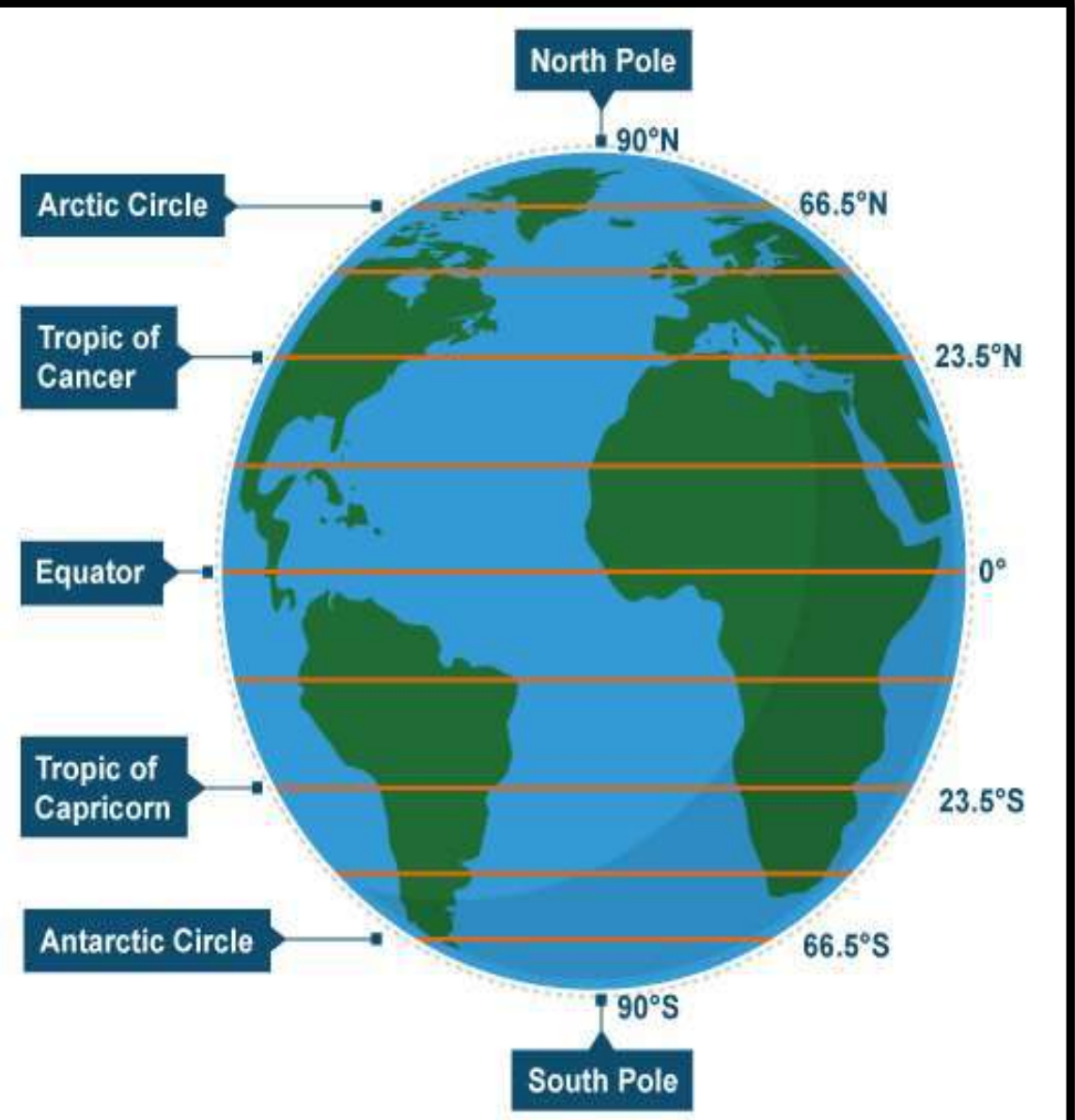
(iii) It is not helpful in giving directions.

An imaginary line running on the globe divides it into two equal parts. This line is known as the **equator.**

The northern half of the earth is known as the **Northern Hemisphere** and the southern half is known as the **Southern Hemisphere.**

Therefore, the equator is an imaginary circular line and is a very important reference point to locate places on the earth. All parallel circles from the equator up to the poles are called **parallels of latitudes.** Latitudes are measured in degrees.

Important Latitudes



The equator represents the **zero degree latitude.** Since the distance from the equator to either of the poles is one-fourth of a circle round the earth, it will measure ¼th of 360 degrees, i.e. 90°. Thus, 90 degrees north latitude marks the North Pole and 90 degrees south latitude marks the South Pole.

As such, all parallels north of the equator are called '**north latitudes.**' Similarly all parallels south of the equator are called '**south latitudes.**'

Besides the equator (0°), the North Pole (90°N) and the South Pole (90° S), there are four important parallels of latitudes–

(i) Tropic of Cancer (23½° N)

(ii) Tropic of Capricorn (23½° S)

(iii) Arctic Circle at 66½° north of the equator.

(iv) Antarctic Circle at 66½° south of the equator.

HEAT ZONES

Torrid Zone –

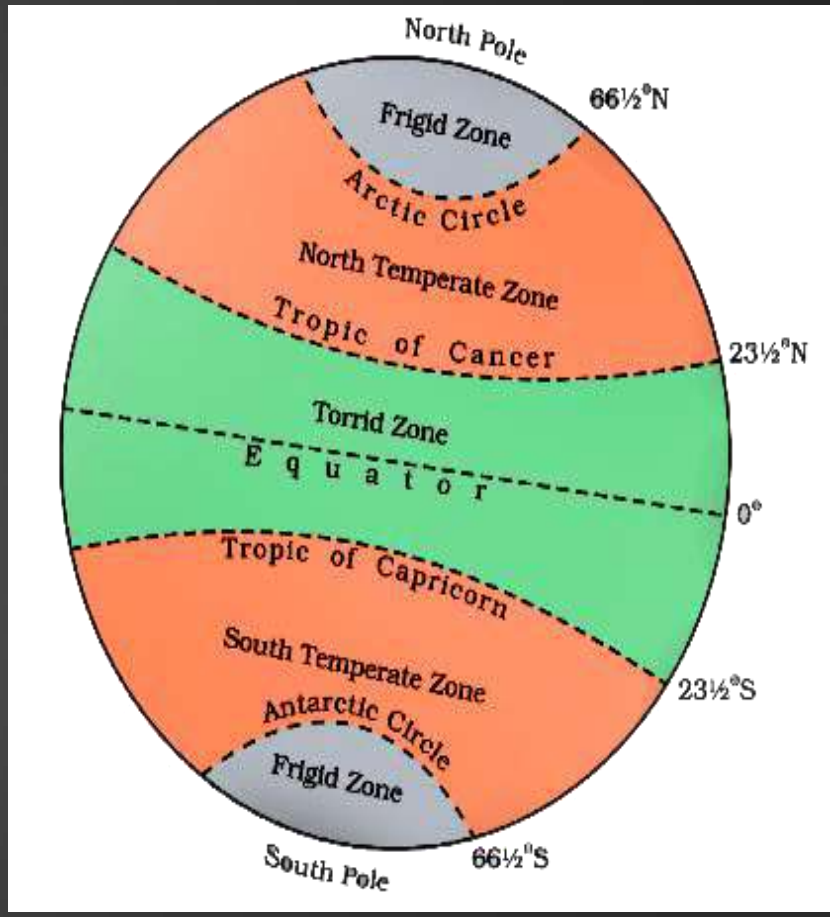
- Torrid means hot. It is the hottest region of the earth.
- It lies between the Tropic of Cancer and Tropic of Capricorn .
- The mid-day sun is exactly overhead at least once a year on all latitudes.

Temperate Zone –

- It lies between the Tropic of Cancer and Arctic Circle in the Northern Hemisphere and between the Tropic of Capricorn and Antarctic Circle in the Southern Hemisphere.
- The mid-day sun never shines overhead on any latitude of this region. It experiences slanting rays of the sun through out the year.
- These regions have moderate temperature.

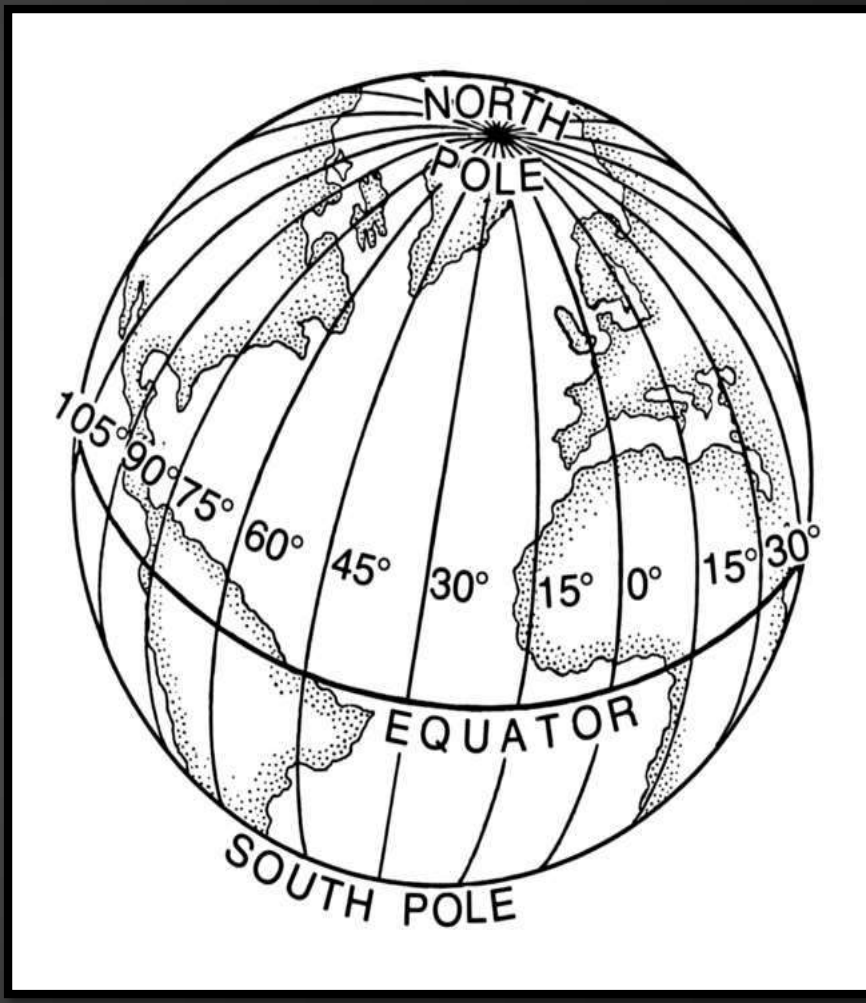
Frigid Zone –

- This zone lies between the Arctic Circle and the North Pole in the Northern Hemisphere and between the Antarctic Circle and the South Pole in the Southern Hemisphere.
- In these areas ,the Sun does not rise much above the horizon and the Sun's rays are very slanting ,so they are very cold.
- These are the coldest region of the earth's surface.



