

CLASS
IX



CBSE



MIND MAPS

Science

English

Mathematics

Social Science

1

Visualize
and
Organize
Information

2

Enhance
Note-taking
Skills

3

Boost your
Exam
Preparation

4

Foster
Creative
Thinking



CONTENTS

MATHEMATICS

❖ Number Systems.....	3
❖ Polynomials	5
❖ Coordinate Geometry.....	6
❖ Linear Equations in Two Variables	7
❖ Euclid's Geometry	8
❖ Lines and Angles.....	9
❖ Triangles	10
❖ Quadrilaterals.....	11
❖ Areas of Parallelograms and Triangles	12
❖ Circles	13
❖ Heron's Formula	14
❖ Surface Areas and Volumes	15
❖ Statistics.....	16
❖ Probability.....	18

PHYSICS

❖ Motion.....	21
❖ Force and Law of Motion	22
❖ Gravitation	23
❖ Work and Energy	24
❖ Sound	25

CHEMISTRY

❖ Matter in our Surroundings.....	29
❖ Is Matter Around us Pure?	30
❖ Atoms and Molecules	31
❖ Structure of Atom	33

BIOLOGY

❖ The Fundamental Unit of Life	37
❖ Tissues (Animal, Plant Tissues).....	38
❖ Diversity in Living Organism.....	40
❖ Why Do We Fall Ill?	41
❖ Natural Resources	42
❖ Improvement in Food Resources	44

ENGLISH

❖ The Fun They Had.....	47
❖ Sound of Music.....	48
❖ The Little Girl.....	49
❖ A Truly Beautiful Mind	50

❖ Snake and the Mirror	51
❖ My Childhood.....	52
❖ Reach for the Top.....	53
❖ Kathmandu.....	54
❖ If I were You	55
❖ Packing	56
❖ The Bond of Love.....	57
❖ The Road Not Taken.....	58
❖ Wind.....	59
❖ Rain on the Roof.....	60
❖ The Lake Isle of Innisfree.....	61
❖ A Legend of Northland	62
❖ No Men are Foreign.....	63
❖ On Killing a Tree	64
❖ A Slumber did My Spirit Seal.....	65
❖ The Duck and The Kangaroo.....	66
❖ The Snake Trying.....	67
❖ The Lost Child	68
❖ Adventure of Toto	69
❖ Ishwaran The Storyteller.....	70
❖ In The Kingdom of Fools	71
❖ The Happy Prince	72
❖ Weathering The Storm in Ersama	73
❖ The Last Leaf.....	74
❖ A House is Not a Home	75
❖ The Accidental Tourist.....	76
❖ The Beggar.....	77
❖ Tenses	78
❖ Modals	79
❖ Subject Verb Agreement	81
❖ Reported Speech: Understanding the Basics	82
❖ Determiners.....	83

SOCIAL SCIENCE

❖ India-Size and Location.....	87
❖ French Revolution	88
❖ What is Democracy and Why Democracy.....	89
❖ The Story of Village Palampur	91
❖ Physical Features of India.....	92
❖ Socialism in Europe and The Russian Revolution	93
❖ Constitutional Design	95
❖ People as Resource	97
❖ Drainage.....	99
❖ Nazism and The Rise of Hitler	100
❖ Climate.....	102
❖ Forest Society and Colonialism	104
❖ Electoral Politics.....	106
❖ Poverty as a Challenge.....	109
❖ Working of Institutions	110
❖ Natural Vegetation and Wildlife	112
❖ Population	113
❖ Pastoralists in The Modern World	114
❖ Democratic Rights	115
❖ Food Security in India	117



MATHEMATICS

MIND MAP





Polynomial Based on Number of Terms

Monomial	Binomial	Trinomial
One Term Eg: x , $3y$, 29 , $\frac{x}{2}$	Two Term Eg: $x^2 + x$, $x^3 - 2x$, $y + 2$	Three Term Eg: $x^2 + 2x + 20$

POLYNOMIALS

POLYNOMIAL

$f(x) = a_n x^n + a_{n-1} x^{n-1} + \dots + a_1 x^1 + a_0$ is called a polynomial in variable x
Where:
 x =variable
 a =real numbers ($a_0, a_1, a_2, \dots$ be constants (real numbers)
 n =whole numbers

Zeroes of a Polynomial

For a polynomial, there could be some values of the variable for which the polynomial will be zero. These values are called zeros of a polynomial.

Based on Degree of Polynomial

Degree	Name of the polynomial	Form of the polynomial
Cannot defined	Zero polynomial	When all the coefficients are equal to zero $f(x) = 0$. We can write it as: $\cdot f(x) = 0x^0$ $\cdot f(x) = 0x^1$ $\cdot f(x) = 0x^2$
0	Constant polynomial	$f(x) = a$, a is a constant
1	Linear polynomial	$f(x) = ax + b$, $a \neq 0$
2	Quadratic polynomial	$f(x) = ax^2 + bx + c$, $a \neq 0$
3	Cubic polynomial	$f(x) = ax^3 + bx^2 + cx + d$, $a \neq 0$
4	Biquadratic polynomial	$f(x) = ax^4 + bx^3 + cx^2 + dx + e$, $a \neq 0$

Division Algorithm

If $f(x)$ is divided by $g(x)$ where $g(x) \neq 0$; then $f(x)$ can be written as $f(x) = g(x)q(x) + r(x)$ where $r(x)$ is the remainder and degree of $r(x) <$ degree of $g(x)$

Rational Root Theorem

Let $\frac{b}{c}$ be a rational fraction in lowest terms. If $\frac{b}{c}$ is a root of the polynomial $f(x) = a_n x^n + a_{n-1} x^{n-1} + \dots + a_1 x + a_0$, $a_n \neq 0$ with integral coefficients, then b is a factor of constant term a_0 and c is a factor of the leading coefficient a_n .
If $\frac{b}{c}$ is a rational root of the polynomial.
Ex: $f(x) = 6x^3 + 5x^2 - 3x - 2$, then the values of b are limited to the factors of -2 which are $\pm 1, \pm 2$; and the value of c are limited to the factors of 6 , which are $\pm 1, \pm 2, \pm 3, \pm 6$. Hence, the possible rational roots of $f(x)$ are $\pm 1, \pm 2, \pm \frac{1}{2}, \pm \frac{1}{3}, \pm \frac{1}{6}, \pm \frac{2}{3}$.
In fact, -1 is a root of $f(x)$.

