

Study Planner for Foundation-IX



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From Managing Director's Desk

Iot has changed at Aakash during the transition from a humble

coaching institute to becoming a recognized name in the education field. We live by the notion that the very essence of success is a strong value system. We still believe in the age-old Indian concept of "Guru-Shishya" relationship where a guru shares his knowledge reserve with his pupils and the 'Shishya' strives hard to quench his/her thirst for knowledge.

It has been our endeavour to make Aakash much more than a coaching institute, which is to build it into an institution of repute and purpose. We consider our students the torchbearers of the future of the country and thus, aim to enlighten the future of the nation through this young generation. We dream of a progressing India through the eyes of our students and assist them in accomplishing their dreams with the collective efforts of our faculty & staff members, our students and their parents.

For 31 years, we have been nurturing students and helping them in their endeavour to qualify in various Engineering and Medical entrance exams in the country. This endeavour is actually a journey, which we take along with our students. We wish to feel their emotions, their frustrations, their dreams, their vision, their struggles and their joys. Together we live an experience, which they would remember as one of the most cherished moments in their lives after qualifying the coveted competitive exams.

Even today, we aim at clearing doubts and strengthening the fundamentals of students in their subjects, because we believe these cleared doubts and strengthened fundamentals will eventually strengthen the destiny of our nation, which actually lies in these hands that are holding the 'mighty' pen & are now learning with technology. And we are confident that with Aakash, their future is in safe and progressive hands.

J. C. Chaudhry
Chairman & Managing Director (CMD)



About Aakash iTutor

Recorded Video Lectures on Olympiads syllabus by master Aakash Faculty help you boost your preparation and perform well in the exam. Learn at your own pace with Video Lectures. Assess yourself by taking the online tests and clear your doubts via 'Ask an Expert'.

Your tools to prepare

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Olympiads

Olympiads provide a unique competitive platform to young intellectuals. They help students analyse their weak and strong attributes and bring out the best in them. Olympiads are highly challenging in nature which improves students' aptitude and builds their confidence. In addition, they cultivate analytical thinking, improve conceptual understanding and enhance problem solving skills.

Each Olympiad is a separate exam with its own organizing body and a common set of rules and regulations. Olympiad exams thus serve as a platform to challenge the intellectual minds in mathematics and science across the world.





About the Course

The course has been designed to give you an edge over other students while appearing for Olympiads. It covers up all the topics with an emphasis on each topic in proportion to Olympiads.

The Study Planner helps you plan your preparation weeks and ensures that you complete the course on time and even get time to revise it. It helps you increase efficiency, manage time and motivate yourself to get the best score.

The Parent Monitoring Sheet, which your parent/guardian will have to fill in, helps to track your preparation

This course contains the following:



950+ hours of curated video content



750+ Topics covered in-depth



30+ ebooks covering the entire syllabus

For Our Students:

Thank you for choosing Aakash iTutor as your trusted partner for, Olympiads preparation. With sincere study, daily and timely revision, you can ensure success in your examination. Track your progress by ticking against the chapters/topics that you have completed.

We wish you the best for your exam preparation.

For Parents:

Dear Parent.

Thank you for choosing Aakash iTutor as a trusted partner for building your child's career! This course will help your child prepare for Olympiads. We request you to have a weekly discussion with your child, track their progress with the help of study planner and fill up the Parent Monitoring Sheet.

April, 2020 (Week 1)

Physics

Chapter 1: Motion

1.1 Motion, Rest, Distance & Displacement

Chemistry

Chapter 1: Matter In Our Surroundings

1.1 Matter and its Solid State

Biology

Chapter 1: The Fundamental Unit of Life

1.1 Introduction to cell ,history of events in cytology , microscopy

Mathematics

Chapter 1: Number System

☐ 1.1 Introduction To Rational Numbers ☐ and their Decimal Representation

.2 Conversion of decimal into rational
Number of form p/q, Converting
terminating decimal to p/q

1.3 Irrational numbers

April, 2020 (Week 2)

