

# CBSE (NCERT) GRADE 9 - LIST OF VIDEO CLASSES

# **PCMB**

Subject	Number of Videos
Mathematics	135
Physics	50
Chemistry	41
Biology	53
English Grammar	82
Total	361

#### **CBSE GRADE-9 (MATHAMATICS) TABLE OF VIDEO CLASSES**

CHAPTER NAME	VIDEO NAME
Number Systems	Number Systems - Part 1
	Exercise 1.1; Irrational Numbers
	Exercise 1.2; Real Numbers and their Decimals - Part 1
	Real Numbers and their Decimals - Part 2; Exercise 1.3
	Exercise 1.3 Continued
	Operations on Real Numbers
	Representing Real Numbers on Number line
	Identities; Example 16 to 18
	Exercise 1.5
	Laws of Exponents; Exercise 1.6 - Part 1
	Laws of Exponents; Exercise 1.6 - Part 2
Polynomials	Introduction
	Classification of Polynomial
	Zeros of a Polynomial - Part 1
	Zeros of a Polynomial - Part 2
	Remainder Theorem - Part 1
	Remainder Theorem - Part 2; Exercise 2.3
	Factorization of Polynomials - Part 1
	Factorization of Polynomials - Part 2; Exercise 2.4
	Exercise 2.4
	Exercise 2.4 Continued
	Algebraic Identities
	Examples 16 to 20
	Examples 21 to 23



	Examples 24, 25; Exercise 2.5(1,2)
	Exercise 2.5 (3-5)
	Exercise 2.5 (6-8)
	Exercise 2.5 (9-14)
	Exercise 2.5 (15-16)
Coordinate Geometry	Introduction
Coordinate deometry	Exercise 3.1
	Exercise 3.2 and 3.3
Linear Equations in Two Variables	Introduction
Linear Equations in Two Variables	
	Exercise 4.1; Solution for Linear Equation; Examples (3,4)  Exercise 4.2
	Graph of a Linear Equation in 2 Variable; Examples (5,6)
	Examples (7,8); Exercise 4.3(1)
	Exercise 4.3 (2-5)
	Exercise 4.3 (6-8)
	Equations of Lines Parallel to the x and y axis; Exercise 4.4
Introduction to Euclid's Geometry	Introduction
	Euclid's Axioms and Postulates; Theorem 5.1
	Exercise 5.1 (1 to 4)
	Exercise 5.1 (5 to 7); Equivalents of Euclid's 5th Postulate; Exercise 5.2 (1,2)
Lines and Angles	Introduction
	Adjacent Angles; Vertically Opposite Angles
	Theorem 6.1; Examples 1,2,3
	Exercise 6.1 (1 to 6)
	Parallel and Transversal Lines; Axiom 6.3 and Theorem 6.2
	Theorem 6.3 to 6.6
	Example 4,5,6
	Exercise 6.2 (1 to 6)
	Theorem 6.7, 6.8; Example 7, 8
	Exercise 6.3 (1 to 6)
Triangles	Introduction
-	Criteria for Congruence of Triangles
	ASA Congruence Rule
	Theorem 7.2, 7.3, 7.4, 7.5, Example 1
	Example 2,3,4,5,6
	Exercise 7.1 (1,2,3,4,5)
	Exercise 7.1 (6,7,8)
	Exercise 7.2 (1,2,3,4,5,6,7,8)
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	Examples 7, 8
	Exercise 7. 3
	Inequalities in a Triangle; Theorem 7.6, 7.7 and 7.8
	Example 9; Exercise 7.4 (1,2)
	Exercise 7.4 (3,4,5,6)
Quadrilaterals	Introduction
	Properties of Parallelogram; Theorem 8.2, 8.3, 8.4, 8.5
	Theorem 8.6, 8.7, 8.8, Example 1
	Example 2,3,4,5,6
	Exercise 8.1 (1 to 4)
	Exercise 8.1 (5 to 7)
	Exercise 8.1 (8,9,10)
	Exercise 8.1 (11,12)
	Mid-Point Theorem and Converse of the Mid-Point Theorem
	Exercise 8.2 (1,2,3)
	Exercise 8.2 (4,5,6,7)
Areas of Parallelograms and Triangles	Introduction
c c	Exercise 9.1; Theorem 9.1
	Example 1,2; Exercise 9.2 (1)
	Exercise 9.2 (2,3,4)
	Exercise 9.2 (5,6); Theorem 9.2
	Formula for Area of a Triangle; Example (3,4); Exercise 9.3(1,2,3)
	Exercise 9.3 (4,5)
	Exercise 9.3 (6,7,8)
	Exercise 9.3 (9,10,11,12)
	Exercise 9.3 (13,14,15,16)
Circles	Introduction
	Exercise 10.1, Theorem 10.1
	Theorem 10.2; Perpendicular Bisector; Theorem (10.3,10.4); Exercise 10.2(1,2)
	Circle Through Three Point; Theorem 10.5; Example 1; Exercise 10.3 (1,2,3)
	Theorem 10.6, 10.7; Example 2; Exercise 10.4 (1,2)
	Exercise 10.4 (3,4,5,6)
	Theorem 10.8, 10.9, 10.10
	Theorem 10.11, 10.12
	Example 3, 4, 5, 6
	Example 3, 4, 5, 6 Exercise 10.5 (1,2,3,4,5,6)