LONGITUDES

- The **longitudes** are the imaginary semi-circular lines running from the North Pole to the South Pole. These are also called the **meridians of longitude.**
- The distances between any two meridians is measured in degrees. Each degree is further divided into minutes, and minutes into seconds.
- There are 360°of Meridians of Longitude; 180° in the east and 180° in the west. The longitudes are semi-circles.
- They are equal in length but not parallel.
- The distance between any two meridians of longitudes is not the same. It decreases steadily pole wards and ultimately becomes zero a the poles where all the meridians meet.
- The Prime Meridian divides the earth into two equal halves- the Eastern Hemisphere and the Southern Hemisphere.
- 180° East and 180° West meridians of longitudes are on the same line.



LONGITUDE AND TIME

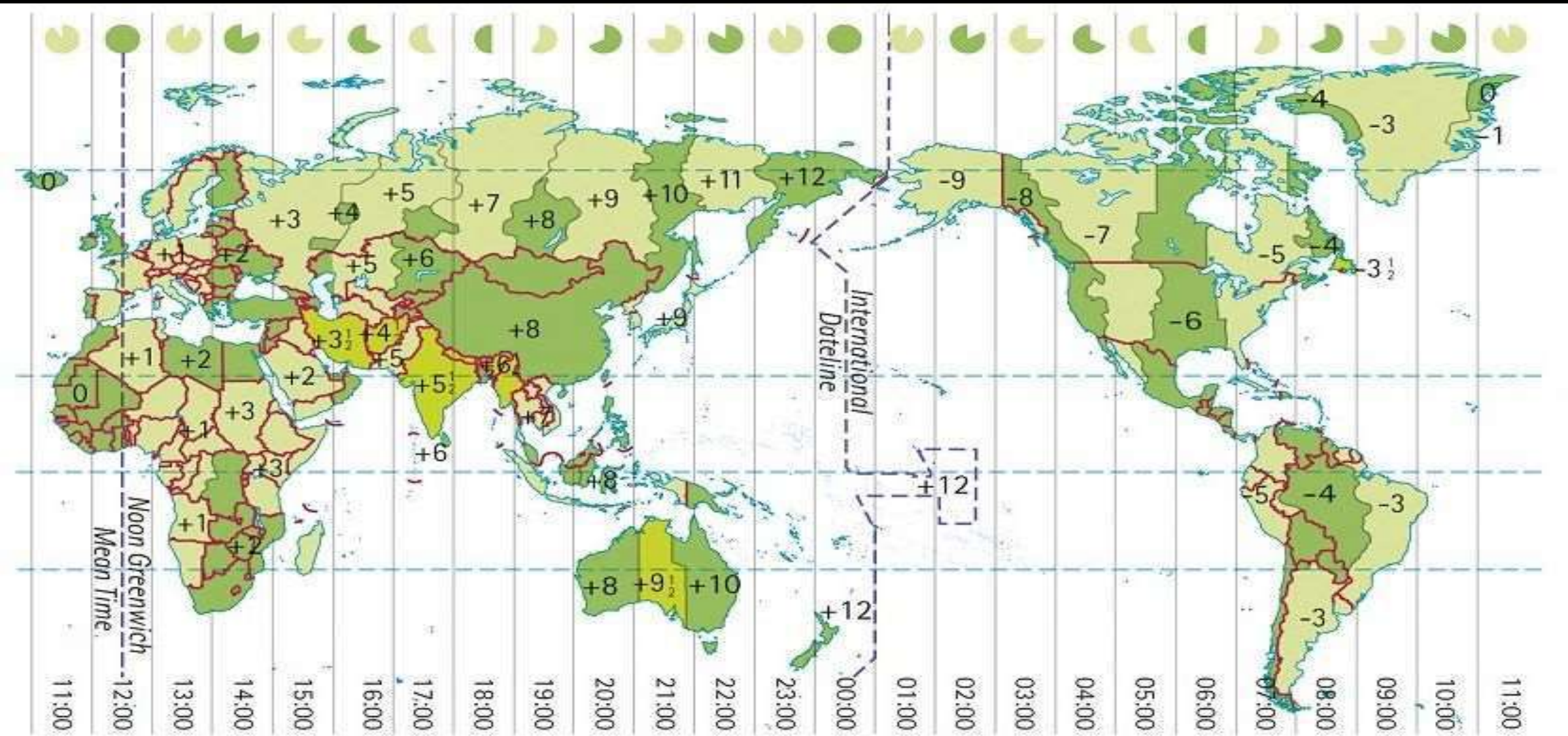
• The Sun is the best time-keeper throughout the world. So, time is measured on the basis of the relationship between the Sun and the movement of the earth. Since the earth takes 24 hours to complete one rotation ,it passes through 15° in one hour or 1° in 4 minutes. The earth rotates from west to east ,so every15° we go east wards, local time is divided by one hour and if we go west ward, local time is related by 1 hour. In this way, we can conclude that the places of east of the Greenwich Meridians face the sun earlier and gain time where as ,the places lying to the west of the Greenwich Meridian the Sun later and lost time.

Local Time - The places situated on the same longitude will have the same time which is called as local time of the places. Local time is calculated by the shadow cast by the Sun. That is, the shortest at noon and longest at Sunrise and Sunset.

• As the earth keeps rotating, the places at different longitudes will have different time. The earth rotates from west to east. So ,the people in the east will see the sun first. As the earth rotates slowly one after the other meridian passes from near the Sun. It takes 24 hrs to complete one rotation, i.e.; 360° .

- 24 hrs = 360°
- 1 hrs = 360° /24 = 15°

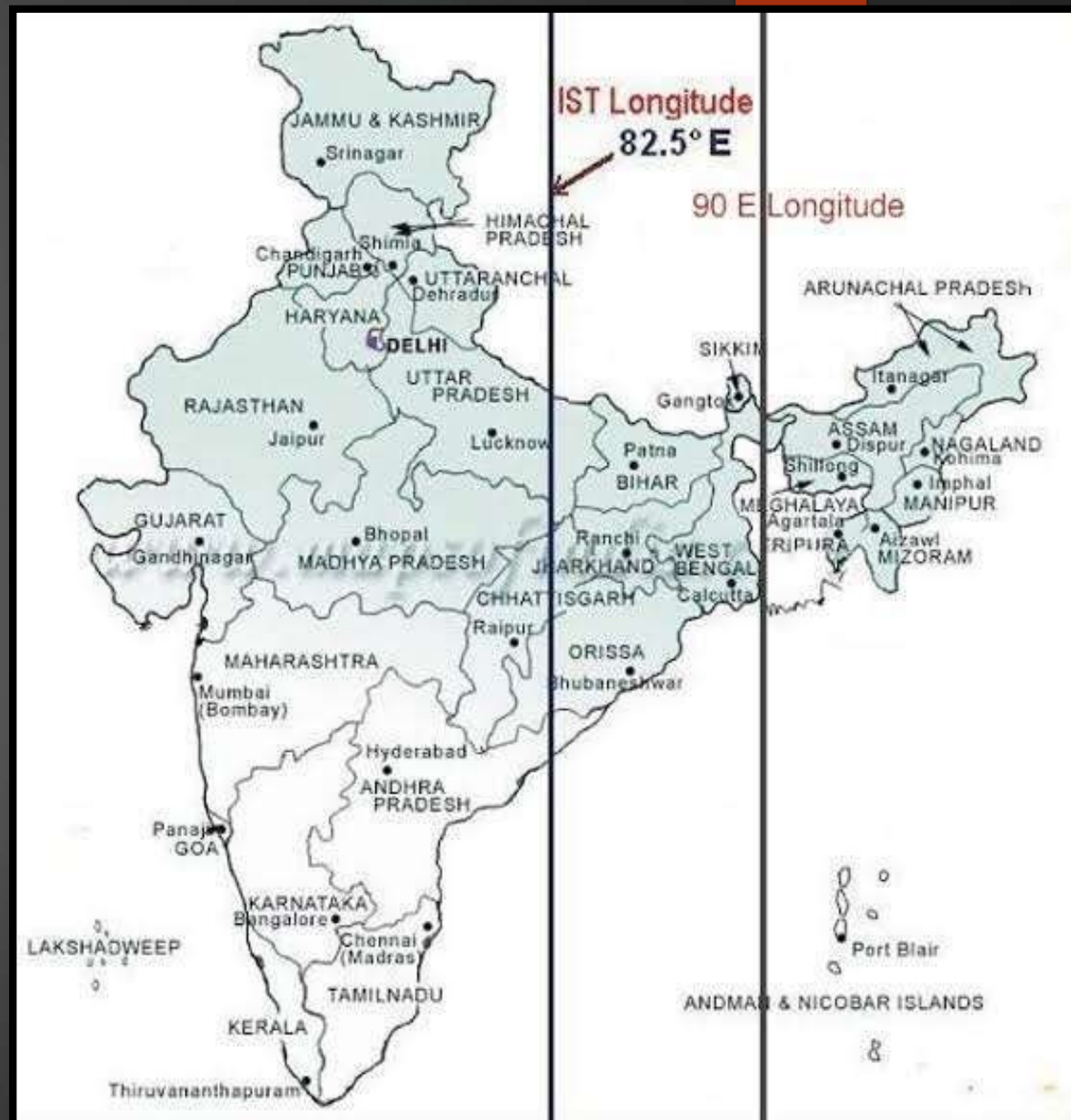
TIME ZONES


Noon Greenwich Mean Time
International Dateline
-12:00
11:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00

INDIAN STANDARD TIME (IST)

India lies between the longitude of 68°7'E and 97°25'E longitudes. There are 29 longitudes that lie between the
East and the west .
In India, the longitude of 82½° E or 82° 30'E is passing through Mirzapur near Allahabad is taken as standard meridian and the local time that prevails on that longitude is taken as the standard time for the whole country. This is called Indian Standard Time or IST.

- It is 5:30 pm in India when it is 12:00 noon in London. This is because IST is the local time of 82° 30'E longitude. This longitude is east of Greenwich near London and 5 hours 30 minutes ahead of Greenwich Mean Time(GMT).
- There are 24 time zones in the world.



DO THE FOLLOWING EXERCISE IN YOUR S.ST. (Geography) NOTEBOOK.

CHOOSE THE CORRECT OPTION

1. Which one of the following items is the true model of the earth?
   (a) Map (b) Globe (c) Apple (d) Ball
2. Net of latitudes and longitudes is also known as
   (a) Grid (b) Sketch (c) Plan (d) None of these
3. The Antarctic Circle is located in the
   (a) Northern Hemisphere (b) Southern Hemisphere
   (c) Eastern Hemisphere (d) Western Hemisphere
4. Which of the following is the largest latitude?
   (a) Tropic of Cancer (b) Equator
   (c) Tropic of Capricorn (d) Arctic Circle
5. Which of the following statements is wrong about the longitudes?
   (a) There are semi-circular lines.
   (b) The Greenwich Meridian is the most significant longitude.
   (c) There are 180° of longitudes.
   (d) All the longitudes converge at the North and the South Pole.

CHOOSE THE CORRECT OPTION

6. How much time does the earth take to pass one longitude?

(a) 4 minutes (b) 6 minutes (c) 7 minutes (d) 10 minutes

7. Which of the following is called the Indian Standard Meridian?

(a) 23½° N (b)66 ½° S (c) 66½° E (d) 82½° E

8. Russia has _____ time zones?

(a) 5 (b) 7 (c) 8 (d) 11

ANSWERS

1. (b) 2. (a) 3. (b) 4. (b) 5. (c) 6. (a) 7. (d) 8. (d)

VERY SHORT ANSWER TYPE QUESTIONS

1. What is globe?
2. What are parallels of latitudes?
3. What is the latitudinal value of Tropic of Cancer, Tropic of Capricorn and Equator?
4. What do you mean by the Grid system?
5. What are the meridians of longitudes?

