EAST POINT SCHOOL

SELF ASSESSMENT

BIOLOGY – CLASS9TH

Chp- Fundamental unit of life -CELL

1. What is cell theory? Who formulated it?
2. Write the full form of DNA and ATP.
3. What is the importance of nucleus?
4. Explain the process of osmosis through an example.
5. Draw and label a Plant cell neatly.
6. Why is Plasma Membrane a selectively permeable membrane?
7. What is the function of chromosome?
8. Name the cleansing organelle in the cell.
9. How does amoeba consume food?
10. The powerful hydrolytic enzymes found inside the lysosomes are made by which of the following cell organelle?

    a) SER b) RER c) Mitochondria d) Vacuoles

NOTE :- Read chapter Tissue

Also watch video on the Chp- Tissue

https://youtu.be/fNQ92ZGWpOA--- link for Tissue .

EAST POINT SCHOOL
CHEMISTRY
IS MATTER AROUND US PURE

Colloidal solution is a heterogeneous mixture. It consists of two phases:-

(i) Dispersed phase : component present in smallproportion

(ii) Dispersion medium : component present in largeproportion

The particles of colloid are large enough to scatter a beam of light passing through it and make its path visible. Thus, they show **Tyndall effect.**

The colloidal particles are moving at random in a zigzag motion in all directions. This type of zig-zag motion of colloidal particles is called **Brownian movement.**

a) on the basis of amount ofsolute:

Unsaturated solution	Saturated Solution	Supersaturated solution
A solution which has lesser amount of solute that it can dissolve at a given temperature is known as unsaturated solution.	A solution which has maximum amount of solute that it can dissolve at a given temperature is known as saturated solution.	A solution which can dissolve amount of solute by increasing temperature saturated solution is known as supersaturated solution.

b) on the basis of nature ofsolvent

Aqueous solution	Non-Aqueous solution
The solution in which the solvent is water is known as aqueous solution.	The solution in which the solvent is other than water (ether, alcohol or aceton) known as non-aqueous solution.

Q.1 Classify the following substances into true solutions and colloidalsolutions.
Milk , ink , starch dissolved inwater.
Q.2 Give an example of an aqueous solution in which gas isdissolved.

VIDEO LINK: https://youtu.be/LhFRsGq6KjY

Class: IXth **Subject: Social Science (Economics)**

Chapter 2: People as Resources **11thMay 2020**

Quality of Population

The quality of population depends upon the literacy rate, health of a person indicated by life expectancy and skill formation acquired by the people of the country.

The quality of the population ultimately decides the growth rate of the country.

Education

Education in the initial years of life bore the fruits in the later years in terms of a good job and salary.

Education is an important input for the growth. It opened new horizon, provided new aspiration and developed values of life.

Education contributes towards the growth of society also. It enhances the national income, cultural richness and increases the efficiency of governance.

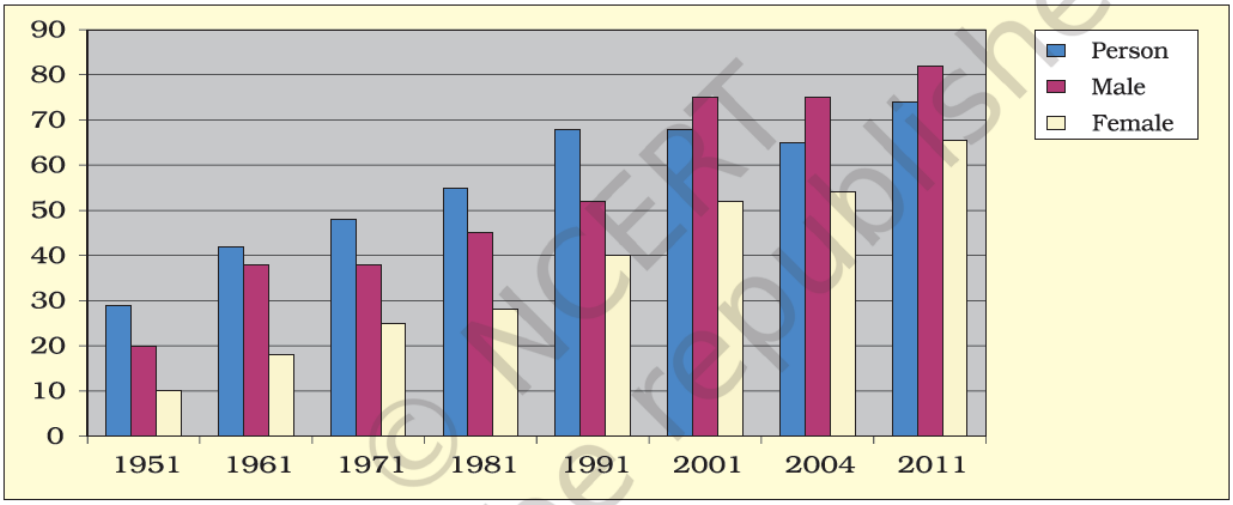
There is a provision made for providing universal access, retention and quality in elementary education with a special emphasis on girls.

There is also an establishment of pace setting of schools like Navodaya Vidyalaya in each district.

Vocational streams have been developed to equip large number of high school students with occupations related to knowledge and skills.

Unfortunately, the huge expansion of schools has been diluted by the poor quality of schooling and high dropout rates.

Graph 2.1: Literacy rates in India



Source: Economy Survey, 2012.

"**Sarva Siksha Abhiyan** is a significant step towards providing elementary education to all children in the age group of six to fourteen years by 2010 . It is a time bound initiative of the central government, in partnership with the states, the local government and the community for achieving the goal of universalisation of elementary education."

Along with it, bridge courses and back-to-school camps have been initiated to increase the enrollment in elementary education.

Mid-day meal scheme has been implemented to encourage attendance and retention of children and improve their nutritional status. These policies could add to the literate population of India.

The strategy focuses on increasing access, quality, adoption of states-specific curriculum modification, vocationalisation and networking on the use of information technology. The plan also focuses on distant education, convergence of formal, non-formal, distant and IT education institutions.

Over the past fifty years, there has been a significant growth in the number of university and institutions of higher learning in specialised areas.

Subject:-Social Science (Economics) **Class:- IX**

Chapter 2:- People as Resource **Assignment No.:-3**

1. **Name the factors on which the quality of population depends.** **(1)**
2. **Which state has the highest literacy rate in India?** **(1)**
3. **Define literacy rate.** **(1)**
4. **Mention two factors determining quality of population.** **(1)**
5. **The literacy rates have increased from 18% in 1951 to _____ in 2010-11.** **(1)**
6. **Why is literacy rate being high amongst the male in India as compared to female?** **(1)**
7. **"Education is an important input of human capital formation." Do you agree? Give reasons for your answer.** **(5)**

OR

What is the role of education in human capital formation? **(5)**

8. **What is the aim of Sarva Shiksha Abhiyan?** **(1)**
9. **What do you know about 'Sarva Shiksha Abhiyan'? Or Write a note on the universalisation of elementary education in India.** **(5)**
10. **What is the mid-day meal scheme? Explain its purpose.** **(3)**

Video Link

https://www.youtube.com/watch?v=P9CGuzZ8_ek

https://www.youtube.com/watch?v=_rcEI6bc38I

EAST POINT SCHOOL

ENGLISH ASSIGNMENT

Q1. Read the following passage carefully and answer the questions given below.

Free Advice

I was overwhelmed with gratuitous advice. Well-meaning yet ignorant friends thrust their opinions into unwilling ears. The majority of them said I couldn't do without meat in the cold climate. I would catch consumption. Mr Z went to England and caught it on account of his foolhardiness. Others said I might do without flesh but without wine I could not move. I would be numbed with cold.

One went so far as to advise me to take eight bottles of whisky, for I should want them after leaving Aden. Another wanted me to smoke, for his friend was obliged to smoke in England. Even medical men, those who had been to England told the same tale. I replied that I would try my best to avoid all these things, but if they were found to be absolutely necessary I did not know what to do. I may here mention that my aversion to meat was not so strong then as it is now. I was even betrayed into taking meat about six or seven times at the period when I allowed my friends to think for me. But in the steamer, my ideas began to change. I thought I should not take meat on any account. My mother, before consenting to my departure, had exacted a promise from me not to take meat. So, I was bound not to take it, if only for the sake of the promise. The fellow passengers in the steamer began to advise us (the friend who was with me and myself) to try it. --

M K Gandhi

Write the correct option for the following questions.