	Constructions 11.2, 11.3
	Exercise 11.1 (1,2)
	Exercise 11.1 (3)
	Exercise 11.1 (4)
	Exercise 11.1 (1) Exercise 11.1 (5); Construction 11.4
	Constructions 11.5 Case 1 and 2; Construction 11.6
	Example 1; Exercise 11.2 (1)
	Exercise 11.2 (2,3)
	Exercise 11.2 (4,5)
Heron's Formula	Introduction
Tieron 3 i ormaia	Example 3; Exercise 12.1 (1 to 6)
	Applications of Heron's Formula; Example 4,5,6
	Exercise 12.2 (1,2,3,4)
	Exercise 12.2 (5,6,7,8,9)
Surface Areas and Volumes	Introduction
Sarrace / it cas arra volumes	Exercise 13.1 (1 to 6)
	Exercise 13.1 (7,8); Right Circular Cylinder; Exercise 13.2(1,2)
	Exercise 13.2 (3 to 11)
	Right Circular Cone; Exercise 13.3 (1 to 8)
	Sphere; Exercise 13.4 (1 to 9)
	Exercise 13.5 (1 to 7)
	Exercise 13.5 (8,9); Exercise 13.6 (1,2,3,8); Exercise 13.7 (1,6,7)
	Exercise 13.6 (4,5,6,7)
	Exercise 13.7 (2 to 9)
	Exercise 13.8 (1 to 10)
	Worked out Examples
Statistics	Introduction; Exercise 14.1(1,2); Example (1,2)
	Presentation of Data; Example 3,4; Exercise 14.2(1,2)
	Exercise 14.2 (3 to 7)
	Exercise 14.2 (8,9); Exercise 14.3 (1,2)
	Exercise 14.3 (3 to 6)
	Exercise 14.3 (7 to 9)
	Exercise 14.3 (7 to 9)  Central tendency of Data (Mean, Median & Mode); Exercise 14.4(
Probability	Central tendency of Data (Mean, Median & Mode); Exercise 14.4(