Algebraic Identities

- (i) $(a + b)^2 = a^2 + b^2 + 2ab$
- (ii) $(a - b)^2 = a^2 + b^2 - 2ab$
- (iii) $(a + b)(a - b) = a^2 - b^2$
- (iv) $(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$
- (v) $(a + b)^3 = a^3 + b^3 + 3ab(a + b)$
- (vi) $(a - b)^3 = a^3 - b^3 - 3ab(a - b)$
- (vii) $a^3 + b^3 = (a + b)(a^2 - ab + b^2)$
- (viii) $a^3 - b^3 = (a - b)(a^2 + ab + b^2)$
- (ix) $a^3 + b^3 + c^3 - 3abc = (a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca)$
- (x) $a^3 + b^3 + c^3 - 3abc = \frac{1}{2}(a + b + c)\{(a - b)^2 + (b - c)^2 + (c - a)^2\}$
- (ix) If $a + b + c = 0$ then $a^3 + b^3 + c^3 = 3abc$

Factorization of polynomials

It means decomposing the given polynomial into a product of two or more polynomials using prime factorization.

A polynomial can be written as the product of its factors having a degree less than or equal to the original polynomial, the process of factoring is called factorization of polynomial.

Various methods of factorization of polynomial are:

- (i) By greatest common factor (GCF)
- (ii) By regrouping
- (iii) Factorization using identities
- (iv) Factorization using middle term splitting (only for quadratic polynomials)
- (v) Factorization using factor theorem

Polynomials in one variable

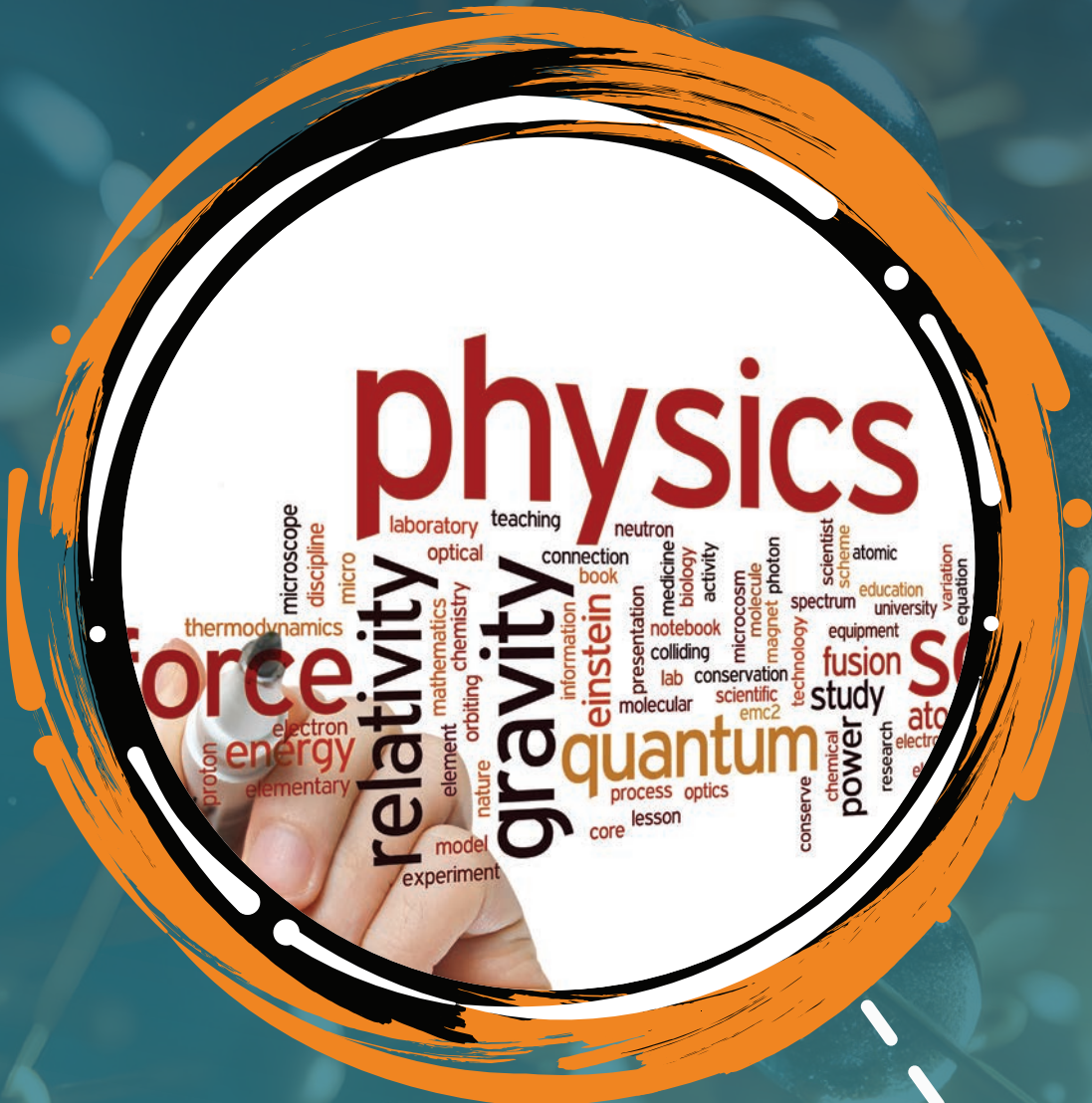
Polynomials in one variable are expressions which consist of only one type of variable in the entire algebraic expressions.

- Ex:
- (i) $3x$
 - (ii) $3x^2 + 4x + 5$
 - (iii) $4y^3 + 5y^2 + 8y$



PHYSICS

MIND MAP



MOTION

01 REST

► If position of an object with respect to its surroundings doesn't change with time, we say that the object is at rest. Example: A tree and a building with respect to ground are at rest.

02 MOTION

► If position of an object with respect to its surroundings changes with time, we say that the object is in motion. Example- Position of a moving car with respect to ground changes with time.

03 REFERENCE POINT

► A point with respect to which the position of an object is described is called a reference point. We choose a reference point according to our convenience.

04 DISTANCE

► Distance is the length of the actual path travelled by an object from one point to another point.

05 DISPLACEMENT

► Displacement is the length of the shortest path from the initial point to the final point. It is a vector quantity that has magnitude as well as direction.

06 SPEED

► It is time rate at which an object travels distance. The SI unit of speed is metre per second and represented as m/s.

07 AVERAGE SPEED

► The speed defined for a time-interval is known as average speed.
If an object travels a distance s in time t then its speed v is, $v = \frac{s}{t}$

08 VELOCITY

► The speed in a particular direction is called velocity. Thus, velocity has two type of variables speed and direction. It can be changed by changing the object's speed, direction of motion or both. Its SI unit is metre per second and represented as m/s.
If velocity of an object is changing at a uniform rate, then average velocity is average velocity = initial velocity(u) + final velocity(v)/2 or $V_{avg} = \frac{u + v}{2}$

09 ACCELERATION

► The time rate of change of velocity is called acceleration. If the velocity of an object changes from an initial value u to the final value v in time t , the acceleration, $a = \frac{v - u}{t}$. The SI unit of acceleration is ms^{-2} .
If the change in velocity is equal in equal time intervals, the acceleration is called uniform acceleration. The motion of a freely falling object is a uniformly accelerated motion. If the change in velocity is unequal in equal time intervals, the acceleration is called non-uniform acceleration. If a bike travelling along a straight road increases its speed by unequal amounts in equal intervals of time, then the motion of the bike is called non-uniform accelerated motion.