(a) The advice the narrator received from his friends was NOT.....

(i) well-meaning (ii) uncalled for

(iii) sought after (iv) given by friends

(b) When was the narrator offered the advice?

(i) when he was leaving for England

(ii) when he was in Aden

(iii) when he had started eating meat

(iv) when he was on the steamer

(c) Why did the narrator's friends advise him to take meat?

(i) everyone in England ate meat

(ii) meat would cause consumption

(iii) meat-eating would keep him healthy

(iv) he would find it tasty

(d) The narrator was reluctant to eat flesh as …….

(i) he had never eaten it before

(ii) he did not like the taste

(iii) it was not available on the steamer

(iv) he had promised his mother he would not do so

(e) What does the term consumption here refer to?

(i) eat (ii) give up

(iii) a disease (iv) cold

Q2. Rearrange the following words and phrases to make meaningful sentences.

(a) where / unproductive work / check / you are / in / wasting time

(b) self-study / availability of time / for / check

(c) to complete / you need / judge / the syllabus / how much time

(d) for / allocate time / as per / different subjects / the need

Q3. The following passage has not been edited. There is one error in each of the lines. Write the incorrect word and correction. Remember to underline the word you have supplied.

Newton had a little dog name Diamond	name (incorrect) / <u>named</u> (correct)
One day when he is fifty years	(a)
old, he went out of his room, left the	(b)
dog asleep. On the table lie his	(c)
papers. They contained all the discovery which	(d)
he had made while the last twenty years. When	(e)
he was gone, down rose little Diamond. He	(f)
jumped upon the table and overthrow the lighted	(g)
candle. The papers caught fire. They were reduce	(h)
to a heap of ashes.	

Q4. Read the following conversation carefully and complete the following passage.

Rony: Alex, how is your knee today? Is it still giving trouble?
Alex: No. It feels a lot better today. I went to a doctor and he told me it was only a pulled ligament. I should be fine for Saturday's game.
Rony: Great. But why don't you take it easy today? Maybe just practice throwing. Don't do any running.
Alex: Okay, I think it's a good idea.

Rony asked Alex(a) …… and if it was still giving him trouble. Alex replied that (b) ……. He told him that he had gone to the doctor, who (c) …….. that it was

only a pulled ligament. He (d) …….. for Saturday's game. Rony then suggested that he should take in easy that day and just practice throwing and not do any running.

Q5. Complete the following sentences using the appropriate tense form of the verb given in the brackets.

1. The constable ---------- (catch) the thief red-handed.

2. Students at many colleges ---------- (stay away) from their classes to protest against the highhandedness of the administration.

3. He ---------- (spend) the whole day in bed.

4. The bomb scare ---------- (delay) the flight by about 2 hours.

5. The stadium ---------- (reverberate) with dance and drama as performers from across the country ---------- (showcase) their talents.

6. He ---------- (love) animals but that ---------- (not prevent) him from eating their flesh.

7. He ---------- (visit) nearly all continents.

8. The man who smuggled cocaine into the city ---------- (arrest)

9. The politician ---------- (never visit) his constituency since the last election.

10. Last year, they ---------- (build) a fence around their property.

Q6. It was raining heavily, the street lights had gone off and I was returning.... Complete the story in about 150- 200 words, providing an appropriate title to it. (Use Story Arc)

The Little Girl

Extra Questions

A. Read the following extracts and answer the questions that follow in one or two lines each.

Q1.***To the little girl, he was a figure to be feared and avoided. Every morning before going to work he came into her room and gave her a casual kiss.***

(a) Who does 'he' refer to in this extract?

(b) What were the feelings of the little girl towards him?

(c) What did 'he' do before going to work every morning?

(d) What does this gesture show about him?

Q2. ***"Mother, go up to her room and fetch down the damned thing – see that the child's put to bed this instant."***

(a) Who speaks these lines and to whom?

(b) What is the mood of the speaker in these lines?

(c) What does the speaker refer to as the 'damned thing'?

(d) Who is the 'child' here? Why does the speaker wish the child to be put to bed immediately?

Q3. ***She never stuttered with other people — had quite given it up — but only with Father} because then she was trying so hard to say the words properly. "What's the matter? What are you looking so wretched about?***

(a) Who is 'you' here?

(b) With whom is she talking here?

(c) How did she speak with other people?

(d) Why did she stutter before her father?

Q4. ***And she was dragged down to where Father was pacing to and fro, hands behind his back.***

"Well?" he said sharply.

(a) Who is 'he' here?

(b) Why was she making a 'pin-cushion'?

(c) Why were the servants questioned by her father?

(d) What quality of her is reflected in the above lines?

B. Answer the following questions in 30- 40 words.

1. Why was Kezia afraid of her father?
2. What was Kezia's father's routine before going to an office and after coming back in the evening?
3. In what ways did Kezia's grandmother encourage her to get to know her parents better?
4. What did Kezia make as a birthday gift for her father? How did she prepare it?
5. Why was a hue and cry in the house? Why did her father punish Kezia?

1. A goalkeeper in a game of football pulls his hands backwards after holding the ball shot at the goal. This enables the goalkeeper to:

(a) Exert large force on the ball

(b) Increases the force exerted by the ball on hands

(c) Increase the rate of change of momentum

(d) Decrease the rate of change of momentum

Answer:(d) Decrease the rate of change of momentum

2. An object of mass 2 kg is sliding with a constant velocity of 4 m/s on a friction less horizontal table. The force required to keep the object moving with the same velocity is:

(a) 32 N

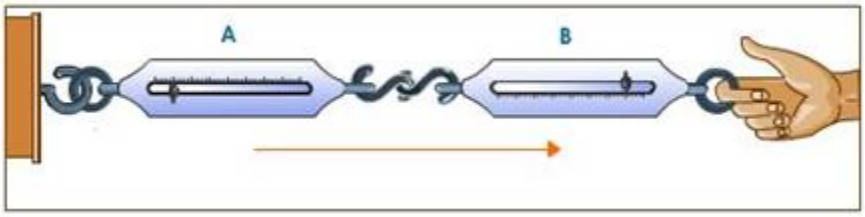
(b) 0 N

(c) 2 N

(d) 8 N

Answer:(b) 0 N

3. Newton's third law of motion explains the two forces namely 'action' and 'reaction' coming into action when the two bodies are in contact with each other. These two forces:



(a) Always act on the same body

(b) Always act on the different bodies in opposite directions

(c) Have same magnitude and direction

(d) Acts on either body at normal to each other

Answer:(b) Always act on the different bodies in opposite directions

4. In a rocket, a large volume of gases produced by the combustion of fuel is allowed to escape through its tail nozzle in the downward direction with the tremendous speed and makes the rocket to move upward.

Which principle is followed in this take off of the rocket?

(a) Moment of inertia

(b) Conservation of momentum

(c) Newton’s third law of motion

(d) Newton’s law of gravitation

Answer:(b) Conservation of momentum

5. A water tank filled upto 2/3 of its height is moving with a uniform speed. On sudden application of the brake, the water in the tank would

(a) Move backward

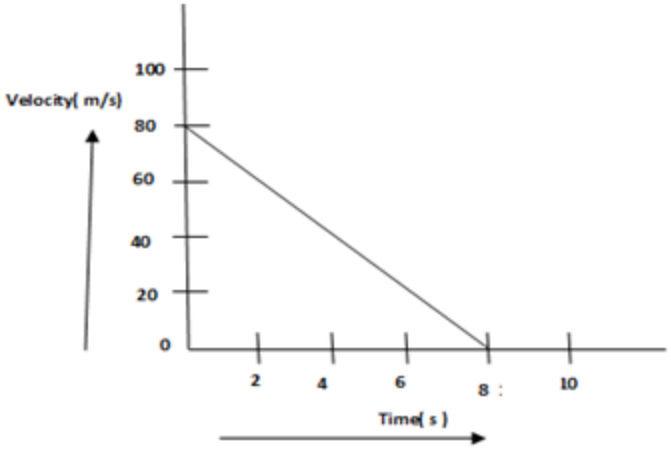
(b) Move forward

(c) Come to the rest

(e) Be unaffected

Answer: (b) Move forward

6. Velocity versus time graph of a ball of mass 50 g rolling on a concrete floor is shown in the figure below. What will be the frictional force of the floor on the ball?