ANSWERS

1. A globe is a true model or miniature form of the earth.

2. The parallels of latitudes is the angular distance of a point on the earth's surface measured in degrees from the equator.

3. 23½° N, 23½° S and 0°, respectively.

4. The latitudes and longitudes intersect each other on the globe and form a grid system.

5. The semi circular lines running from the North Pole to the South Pole are called meridians of longitudes.

SHORT ANSWER TYPE QUESTIONS

1. What is the Prime Meridian? Why is it important?
2. What do you know about the Greenwich Meridian?
3. What is IST? Why have we taken one time zone for whole India?
4. Write any two features of latitudes.

ANSWERS

1. The 0° longitude is the Prime Meridian. From this 180° eastwards and 180° westwards are counted.

2. It passes through British Royal Astronomical Observatory, Greenwich. All the time zones are measured from this.

3. IST is the Indian Standard Time. One time zone is taken for whole India to avoid confusion regarding time throughout the country.

4. Each parallel of latitude is a circle. The distance between two consecutive parallels of latitudes is 111km.

LONG ANSWER TYPE QUESTIONS

1. Which term is used for the true shape of earth? Discuss its three disadvantages.
2. Give a brief account of heat zones of the earth.
3. Differentiate between the Torrid and Frigid zones.
4. Why is there a time difference of about 5 hours between India and London?

ANSWERS

1. True shape of earth is called geoid. Three disadvantages of globe are:

(i) It is inconvenient to carry.

(ii) Only part of the earth can be seen at one time.

(iii) It is not helpful in giving directions.

2. There are three heat zones of the earth:

(i) Torrid Zone: It lies between the Tropics of Cancer and Capricorn. It is the hottest zone on earth. The midday sun is exactly overhead at least once a year on all latitudes of this region.

(ii) Temperate Zone: There are two of these. They lie between the Tropic of Cancer and Arctic Circle in the northern hemisphere and between the Tropic of Capricorn and Antarctic Circle in the southern hemisphere. The angle of sunrays goes on decreasing towards the poles. They have moderate temperatures.

ANSWER

(iii) Frigid Zone: They lie between the Arctic Circle and the North Pole in the Northern Hemisphere and between the Antarctic Circle and the South Pole in the southern hemisphere. These are the coldest regions on earth. They barely receive sunlight.

3.

Torrid Zone	*Frigid Zone*
(i) It is the hottest region on earth.	*(i) These are the coldest regions on earth.*
(ii) It lies between the Tropic of Cancer and Tropic of Capricorn in both hemispheres.	*(ii) These lie between the Arctic Circle and the North pole in the Northern Hemisphere and between the Antarctic Circle and the South Pole in the Southern Hemisphere.*
(iii) The midday sun is directly overhead at least once a year in every latitude in this region.	*(iii) The sun doesn't rise much above the horizon.*

4. There is a time of 4 minutes between two consecutive longitudes. There are 82 and ½ longitudes between Greenwich Meridian and Indian Standard Meridian. So by calculation 82.5 x 4 = 330 minutes, that is equal to 5 hours and 30 minutes. Therefore, there is a time difference of about 5 hours between India and London.

STATE TRUE OR FALSE

1. The globe is a flat representation of the earth.
2. 66½° N latitude is also known as Arctic circle.
3. Temperate zone is the hottest place of the earth.
4. U.S.A. has 5 time zones.
5. The Greenwich Meridian is the 0° longitude.

ANSWERS

1. False *2. True* *3. False* *4. True* *5. True*

I. DRAW A COLOURED DIAGRAM OF THE GLOBE.

II. DRAW A DIAGRAM OF IMPORTANT PARALLELS OF LATITUDES.

III. DRAW A COLOURED DIAGRAM SHOWING VARIOUS HEAT ZONES OF THE EARTH.

CLICK THIS VIDEO LINK TO UNDERSTAND THIS TOPIC CLEARLY

https://youtu.be/6vbOr13Zb9I

NOTE: If you are unable to open the given link on your mobile phone, kindly copy the link to Google Chrome, Internet Explorer, Mozilla Firefox or any other browser.

The King and The Tree-Goddess

English Class-VI

Introduction:

This story by 'Ruskin Bond' revolves around a king who lives in the Himalayas. He desired to build up such a grand palace that no one had ever seen before. He ordered the royal wood-cutters to cut down the tallest trees of the area. The villagers, repugnant to this idea tried explaining him about the sacracy of the trees.

Let's find of if the king really dropped his idea and if he did then Why and How?

Summary:

- A king living in the Himalayan foothills wanted to build a beautiful palace for himself with the wood of the deodar tree which is usually used to build temples.
- After searching a lot, the king's men found a splendid deodar tree.
- The villagers were against the cutting down of this Deodar tree since they used to treat and worship the tree like a goddess. They believed that a goddess resides in that tree.
- Irony, the king's men too were worshippers of that tree and they paid homage to the goddess residing in that tree and also informed her about the king's plan.

- **The king meanwhile made continuous efforts to make sure that the tree gets uprooted.**
- **The goddess reciprocated calmly to this issue.**
- **The very same fall, she spoke to the king in his dreams and tried persuading him to understand the importance of trees. Not just the tree of Deodar but each and every other tree.**
- **Fortunately, this step was successful and the king realized his fault and at the same time dropped his idea of a grand palace made of Deodar wood and instead decided using stone column.**

ANSWERS

READING COMPREHENSION

(the following answers are just underlining the main points for general help sake and you have to create your own answers by reading the chapter)

A. tick the correct answer.

1.was God –f**earing**

2. failed to carry out the king's orders.

3. not strong enough for making a tall pillar.

4. cared about the younger trees.

B. 1.

(a)The king wanted the listeners to try elephants to drag tree.

(b) The elephants were brought from plains.

(c) I think hills were too steep and the paths were too narrow .Therefore they had to return to the valley.

B.2.

(a) The king was speaking to Tree – Goddess.

(b) He is referring to pain for long time .

(c) The reason was plain, because dozens of young deodars have sprung from it ,if it fell in one stroke, it's weight would've crushed all the little plants around.

(d) The Goddess wanted the Deodar to be cut-off in three parts. This would've made her suffer long with pain.

Answer the following questions :

1. Give a short summary of the chapter in your own words in 100-150 words.
2. Describe the attitude of the: a) Goddess b)King
3. Present an instance from the story from where you got to know about the proud nature of the king.
4. Describe the problems the ministers were facing in bringing the tree to the king.
5. What were the requests of the Goddess to the King?
6. Why do you think the king changed his mind about building the palace. Do you appreciate his idea? Give reasons.

- For better understanding of the chapter kindly follow the conferred link:https://www.youtube.com/watch?v=GSojMcM9BJE&t=15s

हिन्दी

कक्षा - VI

पाठ – 3
ओलंपिक्स

लिंक अवश्य देखें

https://youtu.be/W754eW5LGjU

ओलंपिक्स

पाठ का सारांश

अंतरराष्ट्रीय स्तर पर होने वाली खेल प्रतियोगिता "ओलंपिक्स " का वर्णन करते हुए इस पाठ में यह बताया गया है कि ओलंपिक खेलों की शुरुआत सर्वप्रथम यूनान के एथेंस शहर में हुई थी । इन खेलों में हजारों एथलीट कई प्रकार की खेल प्रतियोगिताओं में भाग लेते हैं । ओलंपिक समिति की कार्यकारिणी इन खेलों का आयोजन करती है ।यह खेल चार साल के अंतराल पर आयोजित किए जाते हैं ।

ओलंपिक्स

पाठ का सारांश

ध्वज सफ़ेद रंग का सिल्क का बना ध्वज है जिस पर पाँच चक्र बने हैं । ये पाँच चक्र विश्व के पाँच महाद्वीपों का प्रतिनिधित्व करते हैं । ओलंपिक मशाल को खेल शुरु होने के कुछ दिन पहले यूनान के " हेरा मंदिर " के सामने सूर्य की किरणों से प्रज्वलित किया जाता है । ओलंपिक खेलों में रजत , स्वर्ण , तथा काँस्य तीन प्रकार के पदक दिए जाते हैं । पिछले ओलंपिक ब्राजील के रियो डी जेनेरिया में आयोजित किए गए थे भारत ने इन खेलों में भाग लेकर एक रजत (पी वी सिंधु ने) तथा एक काँस्य पदक (साक्षी मलिक ने) प्राप्त किया ।

शब्द -अर्थ

1.प्रतिभागी - भाग लेने वाला
2. उत्साहवर्धन - जोश बढ़ाना
3.अंतरराष्ट्रीय -विभिन्न देशों के बीच
4.समारोह - उत्सव
5. स्पर्धा – मुकाबला
6. भागीदारी - भाग लेना
7.प्रतिनिधित्व - प्रस्तुत होना
8.निष्पक्ष - बिना पक्ष के
9.प्रज्वलित - जलाना
10. रजत परत युक्त - चाँदी की परत

मौखिक

प्रश्न 1. ओलंपिक्स राष्ट्रीय खेल है या अंतरराष्ट्रीय ?
उत्तर 1. ओलंपिक अंतरराष्ट्रीय खेल है ।

प्रश्न 2. ओलंपिक का आयोजन कितने समय के अंतराल पर किया जाता है ?
उत्तर 2 .ओलंपिक का आयोजन चार साल के अंतराल पर किया जाता है ।

प्रश्न 3. 2016 में ओलंपिक कहाँ हुए थे ?
उत्तर 3 . 2016 में ओलंपिक ब्राजील में रियो डी जनेरिया में आयोजित किए गए थे ।

प्रश्न 4. भारत की ओर से 2016 के ओलंपिक खेलों में किस -किस को पदक मिला था ?
उत्तर 4 .भारत की ओर से 2016 के ओलंपिक खेलों में साक्षी मलिक तथा पी. वी . सिंधु को पदक मिला था ।

लिखित

(क) लघु उत्तरीय प्रश्न

प्रश्न 1. ओलंपिक खेलों में लगभग कितने देश भाग लेते हैं ?
उत्तर 1. ओलंपिक खेलों में 200 से ज्यादा देश प्रतिभागी के रूप में भाग लेते हैं ।

प्रश्न 2. ओलंपिक ध्वज के विषय में जानकारी दीजिए ।
उत्तर 2. ओलंपिक ध्वज का उदघाटन 1914 में पेरिस में हुआ था । यह सफ़ेद रंग का ध्वज है । सिल्क के बने इस ध्वज के मध्य ओलंपिक प्रतीक के रूप में पाँच रंगीन चक्र एक दूसरे से मिले हुए दर्शाए गए हैं । ये पाँच चक्र विश्व के पाँच महाद्वीपों का प्रतिनिधित्व करने के साथ ही निष्पक्ष एवं मुकत स्पर्धा के प्रतीक हैं

लिखित

(क) लघु उत्तरीय प्रश्न

प्रश्न 3. ओलंपिक के ध्वज पर कितने चक्र हैं और ये किसका प्रतिनिधित्व करते हैं ?
उत्तर 3. ओलंपिक के ध्वज पर पाँच चक्र हैं जो पाँच महाद्वीपों का प्रतिनिधित्व करते हैं ।