#### **CBSE GRADE-9 (PHYSICS) TABLE OF VIDEO CLASSES**

CHAPTER NAME	VIDEO NAME
Motion	Describing Motion
	Motion along the Straight Line; Uniform and Non-Uniform Motion
	Measuring Rate of a Motion
	Rate of Change of Velocity
	Graphical Representation of Motion - Distance Time Graph
	Exercises
	Velocity - Time Graph
	Equations of Motion by Graphical Methods
	Equation for Velocity - Time Graph
	Activity 8.9, 8.10
	Questions on Page 103
	Examples 8.5, 8.6, 8.7
	Questions on Page 109,110
	Uniform Circular Motion and Recap
	Recap Continued
Force and Laws of Motion	Introduction
	First Law of Motion
	Inertia and Mass
	Second Law of Motion
	Solved Problems
	Solved Problems and Third Law of Motion
	Conservation of Momentum
	Solved Problems
	Example 9.5, 9.8, 4 on Page 127
Gravitation	Introduction
	Free Fall
	Solved Problems
	Mass, Weight
	Thrust and Pressure, Pressure in Fluids, Buoyancy
	Why objects Float or Sink? Example 10.4, 10.5
	Exercises on Page 143
	Exercises on Page 144
	Archimedes Principle; Relative Density
Work and Energy	Introduction
	Forms of Energy; Kinetic Energy
	Solved Problems - 1
	Potential Energy



	Law of Conservation of Energy
	Rate of Doing Work; Commercial Unit of Work; Solved Problems
Sound	Introduction
	Sound Needs a Medium to Travel; Characteristics of the Sound Wave
	Characteristics of a Sound Wave; Amplitude and Speed
	Example 12.1; Intext Questions - 3,4; Speed of Sound in Different Medium
	Reflection of Sound; Range of Hearing
	Applications of Ultrasound
	Solved Problems; Structure of the Ear
	Exercises (1,2,3,4,5,6)
	Exercises (7,8,9,10,11)
	Exercises (12,13,14,15)
	Exercises (16,17,18,20,21)

## CBSE GRADE-9 (CHEMISTRY) TABLE OF VIDEO CLASSES

CHAPTER NAME	VIDEO NAME
Matter in our Surroundings	Introduction to Matter in our Surroundings
	States of Matter
	Change in States of Matter
	Evaporation
	Solving Questions - Part 1
	Solving Questions - Part 2
	Solving Questions - Part 3
	Solving Questions - Part 4
	Exercises - Part 1
	Exercises - Part 2
	Recap
Is Matter Around Us Pure	Introduction
	Types of Mixtures; Solutions
	Concentration of a Solution
	Suspensions and Colloids
	Colloids Explained
	In text Questions on Page 15 and 18
	Separating the Components of a Mixture - Part 1
	Separating the Components of a Mixture - Part 2
	Chromatography and Crystallization
	Physical and Chemical changes
	Elements and Compounds Rejected



	Text Book Questions
	Exercise 1,2 & 5
	Exercise 3
	Exercise 4,6,7,8,9,10,11
Atoms and Molecules	Introduction
	Atoms, Elements
	Modern Day Symbols of Atoms of Different Elements
	Atomic Mass
	Molecules of Elements and Compounds ; Ions
	Writing Chemical Formula - Part 1
	Writing Chemical Formula - Part 2
	Molecular Mass and Mole Concept
	Example 3.3, 3.4, 3.5
Structure of Atom	Introduction
	Rutherford's Model of an Atom - Part 1
	Rutherford's Model of an Atom - Part 2
	Distribution of Electrons in Shells
	Valency (Combining Capacity)
	How to Calculate Valency?

## CBSE GRADE-9 (BIOLOGY) TABLE OF VIDEO CLASSES

CHAPTER NAME	VIDEO NAME
The Fundamental Unit of Life	Introduction
	Structural Organization of a Cell
	Plasma Membrane
	Plasma Membrane Continued
	Nucleus
	Cytoplasm
	Organelles of the Cell - 1
	Organelles of the Cell - 2
Tissues	Tissues Introduction
	Section of the Stem
	Types of Plant Tissues
	Sclerenchyma Tissues and Epidermis
	Complex Tissues
	Animal Tissues
	Epithelial Tissues and Connective Tissue
	Cartilage, Areolar and Adipose Tissues