(a) 0.5 N

(b) 50 N

(c) 5 N

(d) 0.05 N

Answer:(a) 0.5 N

7. The seat belts are provided in the cars so that if the car stops suddenly due to an emergency braking, the persons sitting on the front seats are not thrown forward violently and saved from getting injured. Can you guess the law due to which a person falls in forward direction on the sudden stopping of the car?

(a) Newton’s first law of motion

(b) Newton’s second law of motion

(c) Newton’s third law of motion

(d) Newton’s law of gravitation

Answer:(a) Newton’s first law of motion

8. When a balloon held between the hands is pressed, its shape changes. This happens because:

(a) Balanced forces act on the balloon

(b) Unbalanced forces act on the balloon

(c) Frictional forces act on the balloon

(d) Gravitational force acts on the balloon

Answer:(a) Balanced forces act on the balloon

9. Which of the following situations involves the Newton’s second law of motion?

(a) A force can stop a lighter vehicle as well as a heavier vehicle which are moving

(b) A force exerted by a lighter vehicle on collision with a heavier vehicle results in both the (vehicles coming to a standstill

(c) A force can accelerate a lighter vehicle more easily than a heavier vehicle which are moving

(d) A force exerted by the escaping air from a balloon in the downward direction makes the balloon to go upwards

Answer:(c) A force can accelerate a lighter vehicle more easily than a heavier vehicle which are moving

10. The speed of a car weighing 1500 kg increases from 36 km/h to 72 km/h uniformly. What will be the change in momentum of the car?

(a) 15000 kg km/h

(b) 15000 kg m/s

(c) 54000 kg m/s

(d) 54000 g m/s

Answer:(b) 15000 kg m/s

11. A passenger in a moving train tosses a coin which falls behind him. Observing this statement what can you say about the motion of the train?

(a) Accelerated

(b) Retarded

(c) Along circular tracks

(d) Uniform

Answer:(a) Accelerated

12. Newton's first law of motion says that a moving body should continue to move forever , unless some external forces act on it. But a moving cycle comes to rest after some time if we stop pedaling it. Can you choose the correct reason for the stoppage of cycle?

i. Air resistance

ii. Gravitational pull of the earth

iii. Friction of the road

iii. Heat of the environment

Choose the correct option:

(a) (iii) and (iv)

(b) (i) and (iii)

(c) (i) and (ii)

(d) (ii) and (iii)

Answer:(b) (i) and (iii)

13. A man wearing a bullet-proof vest stands on roller skates. The total mass is 80 kg. A bullet of mass 20 g is fired at 400 m/s. It is stopped by the vest and falls to the ground. What is then the velocity of the man?

(a) 1 m/s

(b) 0.1 m/s

(c) 0.01 m/s

(d) 0 m/s

Answer:(b) 0.1 m/s

14. The unit of measuring the momentum of a moving body is:

(a) m/s

(b) kg.m/s

(c) $kg.m/s^2$

(d) $N\ m^2/kg^2$

Answer:(b) kg.m/s

15. The inertia of a moving object depends on:

i. Mass of the object

ii. Momentum of the object

iii. Speed of the object

iv. Shape of the object

Choose the correct option:

(a) (i) and (ii)

(b) only (i)

(c) only (ii)

(d) (iii) and (iv)

HISTORY

https://www.youtube.com/watch?v=o6CwIEjtJ6s

Did Women have a Revolution?

Summary

Women came into the forefront on October 5, 1789, when they marched to Versailles and brought King Louis the sixteenth back to Paris.

The Society of Revolutionary and Republican Women was formed in 1793 to voice its opinion and grievances against the constitution of 1791 which denied them the right to vote.

The eminent writer and political activist, Olympe de Gouges opposed the constitution and the Declaration of Rights of Man and Citizen of 1791. She later drafted the Declaration of Rights for Women and Citizen.

Olympe de Gouges was charged with treason and was guillotined on November 2, 1793.

The revolution carried out by the women of France triggered the international suffrage movement, for the next two centuries. As a result of this movement, in 1946, the women of France won the right to exercise their franchise and equal wages.

EAST PONT SCHOOL

MATHS ASSIGNMENT

Q1. Find the remainder when the polynomial $f(x) = 2x^4 – 6x^3 +2x^2 – x + 2$ is divided by $x + 2$.

Q2. Show that $(x – 3)$ is a factor of the polynomial $x^3 – 3x^2 + 4x -12$.

Q3. Show that $(x – 1)$ is a factor of $x^{10} – 1$ and also of $x^{11} – 1$.

Q4. Find the value of k, if $x + 3$ is a factor of $3x^2 + kx + 6$.

Q5. For what value of a is $2x^3 + ax^2 + 11x + a + 3$ is exactly divisible by $(2x – 1)$?

Q6.Let R_1 and R_2 are the remainder when the polynomials $x^3 +2x^2 – 5ax – 7$ and $x^3 + ax^2 – 12x + 6$ are divided by $x + 1$ and $x – 2$ respectively. If $2R_1 + R_2 = 6$, find the value of a.

Q7.If $f(x) = x^4 -2x^3 + 3x^2 –ax + b$ is a polynomial such that when it is divided by $x – 1$ and $x + 1$, the remainders are 5 and 19. Determine the remainder when $f(x)$ is divided by $(x – 2)$.

Q8. If both $x – 2$ and $x- \frac{1}{2}$ are factors of $px^2 + 5x + r$, show that $p = r$.

Q9. If $x^2 – 1$ is a factor of $ax^4 + bx^3 + cx^2 + dx + e$, show that $a + c + e = b + d = 0$

Q10. Factorize: $x^3 + 13x^2 + 32x + 20$.

Video link: https://youtu.be/qyFDQ9Icu4s

EAST POINT SCHOOL
CLASS- IX ,SUBJECT- PHYSICS
CHAPTER –FORCE AND LAWS OF MOTION

How does an object start moving?

We need to put some effort to make a stationary object move, **For Example**, a push, a hit or a pull.

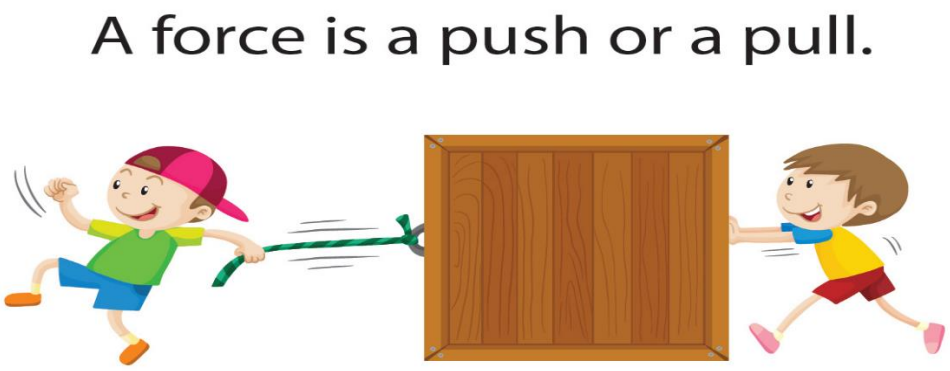


Fig.1- How does an object move

What is a force?