प्रश्न 4. ओलंपिक खेलों के विजेताओं को कितने और कौन - कौन से पदक दिए जाते हैं ?
उत्तर 4. ओलंपिक खेलों के विजेताओं को स्वर्ण , रजत एवं काँस्य तीन प्रकार के पदक दिए जाते हैं ।

दीर्घ उत्तरीय प्रश्न

प्रश्न 1. ओलंपिक खेलों के इतिहास पर प्रकाश डालिए ।
उत्तर 1. ओलंपिक खेलों का आरंभ यूनान के ओलंपिया शहर में 776 बी. सी. में हुआ था । पहली बार यह खेल ग्रीक के देवता ज़्यूस के सम्मान में खेला गया था । बाद में रोम के राजा के आदेश पर कुछ समय के लिए इन खेलों को बंद कर दिया गया था । आधुनिक ओलंपिक का आरंभ यूनान के एथेंस शहर में हुआ था ।

प्रश्न 2. ओलंपिक मशाल का क्या महत्व है ?
उत्तर 2. ओलंपिक मशाल जलाने की प्रथा 1928 ईसवी में एम्सटर्डम में आरंभ हुई थी । सन 1936 में बर्लिन में ओलंपिक मशाल का वर्तमान स्वरूप अपनाया गया । इस मशाल को खेल शुरू होने से कुछ दिन पहले यूनान के “हेरा मंदिर” के सामने सूर्य की किरणों से प्रज्वलित किया जाता है और फिर वहाँ से पूरे सम्मान के साथ आयोजन स्थल तक विभिन्न खिलाड़ियों के द्वारा लाया जाता है ।

दीर्घ उत्तरीय प्रश्न

प्रश्न 3. ओलंपिक खेलों के मार्च - पास्ट में विभिन्न देशों के खिलाड़ियों का क्या स्वरूप होता है ?
उत्तर 3. ओलंपिक के उदघाटन समारोह में मार्च -मास्ट में यूनान की टीम सबसे आगे एवं मेज़बान टीम सबसे पीछे रहती है । बाकी देशों की टीमों का स्थान अंग्रेज़ी वर्णमाला के अक्षरों के क्रम में होता है ।

प्रश्न 4. 2016 में रियो डी जेनेरिया में हुए ओलंपिक खेलों में भारत का प्रदर्शन कैसा था ?
उत्तर 4. 2016 में रियो डी जेनेरिया में हुए ओलंपिक खेलों में भारत की ओर से कुल 124 खिलाड़ियों ने 30 खेलों मे भाग लिया था । पुरुषों की संख्या 55 तथा महिलाएँ 45 थीं । भारत को कुल दो पदक मिले । साक्षी मलिक ने महिलाओं की 58 किलोग्राम की श्रेणी में काँस्य पदक तथा पी. वी. सिंधु ने बैडमिंटन की महिलाओं की एकल स्पर्धा में रजत पदक प्राप्त किया था ।

नीचे लिखे विशेष्यों के लिए उचित विशेषण लिखिए -

1.(योग्य) खिलाड़ी 2. (स्वर्ण) पदक

3. (कठिन) स्पर्धा 4. (सरल) प्रतियोगिता

(ख) निम्नलिखित वाक्यों में विशेषण शब्दों को रेखांकित करके उनका भेद लिखिए -

1. ओलंपिक खेल (चार साल) के अंतराल पर आयोजित किए जाते हैं ।

उत्तर निश्चित संख्यावाचक विशेषण

2. पी. वी. सिंधु को (रजत) पदक मिला था ।

उत्तर गुणवाचक विशेषण

3. (वे) खिलाड़ी प्रतियोगिता में भाग लेने आए थे ।

उत्तर सार्वनामिक विशेषण

(60 किलोग्राम) की श्रेणी की मुक्केबाजी की प्रतियोगिता रखी गई ।

उत्तर निश्चित परिमाणवाचक विशेषण

(ग) नीचे लिखे प्रत्ययों से दो - दो शब्द बनाइए -

1. ईय - भारतीय , मानवीय 2. ई - अमीरी . सफ़ेदी
3. इमा - महिमा , गरिमा 4. इत - आनंदित , प्रतिष्ठित

(ग) संकेत गद्यांश को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के लिए उत्तर का सही विकल्प चुनिए -

1. रियो डी जेनेरिया में ओलंपिक कब हुए ?

उत्तर 2016 में

2. रियो ओलंपिक में कितनी खेल प्रतियोगिताएँ थीं ?

उत्तर 28

3. रियो ओलंपिक की समाप्ति कब हुई थी ?

उत्तर 22 अगस्त

4. पी. वी. सिंधु को कौन सा पदक मिला था ?

उत्तर रजत पदक

Class VI

Computer

To understand the topics more, click on the link below :
https://youtu.be/_XDSmFtbgNk

CONTINUATION OF CHAPTER – 2
MORE ON MS-WINDOWS

REVISION

- Windows 7 is an Operating System Software.
- A window has many components like address bar , menu control bar , back & forward button , scroll bar , status bar etc.
- We can move a window from one place to another.
- We can increase or decrease the size of a window.
- To display window side by side , open two or

CONTROL PANEL

- It is a component of Microsoft Windows that provides the ability to view and change system settings.
- It consists of a set of applets that include adding or removing

  hardware and software, controlling

  user accounts ,changing

  accessibility options,

  and accessing

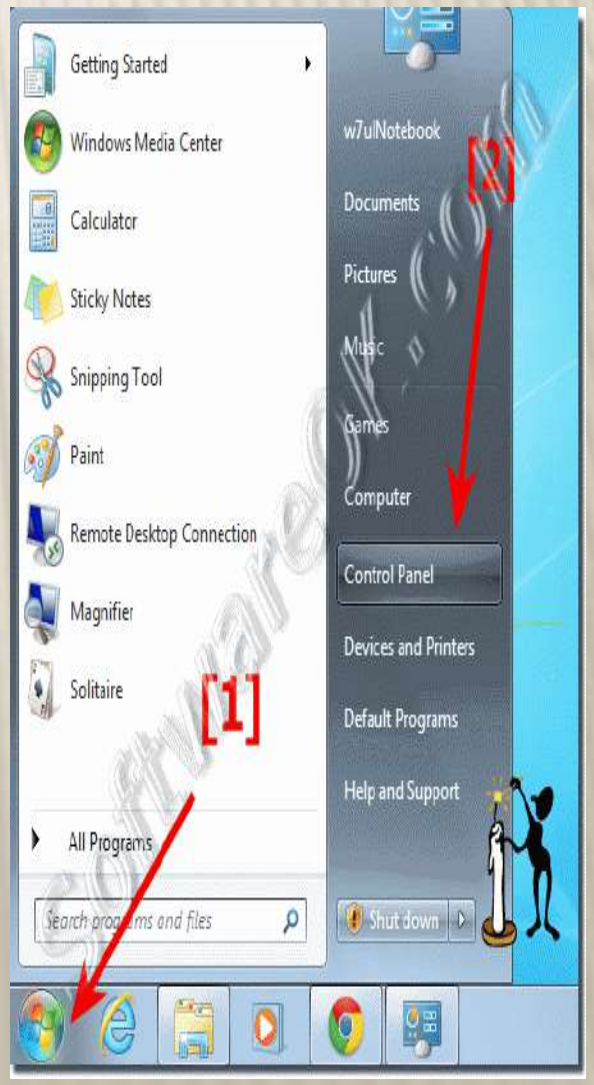
  network settings.

OPEN CONTROL PANEL

To open the Control Panel window, follow the given steps:

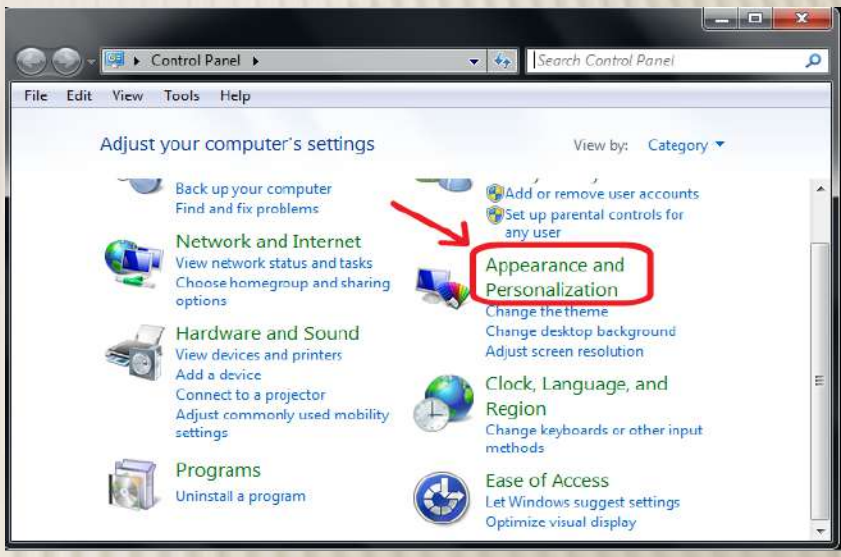
- Click the start button.
- Click the Control Panel option.

A window will appear on the screen.



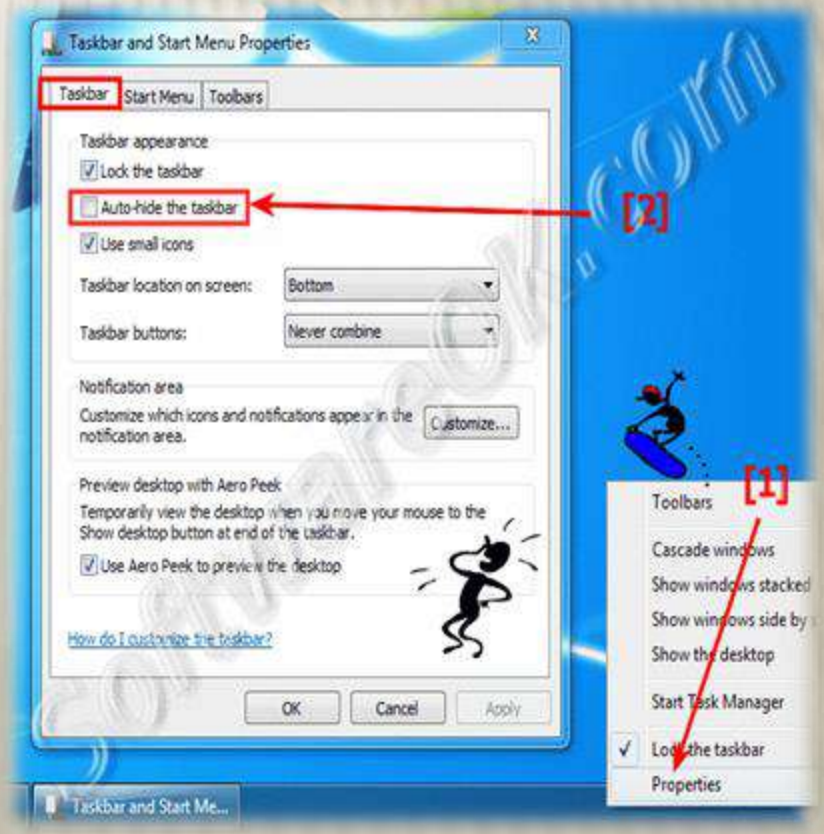
APPEARANCE OF WINDOWS

- Open the Control Panel.
- Click the Appearance and Personalization.
- Click the Personalization option.
- Choose any theme and click to apply it on your computer.