10 UNIFORM MOTION

► If an object moves equal distance in equal time-intervals, the motion is called uniform motion. Example: A bike moving with constant speed.

11 UNIFORM CIRCULAR MOTION

► When an object moves on a circular path with a constant speed not velocity, the motion of the object is known as uniform circular motion. Example- Motion of Tip of needles in watch.

12 NON UNIFORM MOTION

► If an object moves unequal distance in equal time-intervals, the motion is called non-uniform motion. Example- Motion of car on a crowded road.

13 STRAIGHT LINE MOTION

► If an object moves along a straight line, this type of motion is known as straight line motion. Example: A bus moving on a straight road.

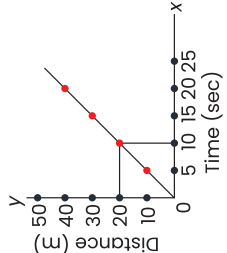
14 EQUATIONS OF MOTION

1st equation, $v = u + at$
2nd equation, $s = ut + \frac{1}{2} at^2$
3rd equation, $v^2 = u^2 + 2as$.

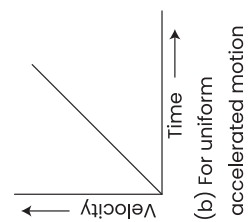
15 GRAPHICAL REPRESENTATION OF MOTION

1 Distance: Time Graph- In this graph, time is taken along the x-axis and distance are taken along the y-axis.

2 Velocity Time Graph: In this graph, time is taken along the x-axis and velocity are taken along the y-axis.



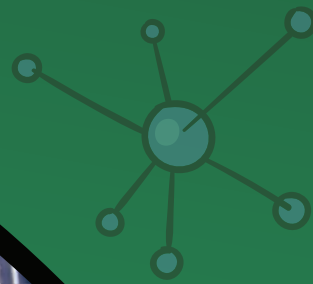
(a) For uniform speed The graph will be a straight line.
(b) For non-uniform motion- The graph will be non-linear that means it will be curved shape.



(a) For uniform motion
(b) For uniform accelerated motion



MIND MAP



CHARACTERISTICS OF PARTICLES OF MATTER

Particles of matter are constantly moving

Matter is made up of extremely small particles which cannot be seen even with a powerful microscope

Particles of matter have spaces between them

Particles of matter attract each other
The particles of matter have force acting between them, which keeps these particles together.

Diffusion: The spontaneous movement of particles from a region of higher concentration to a region of lower concentration

(a) The rate of diffusion increases with increase in temperature because the kinetic energy of particles increases and as a result the movement of particles increases.

(b) Solid dissolves more quickly in hot water than in cold water because diffusion occurs faster in hot water.

(b) Stronger the force of attraction, lower is the average speed, and thus lower will be the rate of diffusion.

PHYSICAL NATURE OF MATTER

Particle Nature of Matter –Matter is made up of particles

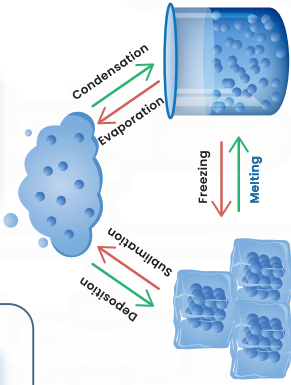
Matter is made up of extremely small particles which cannot be seen even with a powerful microscope

CAN MATTER CHANGE ITS STATE?

Inter conversion of matter can be achieved by the following two ways:

By changing the temperature

By changing the pressure

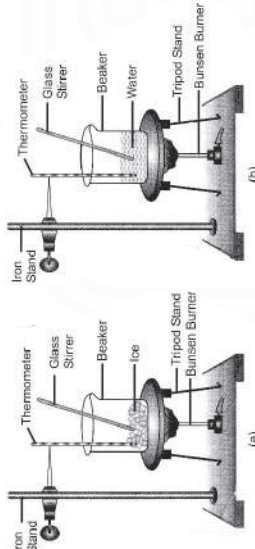
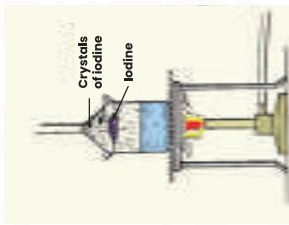


SUBLIMATION

Sublimation is the process of conversion of a solid directly into a gas or vice-versa without changing into liquid state

Solid $\xrightarrow{\text{Heating}}$ Vapour (or gas)
 $\xleftarrow{\text{Cooling}}$

Iodine crystals, Dry ice, camphor, etc undergo sublimation.



EFFECTS OF INCREASING TEMPERATURE

(a) Conversion of ice to water: On heating, it will be observed that first the ice (solid) melts to form water (liquid), if the heating is carried out further, the liquid (water) will change to gaseous state (vapour).

(b) Conversion of water to water vapour: The temperature at which a solid melts to become a liquid at atmospheric pressure is called its 'melting point'. This process of change of solid state into liquid state is also called 'Fusion'.
Solid $\xrightarrow{\text{Heat}}$ liquid

LATENT HEAT

The amount of heat required to change the state of matter from one state to another without rise in temperature is known as latent heat of that substance.

(i) **Latent heat of fusion:**
The amount of heat required to change the state of matter from solid state to liquid state without rise in temperature is known as latent heat of fusion.

(ii) **Latent heat of vaporisation:** The amount of heat required to change the state of matter from liquid state to gaseous state without rise in temperature is known as latent heat of vaporisation.

MATTER IN OUR SURROUNDINGS

EFFECT OF DECREASING TEMPERATURE

(a) Change of state from liquid to solid (solidification)
Liquid $\xrightarrow{\text{Cool}}$ Solid

(b) Change of state from gas to liquid (condensation)
Gas $\xrightarrow{\text{Cool}}$ Liquid

(c) Change of state from liquid to gas (vaporisation)
Liquid $\xrightarrow{\text{Heat}}$ Gas

EVAPORATION

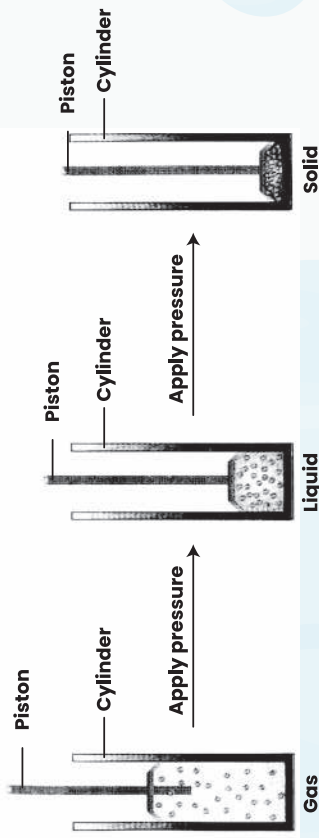
The phenomenon of change of a liquid into vapours at any temperature below its boiling point is called 'evaporation'. Evaporation is a surface phenomenon.