Whenever we push or pull an object a force acts upon them and makes them move from one place to another. Hence, force can –

- initiate motion in a motionless object
- change (increase or decrease) the velocity of the moving object
- alter the direction of a moving object
- change the shape and size of an object

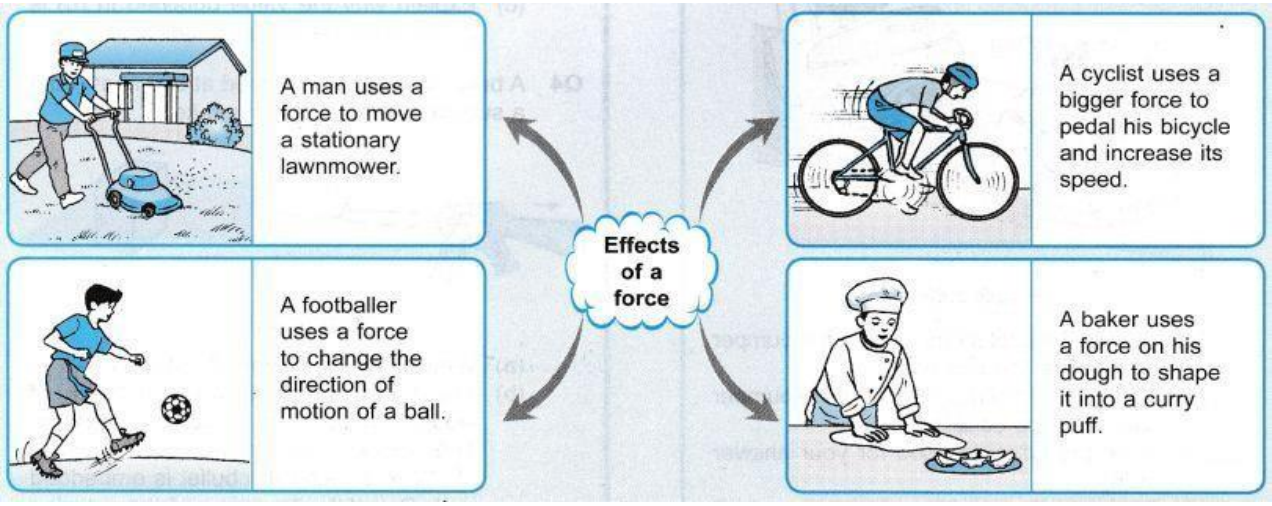


Fig.2 - Effects of Force

Balanced and Unbalanced Forces

Balanced Forces –

- When equal amount of forces are applied on an object from different directions such that they cancel out each other
- They do not change the state of rest or motion of an object
- They may change the shape and size of an object

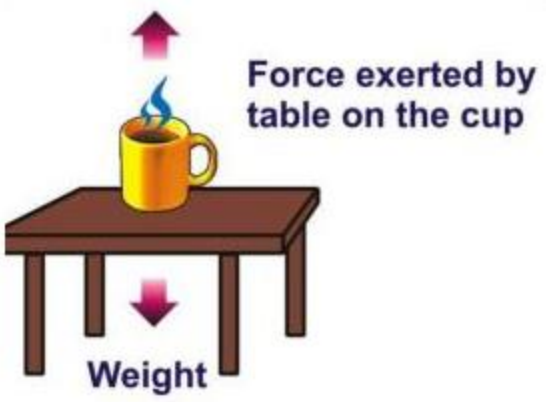


Fig.3- Balanced Forces

Unbalanced Force –

- When forces applied to an object are of different magnitude(or not in opposite directions so as to cancel)
- They can alter state of rest or motion of an object
- They can cause acceleration in an object
- They can change the shape and size of an object

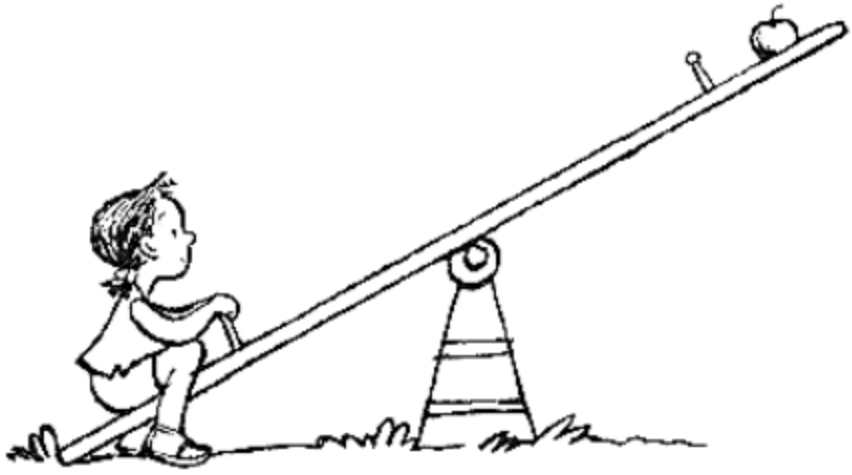


Fig.4 – Unbalanced Forces

What is the force of friction?

It is a force extended when two surfaces are in contact with each other. It always acts in a direction opposite to the direction of motion of the object.

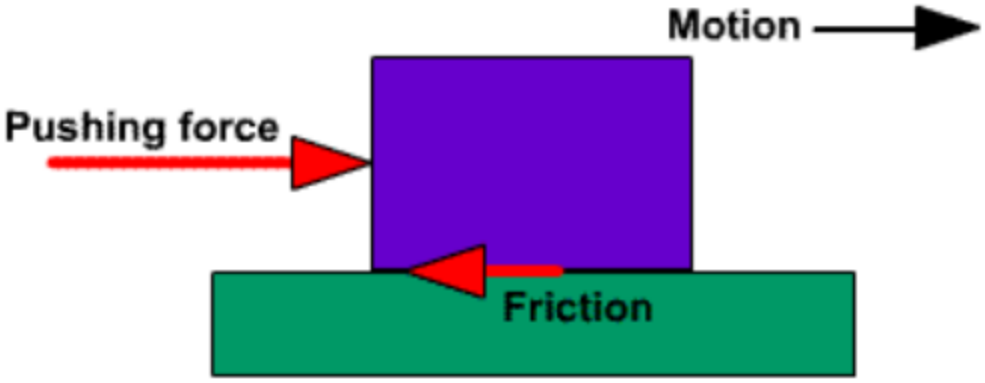


Fig. 5 – The force of Friction

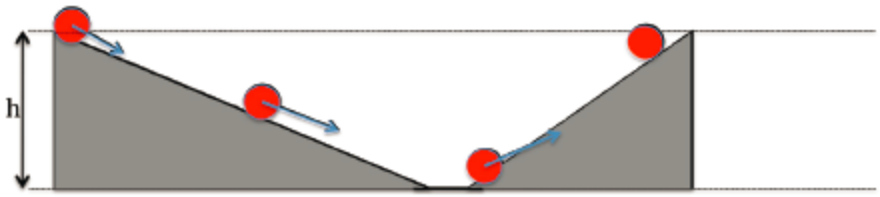
First Law of Motion

Galileo's Observation

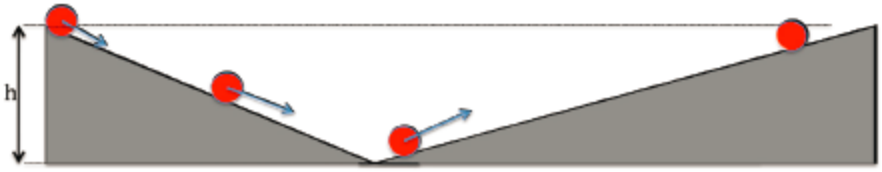
- He observed the motion of objects on an inclined plane.
- When a marble is rolled down an inclined plane its velocity increases.

Galileo's Arguments

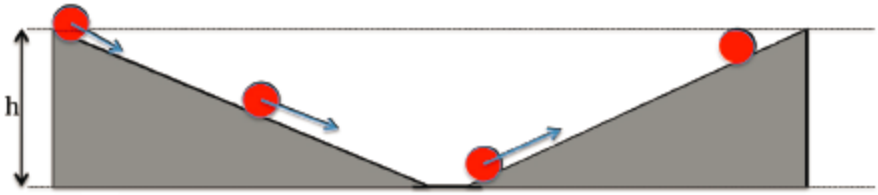
- When a marble is rolled down from the left – It will go up on the opposite side up to the same height at which it is dropped down.



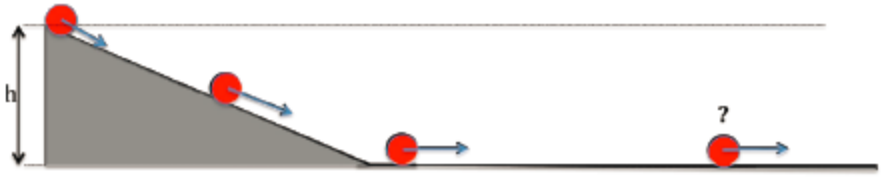
- If the inclination of planes is equal – The marble would travel equal distances while climbing up as travelled while rolling down.



- If we decrease the angle of inclination of the right plane – The marble would travel further until it reaches its original height.



- If the right side plane is made flat – Marble would travel forever to achieve the same height.