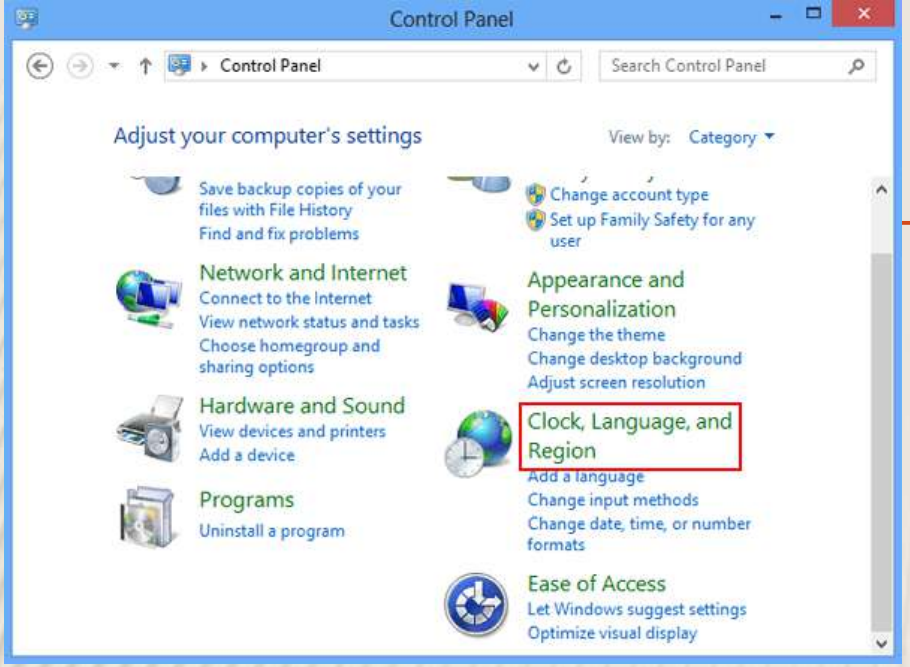
CUSTOMIZING THE TASKBAR

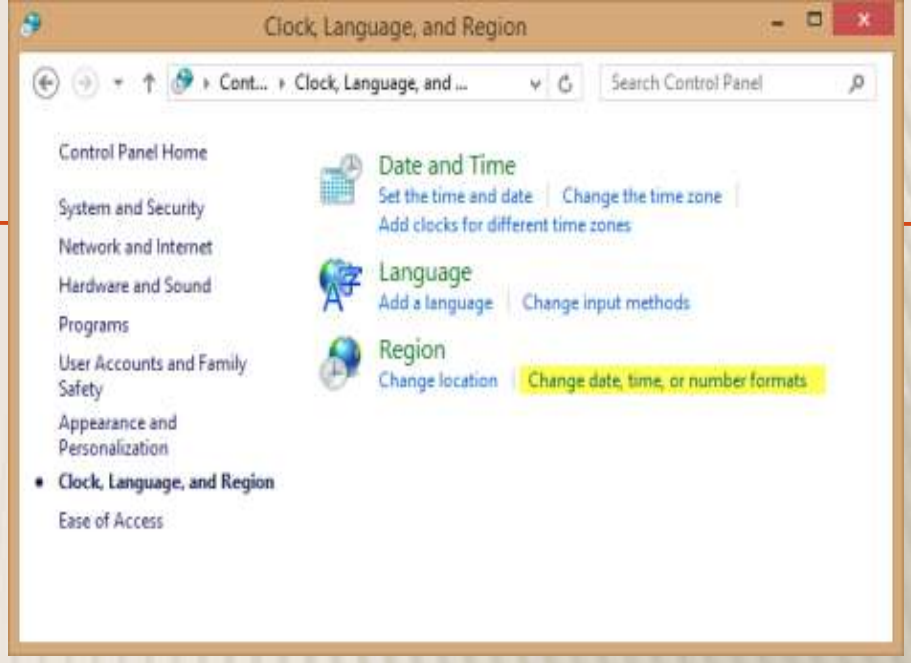
- Open Control Panel.
- Click the Appearance and Personalization.
- Click the Taskbar and Start Menu option.
- Click the required options in the Taskbar and Start Menu properties dialog box.

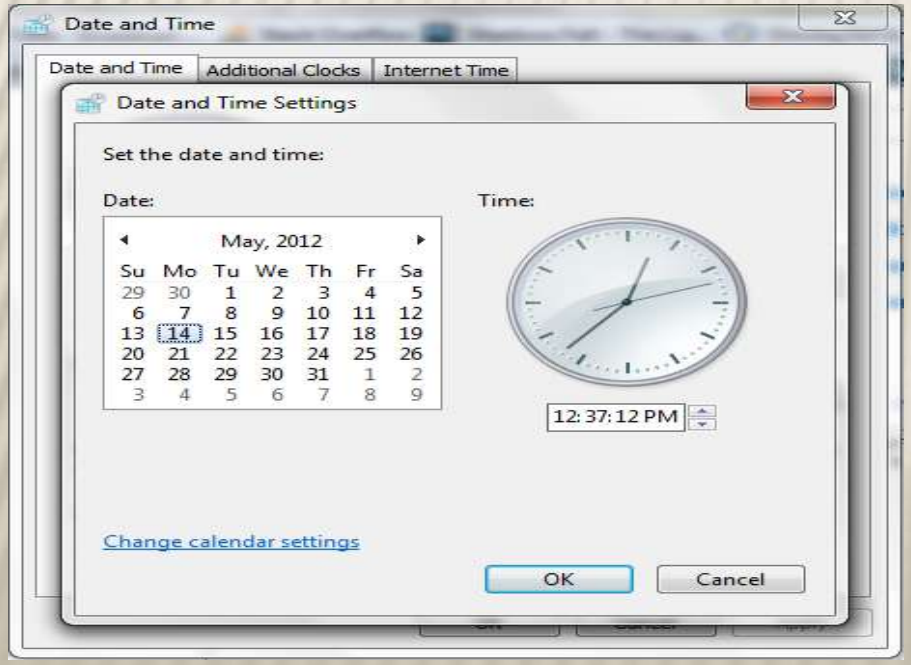


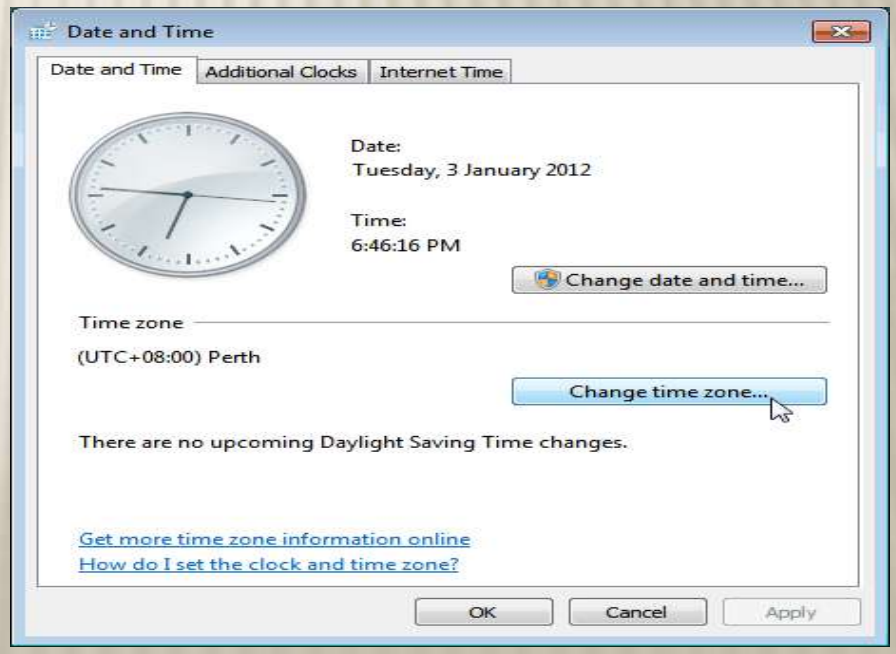
CONFIGURING DATE AND TIME

- Open the Control Panel.
- Click the Clock, Language and Region.
- Click the Date and time option.
- Click change date and time button.
- Now, change the date and time of your screen.
- Click Ok button on the Date and Time Settings dialog box
- Click Ok button on the Date and Time dialog box.


Control Panel
Control Panel
Search Control Panel
Adjust your computer's settings
View by: Category
Save backup copies of your files with File History
Find and fix problems
Network and Internet
Connect to the Internet
View network status and tasks
Choose homegroup and sharing options
Hardware and Sound
View devices and printers
Add a device
Programs
Uninstall a program
Change account type
Set up Family Safety for any user
Appearance and Personalization
Change the theme
Change desktop background
Adjust screen resolution
Clock, Language, and Region
Add a language
Change input methods
Change date, time, or number formats
Ease of Access
Let Windows suggest settings
Optimize visual display


Clock, Language, and Region
Cont... › Clock, Language, and ...
Search Control Panel
Control Panel Home
System and Security
Network and Internet
Hardware and Sound
Programs
User Accounts and Family Safety
Appearance and Personalization
Clock, Language, and Region
Ease of Access
Date and Time
Set the time and date
Change the time zone
Add clocks for different time zones
Language
Add a language
Change input methods
Region
Change location
Change date, time, or number formats


Date and Time
Date and Time
Additional Clocks
Internet Time
Date and Time Settings
Set the date and time:
Date:
May, 2012
Su Mo Tu We Th Fr Sa
29 30 1 2 3 4 5
6 7 8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31 1 2
3 4 5 6 7 8 9
Time:
12:37:12 PM
Change calendar settings
OK
Cancel


Date and Time
Date and Time
Additional Clocks
Internet Time
Date:
Tuesday, 3 January 2012
Time:
6:46:16 PM
Change date and time...
Time zone
(UTC+08:00) Perth
Change time zone...
There are no upcoming Daylight Saving Time changes.
Get more time zone information online
How do I set the clock and time zone?
OK
Cancel
Apply