FACTORS AFFECTING EVAPORATION

- (a) Surface Area
- (b) Nature of Liquid
- (c) Humidity
- (d) Temperature
- (e) Speed of wind

LIQUEFACTION OF GAS

The minimum pressure which is required to liquefy a gas at critical temperature is called "critical pressure".
If the temperature is more than critical temperature, gas can not be liquefied at any pressure.



LIQUID STATE

The matter in liquid state has a definite volume and no definite shape.

Properties of Liquids

Liquid do not have fixed shape but have a fixed volume.

Liquids possess fluidity

Liquids possess the property of Diffusion

- (a) Rate of diffusion of different liquids: Different liquids have different rates of diffusion. For example a drop of blue or red ink diffuses faster than a drop of honey into water.
- (b) Rate of diffusion increases with rise in temperature: Rate of diffusion increases with rise in temperature, hence sugar dissolves much more quickly in hot water than in cold water.

SOLID STATE

Matter in solid state has a definite shape and definite volume.

Properties of Solids

Solids possess rigidity

Solids have a definite volume

Solids have a definite shape and distinct boundaries

GASEOUS STATE

The matter in gaseous state has neither definite volume nor shape.

Properties of Gases

Gases diffuse very rapidly

Gases have low density

Gases exert pressure

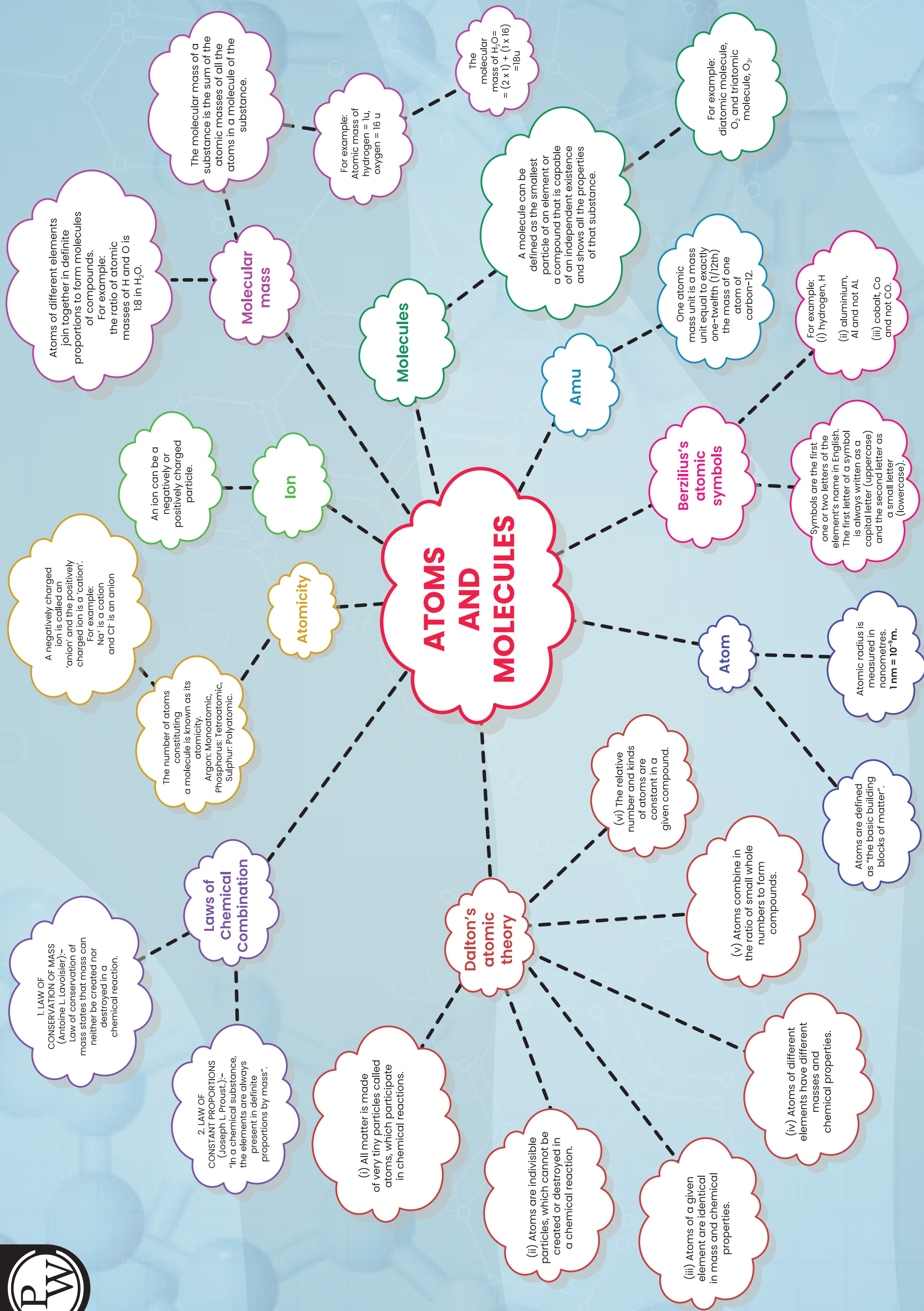
Gases neither have a definite shape nor a definite volume

The Kinetic energy of particles in the gaseous state is quite high

Gases are highly compressible

The spaces between particles of gases are maximum, intermediate in liquids and minimum in solids. Thus, gases are highly compressible; liquids are almost incompressible, while solids are incompressible.