	Muscle Tissue
	Neuron
Diversity of Living Organism	Introduction
Diversity of Living Organism	Hierarchy of Classification; Binomial Nomenclature
	Kingdom Protista and Mycota
	Kingdom Plantae
	Kingdom Animalia - Phylum Porifera and Coelenterata
	Phylum Platyhelminthes, Nematoda and Annelida
	Phylum Arthropoda, Mollusca and Echinodermata
	Phylum Chordata - Group Protochordata and Vertebrates - Class Pisces
	Class - Amphibia, Reptilia, Aves and Mammalia
Why do We Fall III?	Introduction
•	Health and Disease
	Disease and its Causes
	Causes of Diseases
	Infectious Diseases Caused by Viruses and Bacteria
	Means of Spread (Transmission)
	Organ Specific or Tissue Specific Manifestation and Treatment
	Principles and Prevention and Immunization
Natural Resources	Introduction
	Natural Resource - Air
	Rain, Air Pollution
	Water and Water Pollution
	Minerals and Formation of Soil
	Types of Soil; Soil Erosion; Water Cycle
	Nitrogen Cycle and Carbon Cycle
	Ozone Layer
Improvement in Food Resources	Introduction
	Crop Variety Improvements
	Crop Variety Improvements - Methods
	Crop Production Management - Part 1
	Crop Production Management - Part 2
	Crop Production Management - Part 3
	Crop Production Management - Part 4
	Animal Husbandry
	Poultry Farming
	Fish Production and Beekeeping



#### **ENGLISH GRAMMAR (COMPLIMENTARY) TABLE OF VIDEO CLASSES**

CHAPTER NAME	VIDEO NAME
Alphabet	Vowels and Consonants
Parts of Speech	Parts of Speech
	Nouns
	Pronouns
	Adjectives
	Verbs
	Adverbs - 1
	Adverbs - 2
	Proposition - 1
	Preposition - 2
	Conjunctions
Types of Nouns	Introduction to Nouns and Proper Nouns
	Common Noun and Collective Noun
	Countable and Uncountable Nouns - Part 1
	Countable and Uncountable Nouns - Part 2
	Concrete and Abstract Nouns
Noun Gender	Noun Gender
	Neuter Gender
Noun Cases	Noun Cases
	Objective Case / Accusative Case
	Possessive Case
	Vocative Case
Noun Number	Noun Number - Singular - Plural Rules 1,2,3,4
	Noun Number - Singular - Plural Rules 1,2,3,4
	Noun Number - Singular - Plural Rules 11,12
Compound Nouns	Compound Nouns - Part 1
	Compound Nouns - Part 2
	Compound Nouns - Part 3
Articles	Articles - 1
	Articles - 2
	Definite Article "THE" - Part 1
	Definite Article "THE" - Part 2
Verb	Verb-1
	Verb-2
	Verb-3
Subject Verb	Subject Verb Agreement -1
Agreement	Subject Verb Agreement -2



Pronouns	Pronouns - Personal Pronouns
	Personal Pronouns as Subject and Object
	Relative Pronoun - Demonstrative Pronoun
	Indefinite Pronouns - 1
	Indefinite Pronouns - 2
	Reflexive Pronouns
Tenses	Tenses
	Present Tense - 1
	Present Tense - 2
	Past Tense - 1
	Past Tense - 2
	Future Tense
Figures of Speech	Figures of Speech - 1
	Figures of Speech - 2
	Figures of Speech - 3
	Figures of Speech - 4
Nouns	Proper Noun and Common Noun
	Types of Nouns
Adjectives	Adjectives - 1
	Adjectives - 2
	Adjectives - 3
	Types of Adjectives -1
	Types of Adjectives -2
Articles	Indefinite Articles
	Definite Articles
Auxiliary Verbs	Auxiliary Verbs -1
	Auxiliary Verbs -2
	Auxiliary Verbs - 3
Sentences	The Sentence - Part 1
	The Sentence - Part 2
	Types of Sentences - Part 1
	Types of Sentences - Part 2
Phrases and Clauses	Types of Phrases
	Types of Clauses
Idioms	Idioms - Part 1
	Idioms - Part 2
	Idioms - Part 3
	Idioms - Part 4
	Idioms - Part 5



Question tags	Question tags
Parts of a Sentence	Parts of a Sentence -1
	Parts of a Sentence -2
Pronouns	Interrogative Pronoun
	Possessive Pronoun
Verbs	Main verbs; Auxiliary verbs

<sup>\*</sup>English Grammar is being offered as Complimentary along with Annual Pack