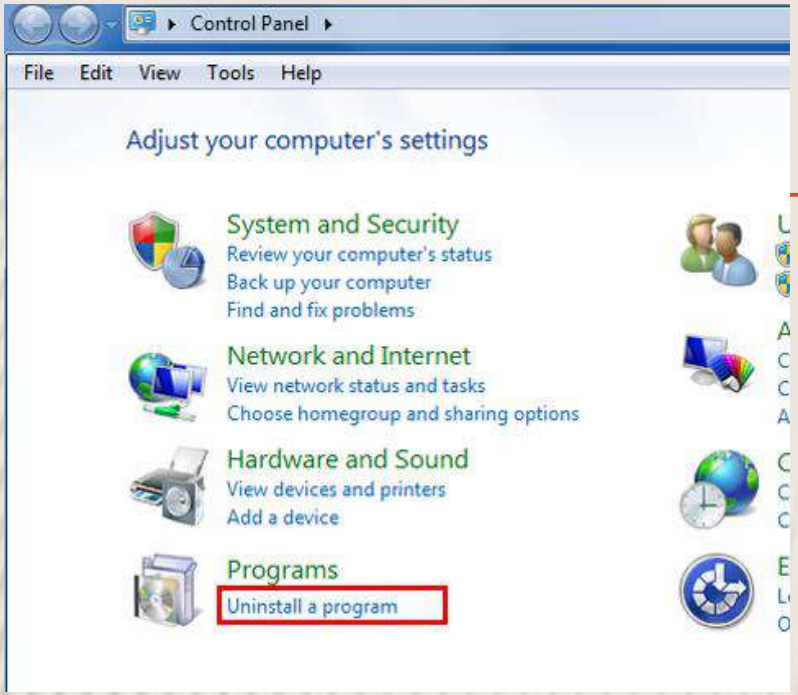
MOUSE FEATURES AND SETTINGS

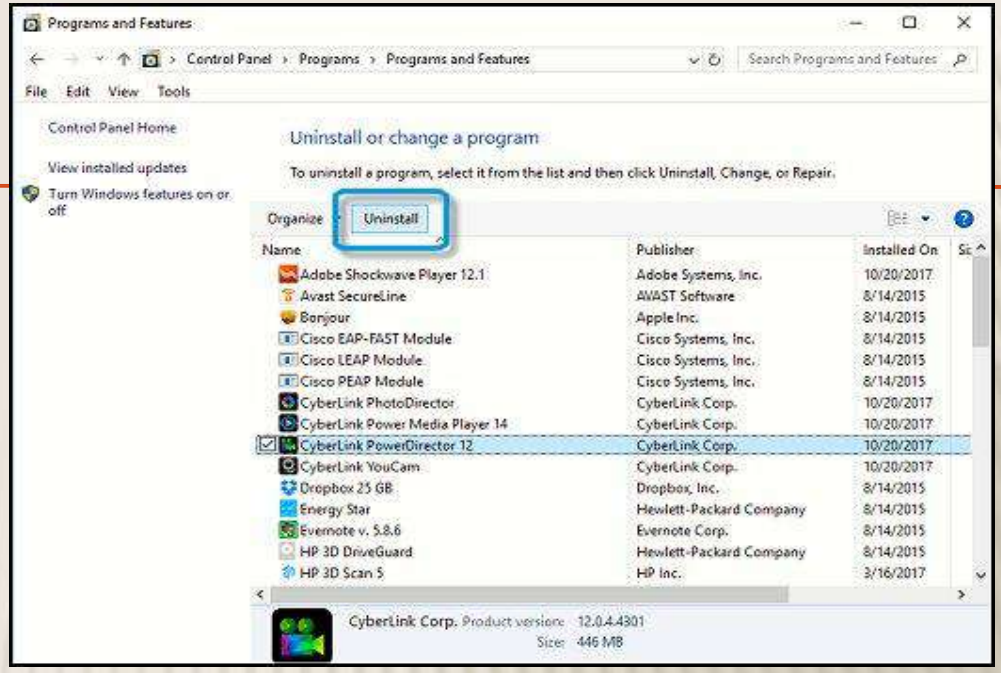
USING THE MOUSE :

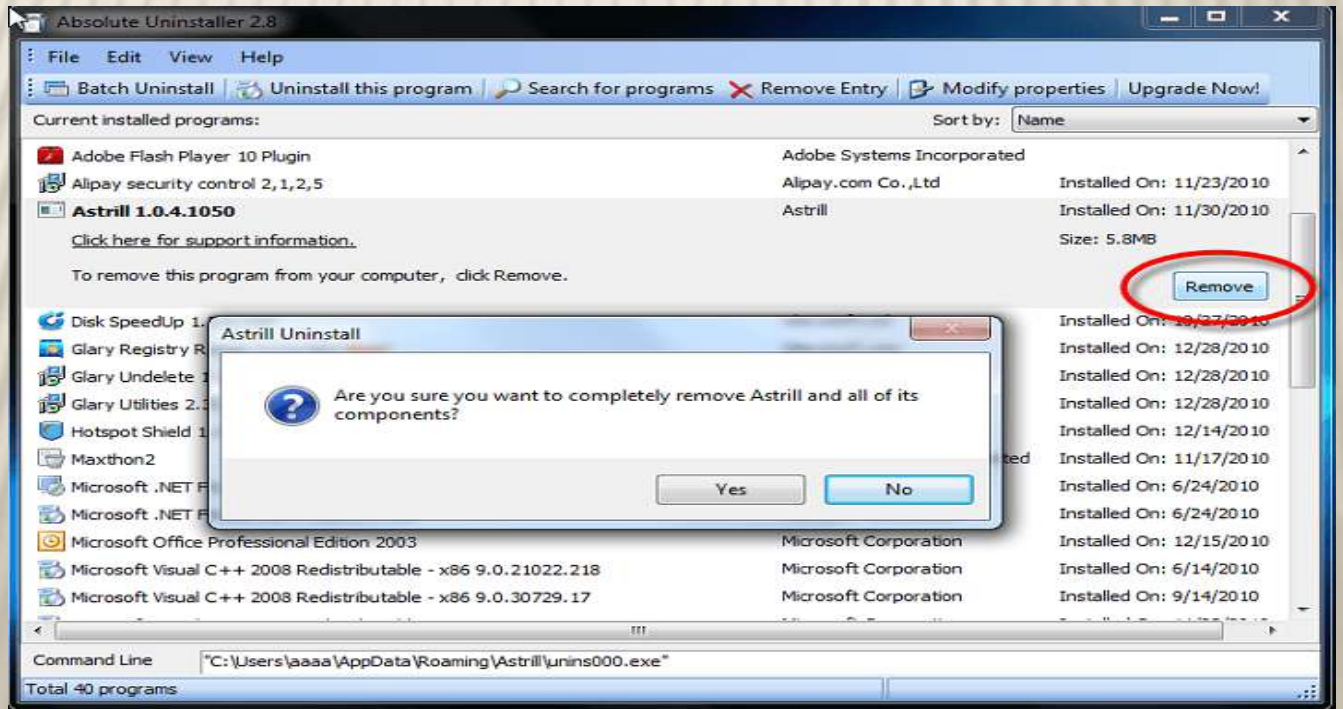
- The mouse is a hand held device used to work within the Windows environment. The following list describes the basic mouse functions:
- Point to and select objects on the screen.
- Select and/or move data or files by dragging and dropping.
- Start programs and shortcuts , or open files.
- Scroll applications windows or web pages by clicking and holding a scroll bar, or by moving the

REMOVING A SOFTWARE

- Open the Control Panel.
- Click the Programs.
- Click the Uninstall a program from the Programs and Features option.
- Select the software you want to uninstall or remove.
- Click the Uninstall button
- Click Yes button.
- After the completion of the removing process, click ok button.


Control Panel
File Edit View Tools Help
Adjust your computer's settings
System and Security
Review your computer's status
Back up your computer
Find and fix problems
Network and Internet
View network status and tasks
Choose homegroup and sharing options
Hardware and Sound
View devices and printers
Add a device
Programs
Uninstall a program


Programs and Features
Control Panel › Programs › Programs and Features
Search Programs and Features
File Edit View Tools
Control Panel Home
View installed updates
Turn Windows features on or off
Uninstall or change a program
To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.
Organize
Uninstall
Name
Publisher
Installed On
Adobe Shockwave Player 12.1
Adobe Systems, Inc.
10/20/2017
Avast SecureLine
AVAST Software
8/14/2015
Bonjour
Apple Inc.
8/14/2015
Cisco EAP-FAST Module
Cisco Systems, Inc.
8/14/2015
Cisco LEAP Module
Cisco Systems, Inc.
8/14/2015
Cisco PEAP Module
Cisco Systems, Inc.
8/14/2015
CyberLink PhotoDirector
CyberLink Corp.
10/20/2017
CyberLink Power Media Player 14
CyberLink Corp.
10/20/2017
CyberLink PowerDirector 12
CyberLink Corp.
10/20/2017
CyberLink YouCam
CyberLink Corp.
10/20/2017
Dropbox 25 GB
Dropbox, Inc.
8/14/2015
Energy Star
Hewlett-Packard Company
8/14/2015
Evernote v. 5.8.6
Evernote Corp.
8/14/2015
HP 3D DriveGuard
Hewlett-Packard Company
8/14/2015
HP 3D Scan 5
HP Inc.
3/16/2017
CyberLink Corp. Product version: 12.0.4.4301
Size: 446 MB


Absolute Uninstaller 2.8
File Edit View Help
Batch Uninstall
Uninstall this program
Search for programs
Remove Entry
Modify properties
Upgrade Now!
Current installed programs:
Sort by: Name
Adobe Flash Player 10 Plugin
Adobe Systems Incorporated
Alipay security control 2,1,2,5
Alipay.com Co.,Ltd
Installed On: 11/23/2010
Astrill 1.0.4.1050
Astrill
Installed On: 11/30/2010
Click here for support information.
Size: 5.8MB
To remove this program from your computer, click Remove.
Remove
Disk SpeedUp 1.
Glary Registry R
Glary Undelete 1
Glary Utilities 2.3
Hotspot Shield 1
Maxthon2
Microsoft .NET F
Microsoft .NET F
Microsoft Office Professional Edition 2003
Microsoft Corporation
Installed On: 12/15/2010
Microsoft Visual C++ 2008 Redistributable - x86 9.0.21022.218
Microsoft Corporation
Installed On: 6/14/2010
Microsoft Visual C++ 2008 Redistributable - x86 9.0.30729.17
Microsoft Corporation
Installed On: 9/14/2010
Astrill Uninstall
Are you sure you want to completely remove Astrill and all of its components?
Yes
No
Command Line
"C:\Users\aaaa\AppData\Roaming\Astrill\unins000.exe"
Total 40 programs

CHANGING THE APPEARANCE OF A TABLET

- Tap  icon at the bottom of the screen.
- Tap System settings option. A new screen appears.
- Tap the Display option under Device section. The various display options will appear on the right of the screen.
- Now, change the settings like brightness, theme, wallpaper, font size etc.

EXERCISE

- What is a Control Panel?
- Write the steps to change the date and time of your system?
- Write the steps to uninstall a software?
- Name the button in Mouse Properties dialog box to

  change the replaced pointer to its default shape.

WORKSHEET

- Give answer in one word:

1. The default view of the Control panel.
2. Feature by which all the opened Windows become transparent.
3. It represents the shape of the mouse pointer.
4. Speed means how quick you are pressing the mouse twice.
5. Category of Control panel which is used to uninstall a software from the computer.