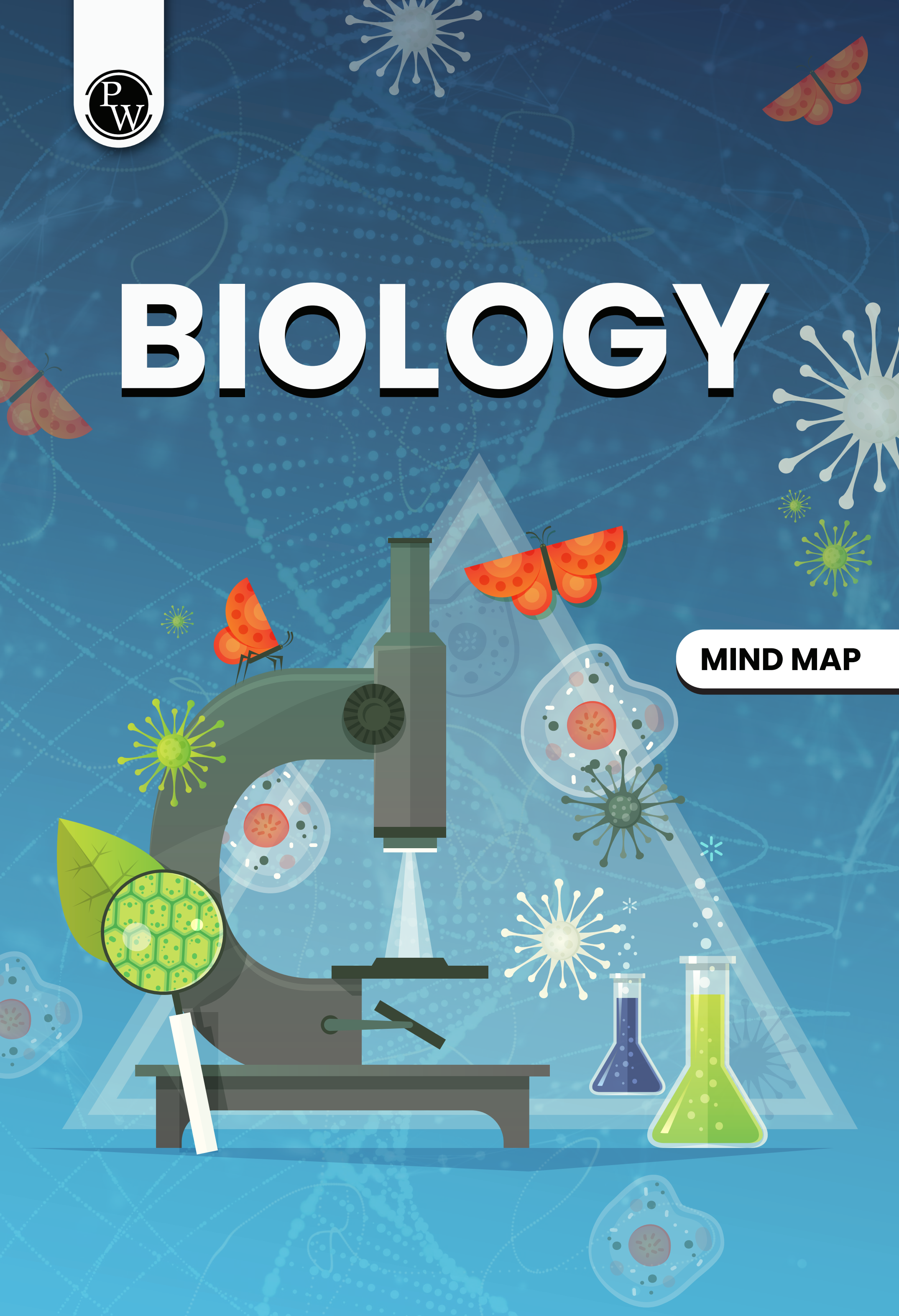




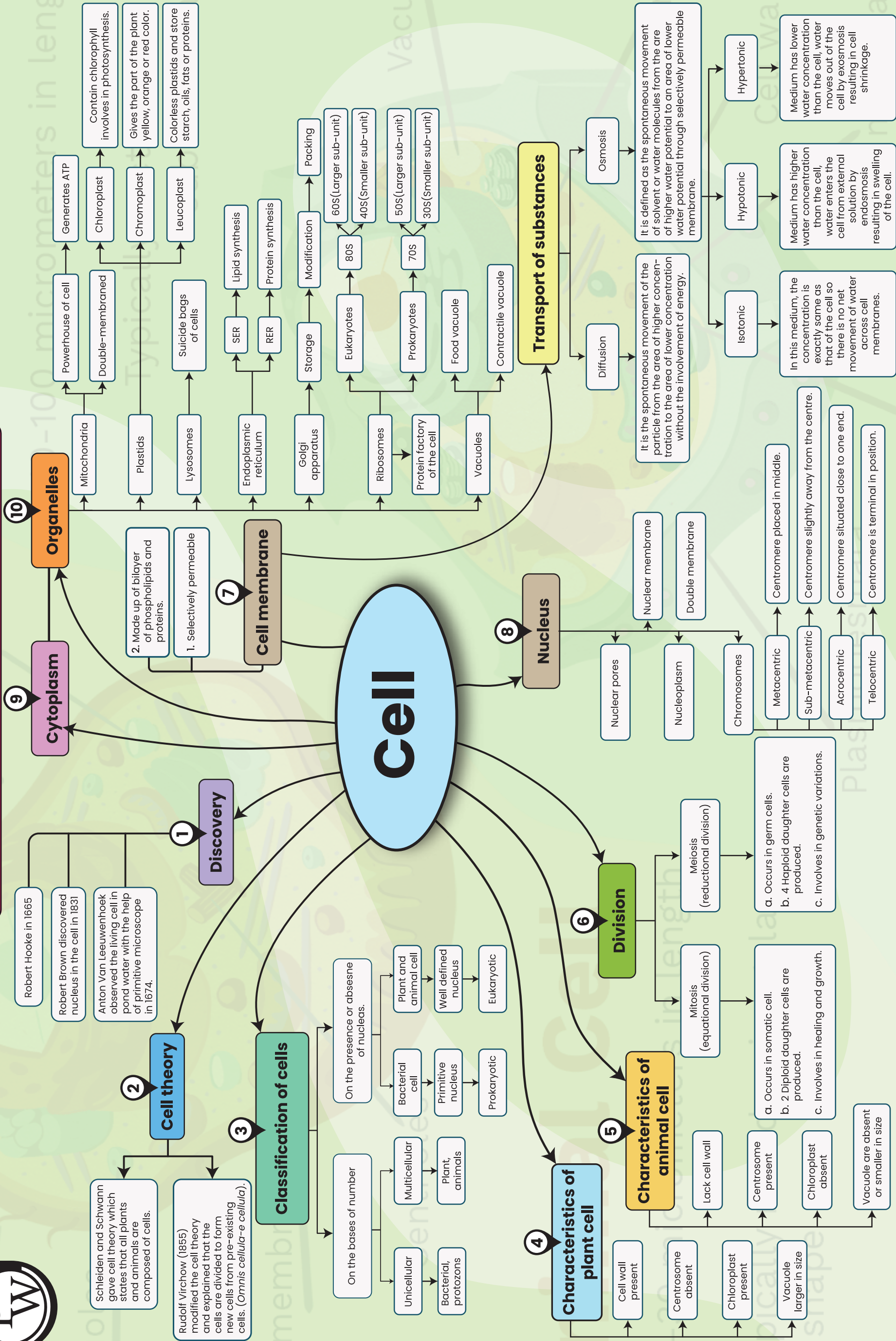


BIOLOGY

MIND MAP



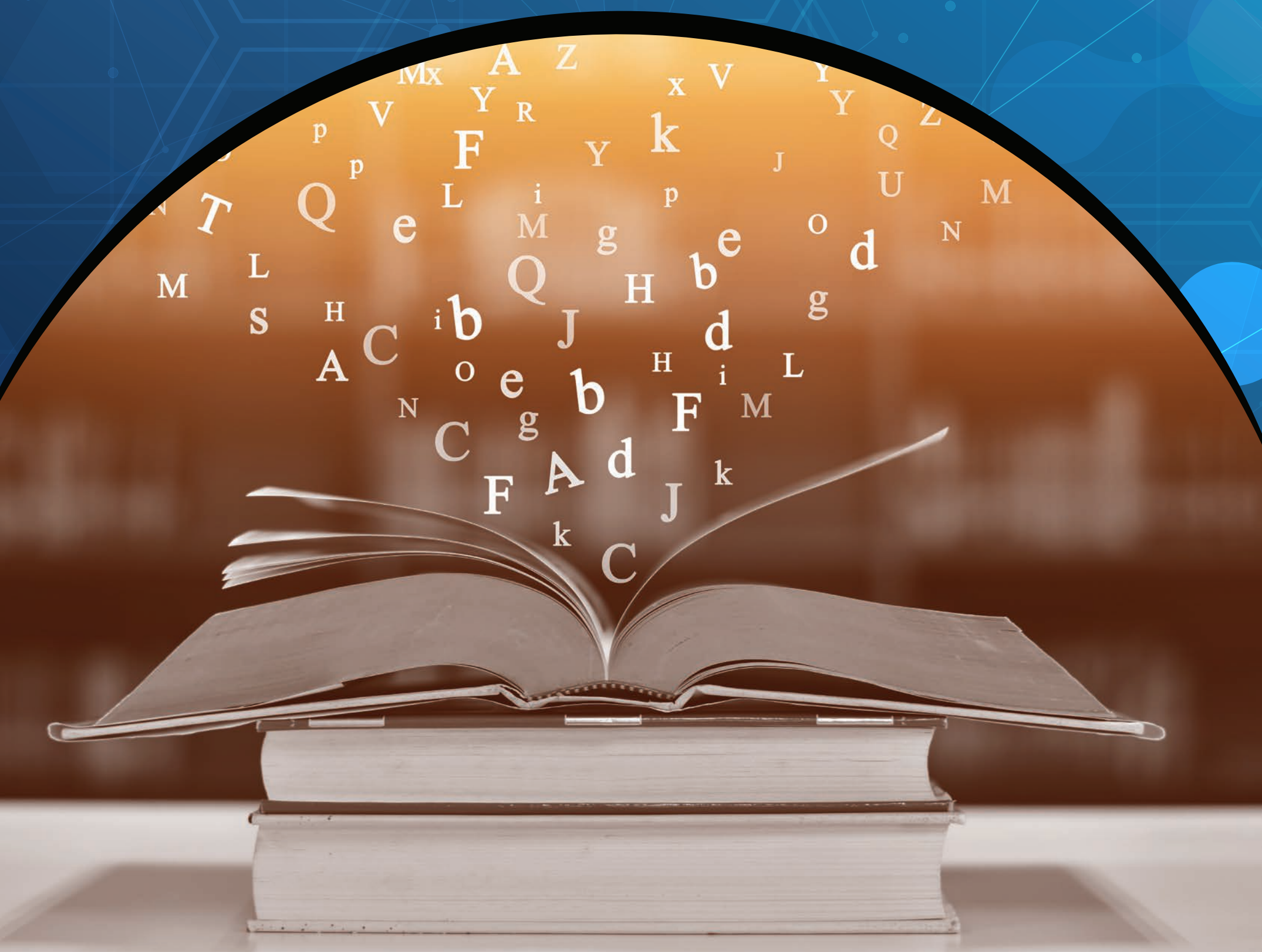
THE FUNDAMENTAL UNIT OF LIFE

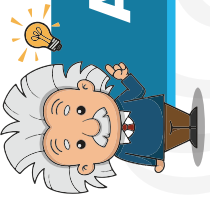




ENGLISH

MIND MAP





A TRULY BEAUTIFUL MIND

Introduction

"A Truly Beautiful Mind" is a brief biographical sketch of the great genius Albert Einstein. The chapter's title refers to the ability to appreciate and understand the beauty of the world through a thoughtful and imaginative mind.

Author

The chapter is an excerpt from the autobiography of Albert Einstein, a great scientist who was deeply concerned about the world and its problems

Flow of the story

Overview of the chapter

The chapter illustrates the life story of Albert Einstein, who was not just a scientist but also a human being with his likes and dislikes, his streaks of rebellion. It describes Einstein's childhood, his struggles in school, and his passion for science. The chapter also highlights Einstein's contributions to the field of science and world politics.

1

Introduction to Albert Einstein, a great scientist with a beautiful mind

- Einstein was a scientific genius who made significant contributions to the field of science.
- The chapter's title "A Truly Beautiful Mind" refers to Einstein's ability to appreciate and understand the beauty of the world through his thoughtful and imaginative mind.
- Einstein was not just a scientist but was deeply concerned about the world and its problem.

2

Einstein's childhood and early struggles in school

- Einstein was born in Germany in 1879 and had a difficult childhood.
- He was a rebel and did not like the strict discipline of school.