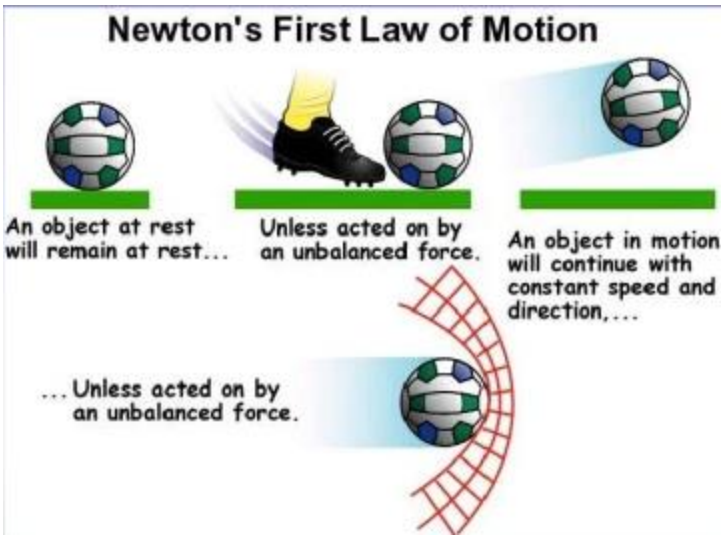


Galileo's Inference

- We need an unbalanced force to change the motion of the marble but no force is required when the marble is moving uniformly. In other words, objects move at a constant speed if no force acts upon them.

Based on Galileo's ideas Newton presented the three Laws of Motion
First law of motion or The Law of Inertia

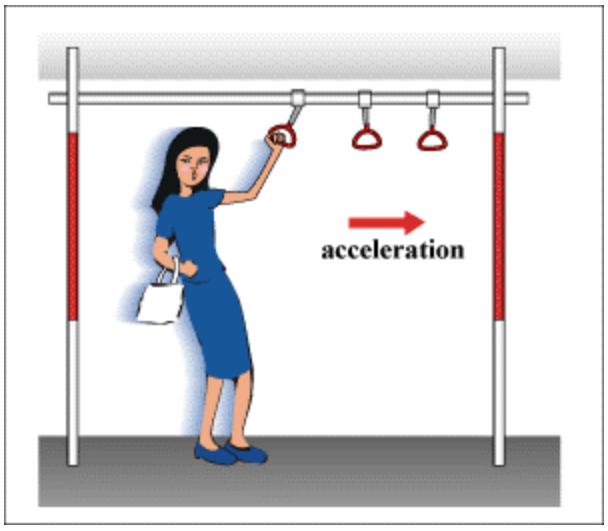
Whether an object is moving uniformly on a straight path or is at rest, its state would not change until and unless an external force is applied on to it.



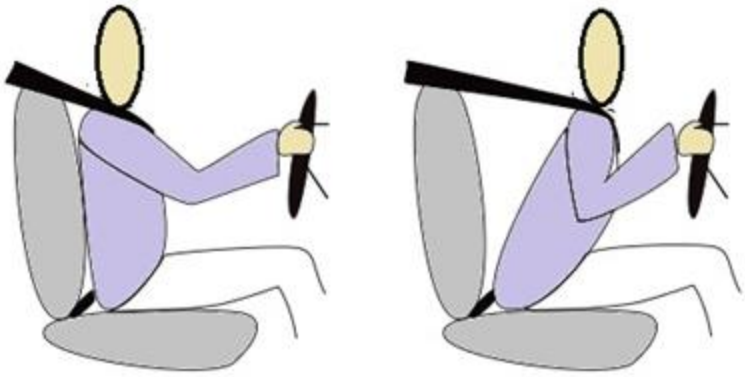
Hence, we can say that objects oppose a change in their state of motion or rest. This tendency of objects to remain in the state of rest or to keep moving uniformly is called **Inertia.**

Examples of Inertia

- We fall back when a vehicle starts moving in the forward direction because our body is in the rest state and it opposes the motion of the vehicle.



- We fall forward when brakes are applied in a car because our body opposite the change of state of motion to rest

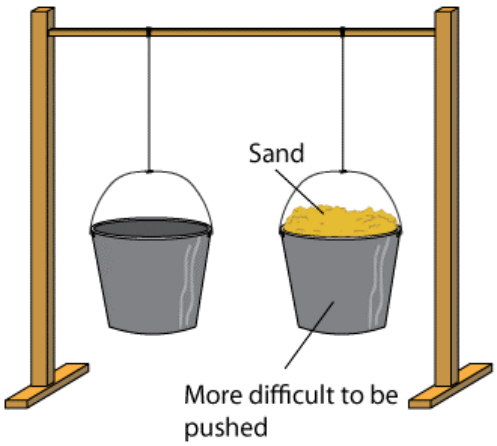


Because of inertia you feel jerk when brakes are applied

Inertia and Mass

- The inertia of an object is dependent upon its mass.
- Lighter objects have less inertia, that is, they can easily change their state of rest or motion.
- Heavier objects have large inertia and therefore they show more resistance.
- Hence ‘Mass’ is called a measure of the inertia of an object.

Consider the image given below; it is easier for a person to push the bucket that is empty rather than the one that is filled with sand. This is because the mass of an empty bucket is less than that of the bucket filled with sand.



The Second Law of Motion

- The impact produced by a moving object depends upon its mass and velocity.
- **For Example**, a small bullet fired at a high velocity can kill a person.
- **Momentum** – The product of mass and velocity is called Momentum.
- It is a vector quantity. Its direction is same as that of the object's velocity.
- Denoted by – p
- SI unit – kg metre per second
- p = mv,

  where m is the mass of the object,

  v is the velocity of the object
- **The momentum of a stationary object –**

  Let the mass of a stationary object be 'm',

  Let the velocity of a stationary object be 'v',

  The stationary object has no velocity, so v = 0,

  Therefore, p = m*v = m*0 = 0

  So, the **momentum of a stationary object is zero**.
- We know that the velocity of an object can be changed by applying an unbalanced force on to it. Similarly, the momentum of an object can change by applying an unbalanced force.
- **According to the second law of motion** –

  The rate of change of momentum of an object is directly proportional to the applied unbalanced force on the object in the direction of the force.

For Example –

A cricketer when catches a ball pulls his hands in the backward direction to give some time to decrease the velocity of the ball. As the acceleration of the ball decreases the force exerted on catching the moving ball also decreases. If the cricketer would try to stop a moving ball suddenly he would have to apply larger force.

Mathematical Formulation of the Second Law of Motion

Based on the definition of the second law of motion, we can infer that -

Change in momentum $\propto p2 - p1$

$\propto mv - mu$

$\propto m(v - u)$

Rate of change of momentum $\propto m(v - u)/t$

Force $\propto m(v - u)/t$

Force $= k\, m(v - u)/t$

Force $= k\, ma$

Force $= ma$

Initial velocity = u

Final velocity = v

Acceleration $= (v - u)/t$

1 unit of force $= k \times (1\ kg) \times (1\ m\ s^{-2})$

K = 1

Therefore, with help of the second law of motion we can evaluate the amount of force that is being exerted on any object. From the formula stated above, we can see that the force is directly proportional to acceleration. So the acceleration of an object can change depending upon the change in force applied.

Force = ma

SI Unit: kg-ms^{-2} or N (Newton)

The Third Law of Motion

Action and Reaction Forces

Two forces acting from opposite directions are called **Action** and **Reaction Forces**.

For Example, a ball when hits the ground (action) bounces back with a certain force reaction.