- Name the three views present in the Control Panel.
- Define : (refer page no-21)

1. Aero peek
2. Auto-hide

Read lesson 2 twice

For more query, email:
mailmeaarti4@gmail.com

संस्कृत
कक्षा – 6
अर्ध वार्षिक परीक्षा पाठ्यक्रम

- ✓ पाठ 3. प्रथम: पुरुष: (त्रिषु लिंगेषु)
- ✓ पाठ 4. मध्यम: पुरुष: (उभयलिंगयो:)
- ✓ पाठ 5. उत्तम: पुरुष: (उभयलिंगयो:)
- ✓ पाठ 6. अव्यय पदानि
- ✓ पाठ 7. कर्ता कारक:- प्रथमा विभक्ति:
- ✓ * धातु रूपाणि

पाठ 3

प्रथम:पुरुष: (त्रिषु लिंगेषु)

'संस्कृत शब्द परिचय' पाठ में आप सभी ने संस्कृत नाम शब्दों को तीनों लिंगों और तीनों वचनों में कैसे प्रयोग करते हैं ये जान चुके हैं। अब हम इस पाठ में सर्वनाम शब्द के बारे में जानेंगें और छोटे छोटे वाक्य बनाना भी सीखेंगें। एक छोटा वाक्य बनाने के लिए कम से कम एक कर्ता और क्रिया पद चाहिए। जैसे –

बालक पढ़ रहा है । इस वाक्य को संस्कृत में - " बालक: पठति "।

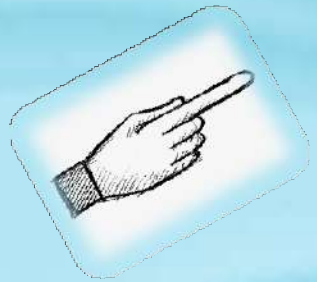
(कर्ता) (क्रिया) (कर्त्ता) (क्रिया)

इस वाक्य को सर्वनाम शब्द में –

स: पठति। (वह पढ़ता है)

(कर्ता) (क्रिया)

क: बालक: ? (कौन बालक ?)



एष: बालक:(यह बालक)

स: बालक: (वह बालक)

सर्वनाम शब्द तीनों लिंगों में तीनों वचनों में –

<u>पुल्लिंग सर्वनाम शब्द</u>

शब्द	अर्थ	एकवचन	द्विवचन	बहुवचन
तत्	वह	स: (वह)	तौ (वे दो)	ते (वे सब)
एतत्	यह	एष: (यह)	एतौ (ये दो)	एते (ये सब)
किम्	कौन	क: (कौन)	कौ (कौन दो)	के (कौन सब)

स्त्रीलिंग सर्वनाम शब्द –

शब्द	अर्थ	एकवचन	द्विवचन	बहुवचन
तत्	वह	सा (वह)	ते (वे दो)	ता: (वे सब)
एतत्	यह	एषा (यह)	एते (ये दो)	एता: (ये सब)
किम्	कौन	का (कौन)	के (कौन दो)	का: (कौन सब)

नपुंसकलिंग सर्वनाम शब्द –

शब्द	अर्थ	एकवचन	द्विवचन	बहुवचन
तत्	वह	तत् (वह)	ते (वे दो)	तानि (वे सब)
एतत्	यह	एतत् (यह)	एते (ये दो)	एतानि (ये सब)
किम्	क्या	किम् (क्या)	के (क्या दो)	कानि (क्या सब)

प्रश्न निर्माण के लिए 'किम्' शब्द को विविध रूपों में प्रयोग करते हैं।

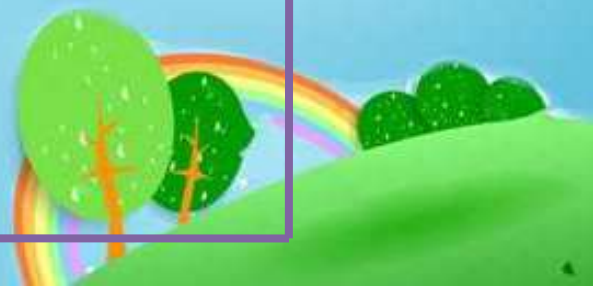
अस्मत् शब्द (तीनों लिंगों में समान होते हैं।)

शब्द	एकवचन	द्विवचन	बहुवचन	
युष्मत्	त्वम् (तुम)	युवाम् (तुम दो)	यूयम् (तुम सब)	मध्यम: पुरुष:
अस्मत्	अहम् (मैं)	आवाम् (हम दो)	वयम् (हम सब)	उत्तम: पुरुष:

(इन दोनों के बारे में आगे आने वाले पाठों में पढ़ेंगें।)

अब हम वाक्य बनाने के लिए कुछ नियमों को समझेंगें –उदाहरण :

कर्ता			क्रिया		
एकवचन	*द्विवचन*	*बहुवचन*	*एकवचन*	*द्विवचन*	*बहुवचन*
बालक:	बालकौ	बालका:	पठति	पठत:	पठन्ति
स:	तौ	ते			



बालक: पठति। (बालक पढ़ता है।)

स: पठति । (वह पढ़ता है।)

बालकौ पठत:। (दो बालक पढ़ते हैं।)

तौ पठत:। (वे दो पढ़ते हैं।)

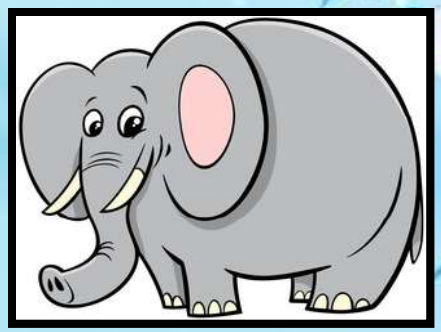
बालका: पठन्ति। (अनेक बालक पढ़ते हैं।)

ते पठन्ति। (वे सब पढ़ते हैं।)

- कर्ता शब्द एकवचन के साथ क्रिया शब्द एकवचन ,
- कर्ता शब्द द्विवचन के साथ क्रिया शब्द द्विवचन तथा
- कर्ता शब्द बहुवचन के साथ क्रिया शब्द बहुवचन का प्रयोग किया जाता है ।

प्रथम पुरुष – एकवचन

गज: चलति। हाथी चलता है ।
स: चलति । वह चलता है ।
विनीत: नमति । विनीत नमस्कार करता है ।
रीना हसति । रीना हँसती है ।
सा हसति । वह हँसती है ।



बालक: गच्छति । बालक जाता है ।
स: गच्छति । वह जाता है ।

पत्रम् पतति। पत्ता गिरता है ।
तत् पतति। वह गिरता है ।

श्वेता पश्यति। श्वेता देखती है।
सा पश्यति । वह देखती है ।

मयूरः नृत्यति। मोर नाचता है।
सः नृत्यति। वह नाचता है।

सिंहः गर्जति। शेर गरजता है ।
सः गर्जति। वह गरजता है।

प्रथम पुरुष – द्विवचन

बालकौ क्रीडतः। दो बालक खेलते हैं ।
तौ क्रीडतः। वे दोनों खेलते हैं ।

कन्ये पठतः। दो कन्याएँ पढ़ती हैं ।
ते पठतः। वे दो पढ़ती हैं ।

बालिके हसतः। दो बालिकाएँ हँसती हैं ।
बालकौ आगच्छतः। दो बालक आते हैं ।
रामः श्यामः च नमतः। राम और श्याम नमस्कार करते हैं ।
तौ नमतः। वे दोनों नमस्कार करते हैं ।

प्रिया प्रियंका च भ्रमत:। प्रिया और प्रियंका घूँमती हैं ।
ते भ्रमत: । वे दोनों घूँमती हैं ।

शुकौ वदत:। दो तोते बोलते हैं।
तौ वदत:। वे दोनों बोलते हैं ।

पुष्पाणि विकसन्ति । अनेक फूल खिलते हैं।
तानि विकासन्ति । वे सब खिलते हैं ।

प्रथम पुरुष – बहुवचन

बालका: नमन्ति। अनेक बालक नमस्कार करते हैं।
ते नमन्ति । वे सब नमस्कार करते हैं ।

बालिका: भ्रमन्ति । अनेक बालिकाएँ घूमती हैं।
छात्रा: नमन्ति । छात्राएँ नमस्कार करती हैं ।

बाला: नृत्यन्ति । लडकियाँ नाचती हैं ।
ता: नृत्यन्ति । वे सब नाचती हैं ।

मृगा: धावन्ति। अनेक मृग दौड़ते हैं ।
ते धावन्ति । वे सब दौड़ते हैं ।

कमलानि विकसन्ति। अनेक कमल खिलते हैं ।
तानि विकसन्ति । वे सब खिलते हैं ।

खगा: कूजन्ति। पक्षियाँ चहचहाते हैं ।
ते कूजन्ति । वे सब चहचहाते हैं।

सैनिका: रक्षन्ति। अनेक सैनिक रक्षा करते हैं ।
ते रक्षन्ति। वे सब रक्षा करते हैं ।

दिव्या, भावना प्रियंवदा च वदन्ति । ता: वदन्ति ।
दिव्या ,भावना और प्रियंवदा बोलते हैं ।

तरुण:, वरुण: अरुण: च क्रीडन्ति। ते क्रीडन्ति ।
तरुण, वरुण और अरुण खेलते हैं । वे सब खेलते हैं ।

शब्द – अर्थ

पत्रम् – पत्ता

पतति – गिरता है

पश्यति – (वह) देखता / देखती है

गर्जति – (वह) गरजता है

स्मरति- (वह) याद करता / करती है

क्रीडत: - (वे दो) खेलते हैं

आगच्छत: - आते हैं

नमत: - नमस्कार करते है

शुक: - तोता

नृत्यन्ति – नाचते हैं

खग: - पक्षी

कूजन्ति – चहचहाते हैं

विकसन्ति – खिलते हैं

वदन्ति – बोलते हैं

नई धातुएँ

धातु	एकवचन	द्विवचन	बहुवचन
पत् (गिरना)	पतति	पतत:	पतन्ति
गर्ज् (गर्जना)	गर्जति	गर्जत:	गर्जन्ति
स्मृ स्मर्(याद रखना)	स्मरति	स्मरत:	स्मरन्ति
विकस् (खिलना)	विकसति	विकसत:	विकसन्ति
कूज् (चहचहाना)	कूजति	कूजत:	कूजन्ति
रक्ष् (रक्षा करना)	रक्षति	रक्षत:	रक्षन्ति

उपसर्ग युक्त धातु

आ+गम् (गच्छ्)	आगच्छति	आगच्छत:	आगच्छन्ति

"च" (और) अव्यय पद तीनों लिंगों में तीनों वचनों में समान होते हैं।

ध्यान दे:-

जैसा कि छात्र समझ चुके हैं कि स्त्रीलिंग द्विवचन, नपुंसकलिंग द्विवचन एवं पुल्लिंग बहुवचन, तीनों के प्रथम पुरुष में सर्वनाम का रूप **'ते'** होता है। इस अंतर को छात्र विभिन्न धातुओं के साथ सचित्र वाक्यों द्वारा अच्छी तरह समझ सकते हैं ; जैसे –

ते लिखत:। (स्त्रीलिंग)

ते पतत:। (नपुंसक लिंग)

ते लिखन्ति । (पुल्लिंग)

अभ्यास कार्य

1. एकपदेन उत्तरत (एक पद में उत्तर लिखो)-

क) **कः** नृत्यति ? मयूरः नृत्यति ।

ख) **के** धावन्ति ? मृगाः धावन्ति ।

ग) **के** पचतः ? महिले पचतः।

घ) **के** पततः ? ते पततः।

2. निम्नलिखित वाक्यानि शुद्धानि कुरुत (वाक्यों को शुद्ध कीजिए) -.