- Einstein was not good at rote learning and struggled in school.
- He was interested in science and mathematics from a young age.
- His friends called him 'Brother boring'.

3

Einstein's passion for science and his contributions to the field of science

- Einstein was passionate about science and mathematics.
- He made significant contributions to the field of science, including the theory of relativity and the famous equation $E=mc^2$.
- Einstein's work revolutionized the field of physics and had a profound impact on modern science.

6

Einstein's personal life

- He loved Mileva and wanted to marry her after his studies.
- His mother was against their marriage.
- She said that they both had an age gap and Mileva was a 'Book' like him.
- Einstein and Mileva married in 1903.
- They had 2 sons.
- Later, they had some issues in their marriage and got divorced in 1919.
- After a few years Einstein got married to his cousin Elsa

4

Einstein's contributions to world politics

- Einstein was deeply concerned about the world and its problems.
- He was an advocate for peace and spoke out against war and violence.
- Einstein was involved in world politics and was a supporter of the Zionist movement.

5

Einstein's belief in the power of imagination and its importance in solving the world's problems

- Einstein believed in the power of imagination and its importance in solving the world's problems.
- He believed that imagination was more important than knowledge.
- Einstein used his imagination to come up with new ideas and solutions to problems.
- He believed that imagination could help solve the world's problems, including war and violence.