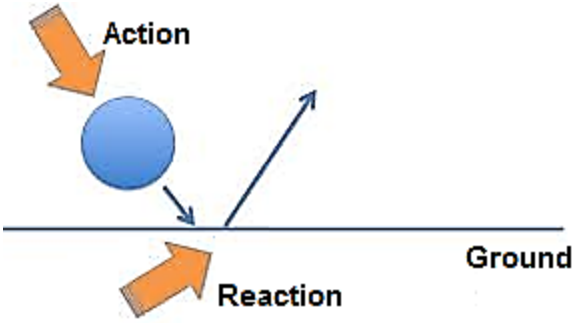


Fig. 15 - Action and Reaction Forces

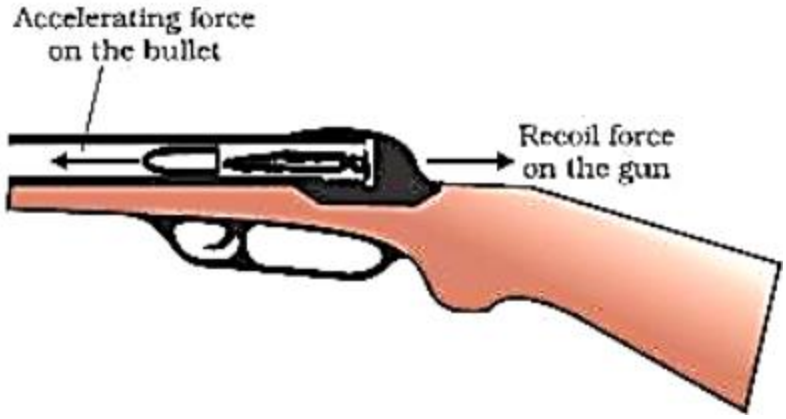
The Third Law of Motion States that –

When an object exerts a force on another object, the second object instantly exerts a force back onto the first object. These forces are always equal in magnitude but opposite in direction. These forces act on two different objects always.

Or in other words, every action has an equal and opposite reaction.

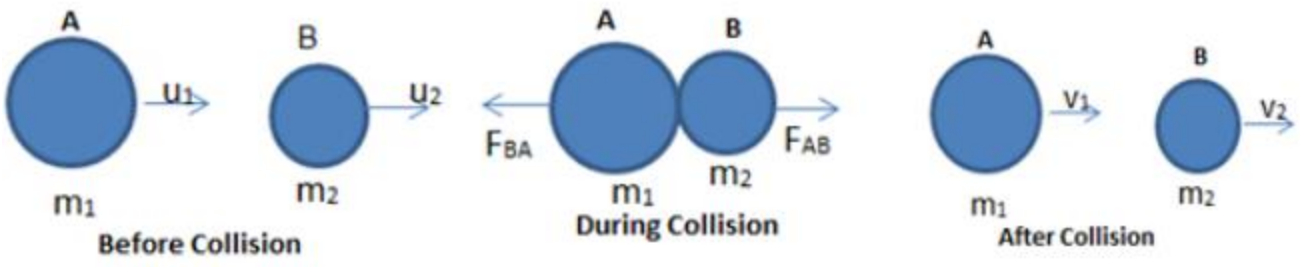
The magnitudes of forces acting upon the objects are same but the acceleration produced in them may or may not be the same because the objects can differ in masses.

For Example, when a bullet is fired from a gun, the gun only moves a little backwards (recoils) while the bullet can travel a large distance. This is because of the difference in the mass of the bullet and the gun.



Conservation of Momentum

As per the law of conservation of momentum, the sum of momenta of two objects before the collision and after collision remains the same given that no external unbalanced force acts upon them. In another way, collision conserves the total momentum of two objects.



Consider the figure given above. Two balls A and B having a certain initial velocities collide with each other. Conditions before the collision-

- There is no unbalanced force acting upon them
- The initial velocity of A is greater than initial velocity of B

The figure below explains how the momentum of the balls is conserved after the collision.

Fig.18 – Conservation of Momentum

Facts about Conservation Laws

- They are considered as the fundamental laws in physics.
- They are based on observations and experiments.

The momentum of ball A before collision = $m_A u_A$	According to third law of motion
The momentum of ball A after collision = $m_A v_A$	$F_{AB} = - F_{BA}$ [-ve sign shows opposite force]
The momentum of ball B before collision = $m_B u_B$	$m_A(v_A - u_A)/t = - m_B(v_B - u_B)/t$
The momentum of ball B after collision = $m_B u_B$	$m_A v_A - m_A u_A = - m_B v_B + m_B u_B$
Rate of change of momentum of ball A $= m_A(v_A - u_A)/t$	$m_A v_A + m_B v_B = m_A u_A + m_B u_B$
$= $Force of action F_{AB}	or
Rate of change of momentum of ball B $= m_B(v_B - u_B)/t$	$m_A u_A + m_B u_B = m_A v_A + m_B v_B$
= Force of reaction F_{BA}	Momentum before collision = Momentum after collision

- They cannot be proved but can be verified or disproved with the help of experiments.
- A single experiment is enough to disprove a law, while a single experiment is not enough to prove the same.
- It requires a large number of experiments to prove the law.
- The law of conservation of momentum was formulated 300 years ago.
- There is no single situation present until now that disproves this law.
- Other laws of conservation are – law of conservation of energy, the law of conservation of angular momentum, the law of conservation of charge.

QUESTION BANK

Constitution Design

1.Who was Nelson Mandela?
2. What was Apartheid?
3. How was the system of apartheid practiced?
4. How was segregation carried out by whites?
5. Who all fought against the apartheid system?
6. When was Nelson Mandela freed?
7. For how many years did Nelson Mandela remain in prison?
8. When did South Africa become a democracy?
9. Why is South Africa constitution called the finest constitution of the world?
10. Why is South African constitution considered a source of inspiration for all?
11. Define constitution.
12. Why do we need a constitution?
13. What kind of compromise was made between the Blacks and whites after South Africa became a democracy?
14. Why did constitution making become important in South Africa?
15. Why was making of the Indian constitution not an easy affair?
16. Who drafted a constitutional guideline for India in 1928?
17. What were the main principles of 1928 Constitution and 1931 resolution at the Karachi session?
18. Explain those factors which contributed to the making of our constitution.
19. What is the importance of 26th January?
20. What is Preamble? What does it contain?
21. Explain the terms- Sovereign, socialist, secular, democratic, republic, justice, liberty, equality, fraternity.

EAST POINT SCHOOL

SANSKRIT

2. अधोलिखितवाक्येषु स्थूलपदानि कस्मै प्रयुक्तानि?

(क) तस्य सानोरुपरि विभाति कञ्चनपुरं नाम नगरम्।
(ख) राजा सम्प्राप्तयौवनं तं यौवराज्ये अभिषिक्तवान्।
(ग) अयं तव सदा पूज्यः।
(घ) तात! त्वं तु जानासि यत् धनं वीचिवच्चञ्चलम्।

3. अधोलिखितानां पदानां पर्यायपदं पाठात् चित्वा लिखत -

(क) पर्वतः	-	....	(ख) भूपतिः	-	....
(ग) इन्द्रः	-	....	(घ) धनम्	-	....
(ङ) इच्छितम्	-	....	(च) समीपम्	-	....
(छ) धरित्रीम्	-	....	(ज) कल्याणम्	-	....
(झ) वाणी	-	....	(ञ) वृक्षः	-	....

4. 'क' स्तम्भे विशेषणानि 'ख' स्तम्भे च विशेष्याणि दत्तानि। तानि समुचितं योजयत-

'क' स्तम्भ	'ख' स्तम्भ
कुलक्रमागतः	परोपकारः
दानवीरः	मन्त्रिभिः
हितैषिभिः	जीमूतवाहन-
वीचिवच्चञ्चलम्	कल्पतरुः
अनश्वरः	धनम्

5. (क) "स्वस्ति तुभ्यम्" स्वस्ति शब्दस्य योगे चतुर्थी विभक्तिः भवति। इत्यनेन नियमेन अत्र चतुर्थी विभक्तिः प्रयुक्ता। एवमेव (कोष्ठकगतेषु पदेषु) चतुर्थी विभक्तिं प्रयुज्य रिक्तस्थानानि पूरयत-

(i) स्वस्ति .... (राजा)
(ii) स्वस्ति .... (प्रजा)
(iii) स्वस्ति .... (छात्र)
(iv) स्वस्ति .... (सर्वजन)

(ख) कोष्ठकगतेषु पदेषु षष्ठीं विभक्तिं प्रयुज्य रिक्तस्थानानि पूरयत-

(i) तस्य .... उद्याने कल्पतरुः आसीत्। (गृह)
(ii) सः .... [illegible] अगच्छत्। [illegible]

Video link: https://youtu.be/lseCI64KNy0

The Little Girl

SUMMARY

In the story, there was a little girl named Kezia. She lives with her father, her mother, and her grandmother. Also, she was afraid of his father and tries to avoid him all the time. Moreover, she feels comforted on seeing his father leaving for office.

She was so afraid of her father that she mumbles in front of him as he appeared to her as rude, critical, and harsh. Further, her grandmother sought her to understand her parents better that's why she would encourage her to go to the drawing-room to chat with her parents. Then again she finds them cold towards her. So, one fine day her grandmother suggested Kezia prepare a pin cushion for her father's birthday.