उदाः- कन्ये धावन्ति । कन्ये धावतः।

क) सा **गच्छन्ति**। सा गच्छति।

ख) कन्याः **भ्रमति** । कन्याः भ्रमन्ति ।

ग) सः **नमतः**। सः नमति ।

घ) बालौ **क्रीडन्ति**। बालौ क्रीडतः।

ङ) छात्राः **पठति** । छात्राः पठन्ति ।

च) फलं **पतन्ति** । फलं पतति ।

छ) खगाः **कूजतः** । खगाः कूजन्ति ।

ज) तौ **गच्छति**। तौ गच्छतः।

झ) सिंहाः **गर्जति**। सिंहाः गर्जन्ति ।

ञ) मृगः **धावतः**। मृगः धावति ।

भाषा –अवबोधनाम्

1. रिक्तस्थानेषु उचितक्रियापदानि लिखत (रिक्त स्थानों में उचित क्रिया पद लिखिए) –

क) छात्रौ पुस्तकम् ---------। (**पठत:** , पठन्ति)
ख) सैनिका: देशम् ----------। (**रक्षन्ति** , रक्षत:)
ग) पुष्पाणि ----------। (विकसति , **विकसन्ति**)
घ) मृग: वने ---------। (धावत: , **धावति**)
(ङ) गज: शनै: --------। (चलत: , **चलति**)

2. उचित कर्तृपदं चित्वा रिक्तस्थानानि पूरयत । (उचित कर्ता पदों को चुनकर रिक्त स्थानों को भरिए)

क) -----आगच्छत:। (स: तानि, **ते**)
ग) ----- पिबत:। (सा , स:, **तौ**)
ङ) ----- गच्छति । (**स:** , तौ , ते)
ख) ----- हसन्ति। (छात्र:, छात्रौ, **छात्रा:**)
घ) ------ सन्ति । (सा , **ते**, तौ)
च) ----- नमत:। (**तौ**, स:, ता:)

3. निम्नलिखितवाक्यानि बहुवचने परिवर्तयत (निम्नलिखित वाक्यों को बहुवचन में बदलिए)-

उदा:- सा हसति । ता: हसन्ति ।

क) स: खादति । ते खादन्ति ।
ख) सा नमति । ता: नमन्ति ।
ग) बाल: क्रीडति । बाला: क्रीडन्ति ।
घ) पुष्पम् विकसति। पुष्पाणि विकसन्ति।
ङ) अश्वौ धावत:। अश्वा: धावन्ति ।
च) मित्रे गच्छत:। मित्राणि गच्छन्ति ।
छ) बाले पठत:। बाला: पठन्ति ।
ज) खग: कूजति ।खगा: कूजन्ति ।

4. संस्कृतेन अनुवादं कुरुत (संस्कृत में अनुवाद कीजिए)-

क) पत्ता गिरता है पत्रम् पतति ।
ख) वे सब पढ़ते हैं । ते पठन्ति ।
ग) वे दोनों नमस्कार करती हैं । ते नमत:।
घ) दो सैनिक रक्षा करते हैं । सैनिकौ रक्षत:।
ङ) वे सब नाचती हैं । ते नृत्यन्ति ।
च) कन्याएँ जाती हैं । कन्या: गच्छन्ति ।

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 देखे । 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/4VAmOsb0hVE

CLASS 6
GENERAL KNOWLEDGE

SPORTS OF DIFFERENT COUNTRIES

SPORTY KNOW-HOW

National sport of Argentina – PATO

It is played on an open field with two teams of 4 horsemen each. The riders hold on to a leather ball and attempt to throw it into the opposing teams goal. It is the national sport of Argentina since 1953.

Popular sport in China - Table Tennis

It was originally called whiff- whaff and ping pong. It is played on a long, flat table divided by a net. It is a sport in which two or four players hit a lightweight ball back and forth across a table using small rackets.

Sport of Bhutan – ARCHERY

It involves shooting arrows with a bow at a fixed target board. Small targets are cut from wood and brightly painted, usually measuring about 3 feet tall and 11 inches wide. It was declared as the national sport in 1971.

Popular sport of Scotland- GOLF

In this sport a player strikes a small hard ball with various clubs into a series of holes. The modern game of golf originated in 15th century Scotland.

National sport of Slovenia – SKIING

It involves gliding over snow using a pair of flat long runners bound to shoes or boots. Player slides down snow-covered slopes on skis with fixed-heel bindings.

TEAM SPORTS

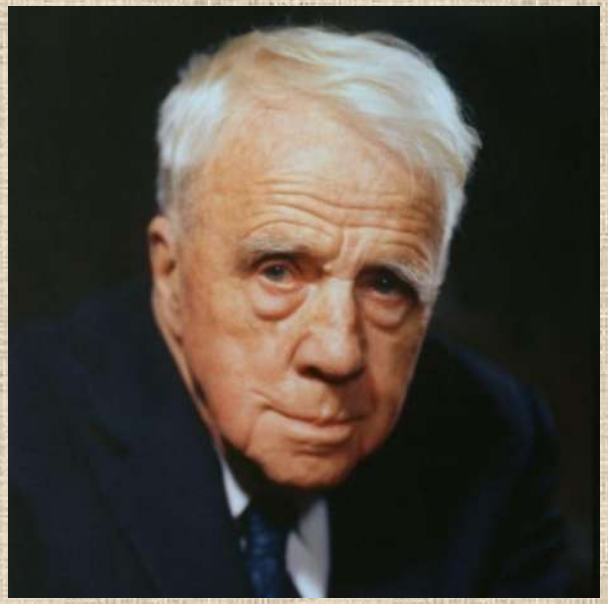
Kabadi

Ice Hockey

Lacrosse

Polo

POETRY CORNER



The Road Not Taken

By: Robert Frost

I shall be telling this with a sigh
somewhere ages and ages hence:
Two roads diverged in a wood, and I -
I took the one less travelled by
And that has made all the difference.

The Solitary Reaper

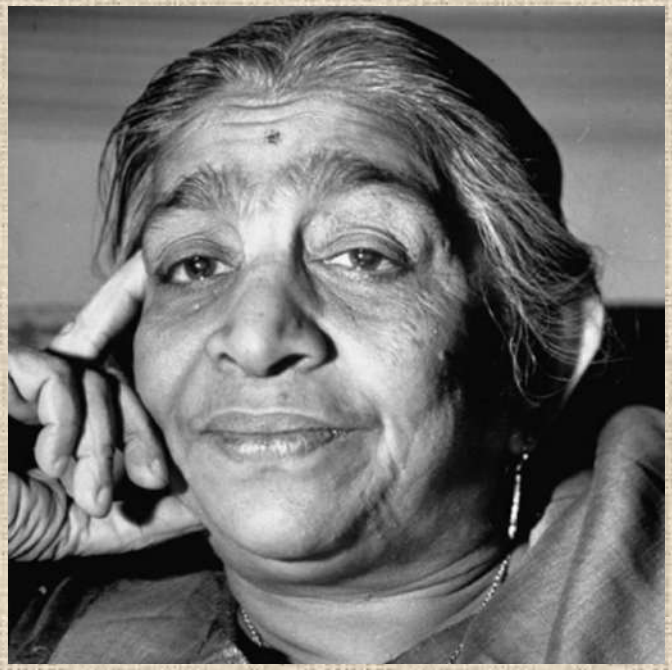
By: William Wordsworth

Behold her, single in the field,
Yon solitary Highland Lass!
Reaping and singing by herself;
Stop here, or gently pass!

The Rime of the Ancient Mariner

By: Samuel Taylor Coleridge

Ah! well a-day! what evil looks
Had I from old and young!
Instead of the cross, the Albatross
About my neck was hung.



Palanquin Brearers

By: Sarojini Naidu

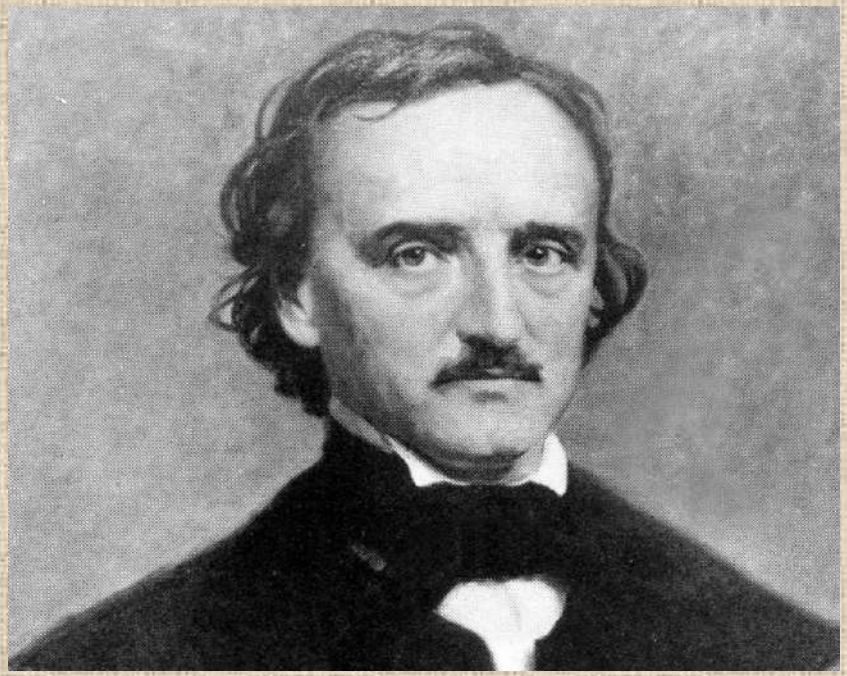
Lightly, O lightly we bear her along,
She sways like a flower in the wind of our song;
She skims like a bird on the foam of a stream,
She floats like a laugh from the lips of a dream

The Raven

By: Edgar Allan Poe

Once upon a midnight dreary, while I pondered, weak and weary,
Over many a quaint and curious volume of forgotten lore—

While I nodded, nearly napping, suddenly there came a tapping,
As of some one gently rapping, rapping at my chamber door.



ACTIVITY:

You can enhance your poetry skills by reading and writing poems. Write a poem as good as you can in A-4 size sheet. You can make it attractive by doing colourful drawing.

DRESSING SENSE

Baju Kurung

Traditional Outfit of **Malaysia**

Dirndl

Traditional Outfit of **Austria**

Kimono

Traditional Outfit of **Japan**

KILT

Traditional Outfit of **Scotland**

THAWB

Traditional Outfit of **Saudi Arabia**

Poncho

Traditional Outfit of **South America**

Traje de luces

Traditional Outfit of **Spain**

Boubou

Traditional Outfit of **West Africa**

CURRENT AFFAIRS

1. Name the Mobile App used as COVID-19 tracking mobile application developed by the Government of India.
2. Name the kit used by Doctors and Paramedics to save them from corona virus infection.
3. When and Where will the FIFA Under-17 Women's World Cup will be held?
4. Name the place in India where recently the Poisonous Gas was leaked from LG Polymer Company.
5. Name the two famous Bollywood personality who died recently.
6. Write all the safeguard methods that should be used to save oneself from corona virus infection.

NOTE :-

Do the exercises of the lessons Sporty Know How, Poetry Corner and Dressing Sense in your G.K Book (By referring to the above slides).

- Do the Current Affair work in your G.K copy.
- Spend some time daily for reading books and E-Newspaper given by the school.

To understand the chapter, refer to the following link:

https://youtu.be/cWn4yEzQKec

NOTE :-

If you are unable to open the given link in your mobile device, kindly copy the link in your Browser.