Conclusion

In conclusion, "A Truly Beautiful Mind" is a biographical sketch of Albert Einstein, a great scientist who was deeply concerned about the world and its problems. The chapter highlights Einstein's childhood, his struggles in school, his passion for science, and his contributions to the field of science and world politics. It also emphasizes the importance of imagination in solving the world's problems.



SOCIAL SCIENCE

MIND MAP





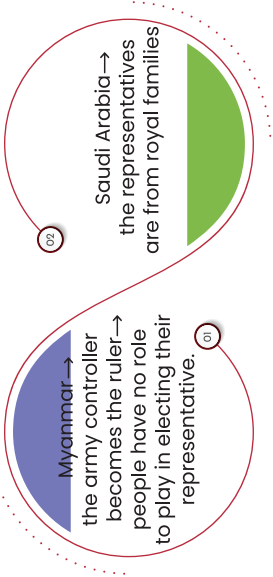
What is Democracy

Why Democracy

1. WHAT IS DEMOCRACY

Definition of Democracy → A form of government → where rulers are elected by the choice of people

Examples of non-democratic governments



2. FEATURES OF DEMOCRACY

Few questions for democracy



Major Decision by the Elected Leaders

In October 1999 → Pakistani General Pervez Musharraf led the military and overthrew a democratic government → declared he the 'Chief Executive'.

In 2002 → changed his designation to President

In August 2002 → passed the 'Legal Framework Order' → stated that the President can dismiss the national and provincial assemblies.

After elections, elected candidates vested some powers, the final power rested with military officers and General Musharraf. It shows that it is not a democratic country.

Free and Fair Electoral Competition

China → to elect members for the country's parliament called Quanguo Renmin Daibiao Dahui (National People's Congress) → election is held every 5 years.

Candidate needs to be a member of the Chinese Communist Party or 8 of its allies to contest elections in 2002-03.

The communist party used to form the government.

Since its independence in 1930 → Mexico holds elections after every six years to elect its President → the country has never been under a military or dictator's rule → But until 2000 every election was won by a party called PRI (Institutional Revolutionary Party).

Examples of Democracy – India and the United States etc.

One person, one vote, one value

- Political equality the basis of democracy.
- Few instances where equal rights are denied have been observed

Until 2015, in Saudi Arabia women did not have the right to vote.

Fiji's electoral system gave more value to indigenous Fiji than Indian-Fijian.

- These are some examples which contradict the basis of democracy where an adult citizen must have one vote with equal value.

Rule of Law and Respect for Rights

In 1980, Zimbabwe gained independence. The leader Robert Mugabe of the ZANU-PF party, which led for the freedom struggle, ruled the country.

President Mugabe used malpractices in elections so that ZANU-PF always won.

Only the verdicts of the ruling party were presented by TV and Radios since a law existed that restricted the right to criticize the President.

Harassment was done to the independent journalist who talked against the government.

Hence, in a democratic government

Major decisions were taken by the rulers elected by the people.

Fair choice of people in changing rulers.

Equal opportunity to all the citizens in choosing their representative

Government's power is limited by the basic rules of the constitution.

3. WHY DEMOCRACY?

Arguments against Democracy

A	B	C	D	E
Political competition and power-play can take the dominance over morality.	Delay in decision making because of multiple consultations	Lack of knowledge in the public interest can result in wrong decision making.	Democracy is based on electoral competition, it brings corruption	People electing their representative may be unaware of their wellbeing



Pastoralists in the Modern World

Pastoral, Nomads and their Movements

In the Mountains

- The Gujjar Bakarwals of Jammu and Kashmir are great herders of goats and sheep.
- In winter, when the high mountains were covered with snow, they lived with their herds in the low hills of the Siwalik range. The dry scrub forests here provided pasture for their herds.
- Several households came together for this journey, forming what is known as a kafilā.
- By the end of September, the Bakarwals were on the move again, this time on their downward journey, back to their winter base.
- In a different area of the mountains, the Gaddi shepherds of Himachal Pradesh had a similar cycle of seasonal movement.
- They too spent their winter in the low hills of Siwalik range.
- By April they moved north and spent the summer in Lahul and Spiti.
- In Garhwal and Kumaon, the Gujjar cattle herders came down to the dry forests of the bhabar in the winter and went up to the high meadows – the bugyals – in summer.

On the Plateaus, Plains and Deserts

- Pastoralists were also found in the plateaus, plains and deserts of India.
- Maharashtra, Dhangars were an important pastoral community that were mostly shepherds, blanket weavers, and buffalo herders.
- In the monsoon, this tract became a vast grazing ground for the Dhangar flocks. By October the Dhangars harvested their bajra and started on their move west.
- After a march of about a month, they reached the Konkan. This was a flourishing agricultural tract with high rainfall and rich soil. Here the shepherds were welcomed by Konkani peasants.
- The Konkani peasants also gave supplies of rice which the shepherds took back to the plateau where grain was scarce.
- The Gollas herded cattle. The Kurumas and Kurubas reared sheep and goats and sold woven blankets.
- Banjaras were yet another well-known group of graziers. They were to be found in the villages of Uttar Pradesh, Punjab, Rajasthan, Madhya Pradesh and Maharashtra.
- In the deserts of Rajasthan lived the Raikas.
- The Raikas combined cultivation with pastoralism. During the monsoons, the Raikas of Barmer, Jaisalmer, Jodhpur and Bikaner stayed in their home villages, where pasture was available.

Colonial Rule and Pastoral Life

- The colonial state wanted to transform all grazing lands into cultivated farms.
- From the mid-nineteenth century, Waste Land Rules were enacted in various parts of the country. By these Rules, uncultivated lands were taken over and given to select individuals.
- By the mid-nineteenth century, some forests which produced commercially valuable timber like deodar or Sal were declared 'Reserved'. No pastoralist was allowed access to these forests.
- These Forest Acts changed the lives of pastoralists. They were now prevented from entering many forests that had earlier provided valuable forage for their cattle.
- They needed a permit for entry. The timing of their entry and departure was specified, and the number of days they could spend in the forest was limited.
- The permit specified the periods in which they could be legally within a forest. If they overstayed, they were liable to fines.
- The colonial government wanted to rule over a settled population. They wanted the rural people to live in villages, in fixed places with fixed rights in particular fields.
- Those who were settled were seen as peaceable and law-abiding; those who were nomadic were considered to be criminals.
- In 1871, the colonial government in India passed the Criminal Tribes Act.
- The colonial government imposed a tax on every possible source of taxation. Pastoralists had to pay tax on every animal they grazed on the pastures.