Consequently, Kezia stitches the three sides of the pincushion casing. But after that, she needs to stuff the cushion with something. That's why she goes to her mother's room 6 number the bed table, there she finds many sheets of fine paper.

Then she torn the paper into small pieces and filled the pincushion and sews up the forth side. However, she doesn't that those papers contain her father's very important speech for the Port Authority. Although she accepted her mistake and also tries to explain the reason why she did it.

But her father was too angry to listen to her reason and punished her with a ruler on her palm. However, she failed to understand why she met out to punishment even after she accepted her mistake. Terribly she said, "What did God make father for?"

Most importantly, one evening she saw Mr. McDonalds, playing with her 5 children, laughing and enjoying with them. This event influenced Kezia that all fathers are not similar. She concluded, that some father is caring and loving like Mr. McDonald and some are harsh like her father.

However, her attitude towards her father changed. Someday, her mother needs to be hospitalized and her grandmother goes with her. So, Kezia was alone in the house with the cook. The day went fine but the night was a different issue. In the middle of the night, she woke up of fear screaming and weeping as she had a terrible nightmare. When Kezia opened her eyes she saw her father right next to her. Her father carried her to his bedroom and made her comfortable and warm on his bed. Further, her father told her to rub her feet with his legs and set them warm. She spends the night with him feeling comfortable and safe.

After that, she realized that her father was not a bad person. And he loves and cares for her in his own way. Moreover, he had to work a whole day to provide for his family and was too weary by evening to play with her.

KEY POINTS

- Kezia is a little girl, growing in her loving grandma's care.
- Kezia has formal relations with mother and father. She is afraid of her strict father so she stammered while talking to him. She thought him to be giant sized.
- On Sundays, Grandma sent her to spend time with parents but Kezia found her father lay down on the sofa to relax and mother busy in reading.
- One day grandma, suggested her to prepare a gift for father's birthday.
- Kezia prepared a pin cushion with a beautiful yellow silk cloth. For that, she needed scrap to fill it.
- She took some papers from father's room and store them up to stuff them in the pincushion. It was the father's important speech for the Port Authority.
- When Kezia was questioned, she admitted her act. Father beat Kezia with a ruler and she cried bitterly. She clung to grandma who consoled her.
- Next door neighbour Mr Macdonald plays with his children in the evening. After watching him, Kezia concludes that all fathers are not like hers.
- One day, her mother got admitted to the hospital, she was alone at home under the care of the cook. Old nightmare haunted her – a butcher with a knife in his hand. She was too much afraid of it.
- Father came to her room hugged her, carried her to his room to comfort her.
- She realised that he was not so bad, but he was too busy to express his love. That night, she felt her father had a big heart.

THEME

The story is based on the theme of a young child's point of view about her father. Children take time to understand the actions of their elders. Till then, they tend to develop a negative opinion and sometimes even distrust. However, as kids grow older, their attitude towards their elders undergoes change. The theme of this story is based on this process of change that makes little children notice the soft and caring heart of their overtly strict elders.

TITLE

The title of the story "The Little Girl" is apt as it is about a little girl Kezia. All the episodes in the story describe the experiences, opinions and observations made by Kezia. This story is in fact narrated from the point of view of Kezia alone. Her views about her father, her mother, her grandmother, their cook Alice, and their neighbours – Macdonalds, let the reader know what a little girl thinks and how she feels regarding the people around her. Thus, the title is appropriate.

MESSAGE

The story conveys a beautiful message that there is a very strong bond between parents and children. This bond has the strength to survive every type of challenge. However, in order to prepare their little children for the hardships of adult life, parents resort to strict punishment and it is difficult for children to understand the true motive behind the stern actions of their parents. As a result, they develop negativity. Therefore, the story gives message to both the children and parents. Children should trust their parents and the parents should understand that physical punishment can leave emotional scars that hamper the growth of a balanced

personality of their child. So, the responsibility to strengthen the parent-child bond rests equally on both.

हिंदी कार्य पत्रिका -7

कक्षा - नवी

उपलब्धकर्ता मिस रंजना

एवरेस्ट : मेरी शिखर यात्रा

watch?v=EejTTrnW4us

watch?v=7sD9gAeaGjY

लेखक परिचय

इस पाठ की लेखिका बचेंद्री पाल है। बचेर्दी पाल का जन्म उत्तरांचल के चमोली जिले में बंचा गाँव में 24 मई 1954 अपनी माँ हंसा नेगी और पिता किशन सिंह पाल की तीसरी संतान है। पिता पढ़ाई का खर्च के में असमर्थ थे, अतः बदी को आठ में आगे की पदई का खर्व सिलाई-कढ़ाई करके जुटामा पदर। दसवी पास करने के बाद बटी के प्रिंसिपल ने उनके पिता को उनकी आगे की पढ़ाई के लिए सहमत किया। बदी ने ऐसी विषम स्थितियों के बावजूद संस्कृत से एम.ए. और फिर बी. एड की शिक्षा हासिल की । लक्ष्य के प्रति इसी समर्पण भात ने इनों एवरेस्ट पर विजय पाने वाली पहली भारतीय पर्वतारोही होने का गौरव दिलाया।

बचेंद्री को पहाड़ों पर चढ़ने का चाय बचपन से ही था। जब इनका बड़ा भाई इनहे पह पर चढ़ने से रोकता था और इनसे छह साल छोटे भाई को पहाड़ पर चढ़ने के लिए उकसाता था, तब बवेदी को बहुत बुरा लगता था। वह सोचती थी कि भाई या क्यों नहीं समझता कि जो काम । भाई कर सकता है, यह उसकी यह बहन भी कर सकती है। लोग लड़कियों को इतना कोमल, नाडुक क्यों समझते है। बहरहाल, पहाड़ों पर पड़ने की उनकी इच्छा बचपन में भी पूरी होती रही। कि इनका परिवार साल के कुछ महीने एक ऊँचाई वाले गांव में बिताता ा और कुछ महीने पहाड़ से नीचे तराई में बसे एक और गाँव में जिस मौसम में परिवार नीचे तराई वाले गाँव में आ जाता था, उन महीनों में स्कूल जाने के लिए विद्या को भी पाँच-छह मीत पहाड़ की चदाई चलनी और उतरने पड़ती थी।

इधर बचेंद्री की पढ़ाई पूरी हुई, उधर इंडियन माउंटेन फाउंडेशन ने एवरेस्ट अभियान पर जाने का साहस रखने वाली महिलाओं की खोज शुरू की। बर्चदी इस अभियान दल में शामिल हो गई। ट्रेनिंग के दौरान बचेंदी 7500 मीटर उंची मान चोटी पर सफलतापूर्वक चों। कई महीनों

के अभ्यास के बाद आखिर वह दिन आ ही गया, जब उन्होंने एवरेस्ट विजय के लिए, प्रयाण किया।

एवरेस्ट-:-मेरी-शिखर-यात्रा – प्रश्न-अध्यास – मौखिक

निम्नलिखित प्रश्नों के उत्तर एक-दो पंक्तियों में दीजिए:

प्रश्न 1. अग्रिम दल का नेतृत्व कौन कर रहा था?

उत्तर: प्रेमचंद्र अग्रिम दल का नेतृत्व कर रहा था।

प्रश्न 2. लेखिका को सागरमाथा नाम क्यों अच्छा लगा?

उत्तर: लेखिका को सागरमाथा नाम अच्छा लगा, क्योंकि सागर के पैर नदियाँ हैं तो सबसे ऊँची चोटी उसका माथा है ।

प्रश्न 3. लेखिका को धवज जैसा क्या लगा?

उत्तर: लेखिका को एक बड़े भारी बर्फ़ का बड़ा फूल ध्वज जैसा लगा।

प्रश्न 4. हिमस्खलन से कितने लोगों की मृत्यु हुई और कितने घायल हुए?

उत्तर: हिमस्खलन से एक की मृत्यु तथा 4 घायल हुए थे।

प्रश्न 5. मृत्यु के अवसाद को देखकर कर्नल खुल्लर ने क्या कहा?

उत्तर: मृत्यु के अवसाद को देखकर कर्नल खुल्लर ने यह कहा कि एवरेस्ट जैसे महान अभियान में खतरों को सहज भाव से स्वीकार करना चाहिए।

प्रश्न 6. रसोई सहायक की मृत्यु कैसे हुई?