Pastoralism in Africa

- Over half the world's pastoral population lives. Even today, over 22 million Africans depend on some form of pastoral activity for their livelihood.
- They include communities like Bedouins, Berbers, Maasai, Somali, Boran and Turkana.
- They raise cattle, camels, goats, sheep and donkeys; and they sell milk, meat, animal skin and wool.
- The Maasai cattle herders live primarily in east Africa: 300, 000 in southern Kenya and another 150,000 in Tanzania.

Where have the Grazing Lands Gone?

- In 1885, Maasai land was cut into half with an international boundary between British Kenya and German Tanganyika.
- Subsequently, the best grazing lands were gradually taken over for white settlement and the Maasai were pushed into a small area in South Kenya and north Tanzania.
- As cultivation expanded, pasturelands were turned into cultivated fields.
- Large areas of grazing land were also turned into game reserves like the Maasai Mara and Somburu National Park in Kenya and Serengeti Park in Tanzania.
- The Serengeti National Park, for instance, was created over 14,760 km. of Maasai grazing land.
- Continuous grazing within a small area inevitably meant a deterioration of the quality of pastures. Fodder was always in short supply. Feeding the cattle became a persistent problem.

The Borders are Closed

- From the late nineteenth century, the colonial government began imposing various restrictions on their mobility.
- Pastoralists were also not allowed to enter the markets in white areas.
- The new territorial boundaries and restrictions imposed on them suddenly changed the lives of pastoralists.
- The restrictions under colonial rule did not entirely stop their trading activities but they were now subject to various restrictions.

When Pastures Dry

- When rains fail and pastures are dry, cattle are likely to starve unless they can be moved to areas where forage is available.
- An enquiry in 1930 showed that the Maasai in Kenya possessed 720,000 cattle, 820,000 sheep and 171,000 donkeys.
- In just two years of severe drought, 1933 and 1934, over half the cattle in the Maasai Reserve died.

Not All were Equally Affected

- In pre-colonial times Maasai society was divided into two social categories – elders and warriors.
- The elders formed the ruling group and met in periodic councils to decide on the affairs of the community and settle disputes. The warriors consisted of younger people, mainly responsible for the protection of the tribe.
- To administer the affairs of the Maasai, the British appointed chiefs of different sub-groups of Maasai, who were made responsible for the affairs of the tribe.
- The chiefs appointed by the colonial government often accumulated wealth over time.
- But the poor pastoralists did not have the resources to tide over bad times. In times of war and famine, they lost nearly everything.

Conclusion

- New laws and new borders affect the patterns of their movement. With increasing restrictions on their mobility, pastoralists find it difficult to move in search of pastures.
- As pasture lands disappear grazing becomes a problem, while pastures that remain deteriorate through continuous overgrazing. Times of drought become times of crises when cattle die in large numbers.
- Environmentalists and economists have increasingly come to recognise that pastoral nomadism is a form of life that is perfectly suited to many hilly and dry regions of the world.

How did these Changes Affect the Lives of Pastoralists?

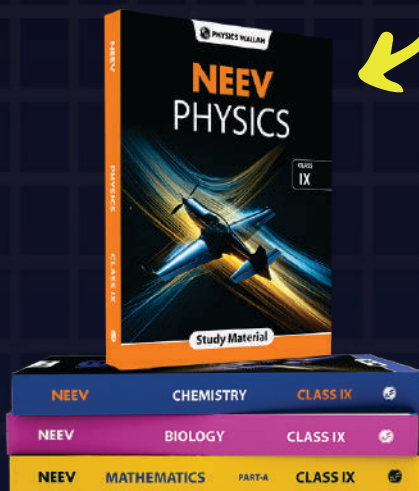
- When restrictions were imposed on pastoral movements, grazing lands came to be continuously used and the quality of pastures declined.
- Underfed cattle died in large numbers during scarcities and famines.

How did the Pastoralists cope with these changes?

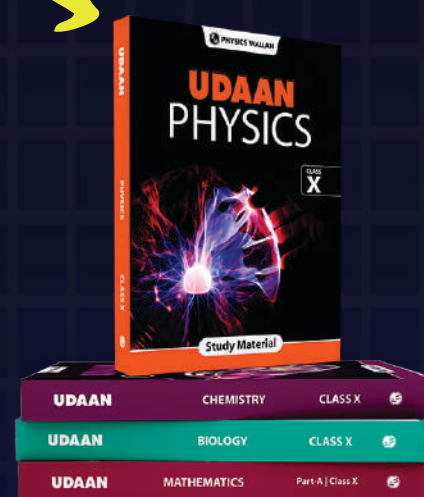
- After 1947, the camel and sheep herding Raikas, for instance, could no longer move into Sindh and graze their camels on the banks of the Indus, as they had done earlier.
- Over the years, some richer pastoralists began buying land and settling down, giving up their nomadic life. Some became settled peasants cultivating land, others took to more extensive trading.
- Some reduced the number of cattle in their herds.
- Others discovered new pastures when movement to old grazing grounds became difficult.

OTHER HELPFUL BOOKS FOR CBSE EXAMS

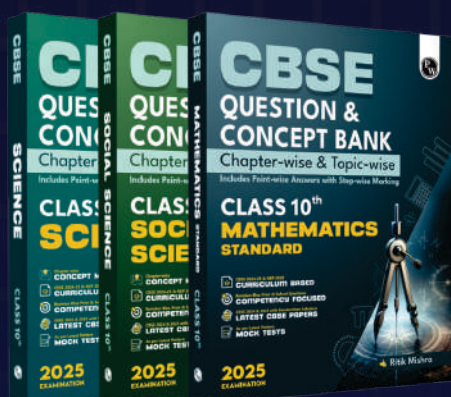
NEEV for Class 9th



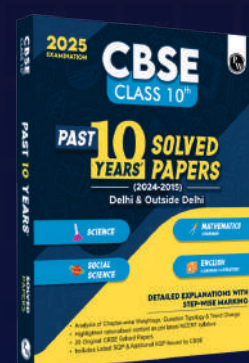
UDAAN for Class 10th



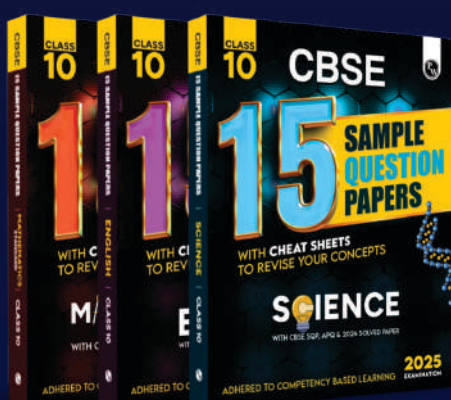
Question & Concept Banks for Class 10th



Previous Years Solved Papers for Class 10th



Sample Papers for Class 10th



₹ 549/-