उत्तर: जलवायु अनुकूल होने के कारण रसोई सहायक की मृत्यु हो गई।

प्रश्न 7. कैंप – चार कहाँ और कब लगाया गया?

उत्तर: कैंप-चार 29 अप्रैल, 1984 को 7900 मीटर पर साउथ कोल में लगाया गया था।

प्रश्न 8. लेखिका ने शेरपा कुली को अपना परिचय किस तरह दिया?

उत्तर: लेखिका ने शेरपा कुली को अपना परिचय इस तरह दिया की वह नौसिखिया है।

प्रश्न 9. लेखिका की सफलता पर कर्नल खुल्लर ने उसे किन शब्दों में बधाई दी ?

उत्तर: "मैं तुम्हारी इस अनूठी उपलब्धि के लिए तुम्हारे माता-पिता को बधाई देना चाहूँगा देश को तुम पर गर्व है और अब तुम ऐसे संसार में जाओगी जो तुम्हारे अपने पीछे छोड़े हुए संसार से एकदम भिन्न होगा। " लेखिका की सफलता पर कर्नल खुल्लर ने उसे इन शब्दों में बधाई दी।

निम्नलिखित प्रश्नों के उत्तर (25-30 शब्दों में) लिखिए :-

प्रश्न 1. नजदीक से एवरेस्ट को देखकर लेखिका को कैसा लगा?

उत्तर: नजदीक से एवरेस्ट को देखकर लेखिका ऐसा लगा कि वह एवरेस्ट ल्होत्से और नुत्से की ऊँचाइयों से घिरी बर्फ़ीली ढेढ़ी-मेढ़ी नदी को निहारती रही।

प्रश्न 2. डॉ. मीनू मेहता ने क्या जानकारियाँ दी?

उत्तर: डॉ मीनू मेहता निम्नलिखित जानकारियां दी :-

(क) अल्मुनियम सीढ़ियों से अस्थाई पुलों का निर्माण
(ख) लट्ठों और रस्सियों का उपयोग
(ग) बर्फ की आड़ी -तिरछी दीवारों पर रस्सियों को बाँधना, आदि जानकारियां दी।

प्रश्न 3. तेनजिंग ने लेखिका की तारीफ में क्या कहा?

उत्तर: तेनजिंग ने लेखिका की तारीफ़ में यह कहा कि वह एक पर्वतीय लड़की है तथा उसे तो शिखर पर पहले ही कोशिश में ही पहुँच जाना चाहिए।

प्रश्न 4. लेखिका को किनके साथ चढ़ाई करनी थी?

उत्तर: लेखिका को अपने दल के साथ चढ़ाई करनी थी। उनके दल में जय और मीनू थे।

प्रश्न 5. लोपसांग ने तंबू का रास्ता कैसे साफ़ किया?

उत्तर: लोपसांगने ने तंबू का रास्ता अपनी स्विस छुरी की सहायता से साफ किया ।

प्रश्न 6. साउथ कोल कैंप पहुँचकर लेखिका ने अगले दिन की महत्वपुर्ण चढ़ाई की तैयारी कैसे शुरू की?

उत्तर: साउथ कोल कैंप पहुँचकर लेखिका ने अगले दिन की महत्वपूर्ण चढ़ाई की तैयारी निम्नलिखित प्रकार से शुरू की :-

(क) जरूरत का सामान जैसे खाना, कुकिंग गैस, कुछ ऑक्सीजन सिलिंडर इकट्ठे किए।
(ख) अन्य सदस्यों की मदद के लिए, थरमसों को जूस व गरम चाय से भरने के लिए नीचे जाने का निश्चय किया।

(ख) निम्नलिखित प्रश्नों के उत्तर (50-60 शब्दों में) लिखिए

प्रश्न 1. उपनेता प्रेमचंद ने किन स्थितियों से अवगत कराया?

उत्तर: उपनेता प्रेमचंद ने निम्नलिखित परिस्थितियों से अवगत कराया :-

(क) उन्होंने यह बताया कि उनके दल ने कैंप-एक (**6000 मीटर**),जो हिमपात के ठीक ऊपर है, वहाँ तक का रास्ता साफ़ कर दिया।
(ख) उन्होंने यह भी बताया कि पुल बना दिया गया है, रस्सियाँ बाँध दी गई हैं तथा झंडियों से रास्ते को चिह्नित कर दिया गया है।

प्रश्न 2. लेखिका को देखकर 'की' हक्का-बक्का क्यों रह गया?

उत्तर: लेखिका को देखकर 'की' हक्का बक्का रह गया क्योंकि इतनी बर्फ़ीली हवा में नीचे उतरना जोखिम भरा था परंतु आप बिना डरे उतर रही थी । ग्लेशियर के बहने से अक्सर बर्फ़ में हलचल मच जाती है। इससे बर्फ़ की बड़ी-बड़ी चट्टाने तत्काल गिर जाया करती हैं। अन्य कारणों से भी अचानक खतरनाक स्थिति उत्पन्न हो जाती है। इससे धरातल पर बड़ी चौड़ी दरारें पड़ जाती हैं।

प्रश्न 3. हिमपात किस तरह होता है और उससे क्या-क्या परिवर्तन आते हैं?

उत्तर: हिमपात एक प्रकार की बर्फीली नदी होती है, जब पहाड़ों से बर्फ पिघलती है तो बहने लगती है। ग्लेशियर के बहने से अक्सर बर्फ़ में हलचल मच जाती है। इससे बर्फ़ की बड़ी-बड़ी चट्टाने तत्काल गिर जाया करती हैं। और तथा उनसे बहुत हानि पहुंचने का खतरा होता है और यह बहुत परिवर्तन भी करती है।

प्रश्न 4. लेखिका के तंबू में गिरे बर्फ पिंड का वर्णन किस तरह किया गया है?

उत्तर: करीब रात के 12.30 बजे जब लेखिका अपने तम्बू में गहरी नींद में सो रही थीं तभी एक सख्त चीज़ लेखिका के सिर के पिछले हिस्से से टकराई, जिस कारण की नींद टूट गया जग गई है । जब उन्होंने देखा कि क्या चीज उनके सर से टकराई तो उन्हें पता चला कि एक लंबा बर्फ़ पिंड ल्होत्से ग्लेशियर से टूटकर कैंप के ऊपर आ गिरा था। वह अत्यंत तेज़ गति के साथ और गर्जना के साथ गिरा था। इस बर्फीले पिंड से सब को चोट तो लगी पर मृत्यु किसी की भी नहीं हुई बर्फीले पिंड ने पूरी तंबू को नष्ट कर दिया।

प्रश्न 5. चढ़ाई के समय एवरेस्ट की चोटी की स्थिति कैसी थी?

उत्तर: चढ़ाई के समय एवरेस्ट की चोटी की स्थिति निम्न प्रकार से थी :-
(क) वहाँ तेज़ हवा के कारण बर्फ़ उड़ रही थी।
(ख) एवरेस्ट की चोटी शंकु के आकार की थी।
(ग) वहाँ इतनी भी जगह नहीं थी कि दो व्यक्ति एक साथ खड़े हो सकें।
(घ) चारों ओर हज़ारों मीटर लंबी सीधी ढलान थी। लेखिका के सामने सुरक्षा का प्रश्न था।
(ड) वहाँ फावड़े से बर्फ़ की खुदाई की गई ताकि स्वयं को सुरक्षित कर स्थिर किया जा सके।

प्रश्न 6. सम्मिलित अभियान में सहयोग एवं सहायता की भावना का परिचय बचेंद्री के किस कार्य से मिलता है।

उत्तर: बचेंद्री पाल बहुत सारे कामों में अपना सहयोग दिया है । वह अपने साथियों के लिए खाना, पानी और चाय बनाती हैं। वह जितना हो सके उतनी कार्य में आगे रहती थी वह सबकी मदद करती थी , तथा कभी भी मदद करने से पीछे नहीं हटती थी । वह दुर्घटना के बावजूद भी घबराते नहीं थी तथा दूसरे को अवश्य प्रदान करती थी ।इस व्यवहार से कार्य में उसके सहयोग और सहायता की भावना का परिचय मिलता है।

एवरेस्टशिखरपरचढ़नेवालेयात्रियोंकीसूचीतैयारकरें