Physics

Chapter 1: Motion

1.2 Speed & Velocity

Chemistry

Chapter 1: Matter In Our Surroundings

1.2 Liquid State

Biology

Chapter 1: The Fundamental Unit of Life

1.2 Structural Organization of a Cell

Mathematics

Chapter 1: Number System

- 1.4 Representing irrational numbers on the number line
- 1.5 Successive magnification and Rationalisation
- 1.6 surds
- .7 Laws of exponents for real numbers
- 1.8 Problems Based on Competitive Exams



April, 2020 (Week 3)

Physics

Chemistry

Biology

Mathematics

Chapter 1: Motion

1.3 Numericals based on Average Speed ☐ and velocity

Chapter 1: Matter In Our Surroundings

1.3 Gas, Plasma and BEC

Chapter 1: The Fundamental Unit of Life

1.3 Cell Organelles

Chapter 2: Polynomials

.1 Introduction, Terms, Coefficients, Standard form, Classification on basis of terms, Degree of the polynomial, Classification of polynomials on basis of degree (also Zero polynomial), Value of the polynomial

April, 2020 (Week 4)

Physics

Chapter 1: Motion

1.4 Acceleration & Retardation

Chemistry

Chapter 1: Matter In Our Surroundings

1.4 State variables and Latent heat

Biology

Chapter 1: The Fundamental Unit of Life

1.4 Cell Organelles

Mathematics

Chapter 2: Polynomials

- 2.2 Zeroes of a polynomial, Problems Discussion, Division of polynomials
- 2.3 Remainder theorem
- 2.4 Factor theorem



May, 2020 (Week 1)

Physics

Chapter 1: Motion

- Graphical representation of motion
- Numericals based on Graphs

Chemistry

Chapter 1: Matter In Our Surroundings

- 1.5 Advanced Lecture
- Assianment 1.6

Biology

Chapter 1: The Fundamental Unit of Life

- 1.5 Cell Organelles
- Cell Organelles and their 1.6 comparison in functions

Mathematics

Chapter 2: Polynomials

- 2.5 Factorisation
- Factorisation by middle term splitting
- Factorisation of polynomial by factor theorem

May, 2020 (Week 2)

Physics

Chapter 1: Motion

- **Equations Of Motion**
- 1.8 **Numericals Based on Equations** of motion PART-1

Chemistry

Chapter 2: Is Matter Around us Pure?

- 2.1 Pure substances
- 2.2 Mixture

Biology

Chapter 2: Tissues

- Plant tissues, Meristematic 2.1 Tissues
- Simple permanent tissues

Mathematics

Chapter 2: Polynomials

- Algebraic identities
- Algebraic identities Algebraic identities
- Relationship between zeroes and coefficient of Quadratic Polynomial



May, 2020 (Week 3)

Physics

Chapter 1: Motion

- 1.9 Numericals Based on Equations of motion PART-2
- 1.10 Uniform Circular Motion & Relative Velocity

Chemistry

Chapter 2: Is Matter Around us Pure?

- 2.3 Solutrion and its concentration
- 2.4 Colloids and their characteristics

Biology

Chapter 2: Tissues

- 2.3 Complex Permanent Tissues
- 2.4 Animal Tissues-L

Mathematics

Chapter 3: Coodinate Geometry

- 3.1 Distance between two points
- 3.2 Application of distance formula
- 3.3 Some important points about special type of quadrilaterals
- 3.4 Section formula, Area of triangle using cooordinate geometry

May, 2020 (Week 4)

Physics

Chapter 1: Motion

- 1.11 Motion under gravity (Uniformly accelerated motion)
- 1.12 Previous Year Questions NTSE STAGE-1 & STAGE- 2

Chemistry

Chapter 2: Is Matter Around us Pure?

- 2.5 Colloids, Changes and Separation of solid-solid mixture
- 2.6 Separation of constituents of Mixture

Biology

Chapter 2: Tissues

- 2.5 Animal Tissues-II
- 2.6 Animal Tissues-III

Mathematics

Chapter 4: Coodinate Geometry

- 4.1 Introduction, Solution of linear equations
- 4.2 Graph of linear equations in two variables



June, 2020 (Week 1)

Physics

Chapter 2: Force & laws of motion

- 2.1 Introduction to force & Newton's first law of motion
- 2.2 Linear momentum & Newton's Second law of motion

Chemistry

Chapter 2: Is Matter Around us Pure?

2.6 Summary of Separation techniques and Assignment

Biology

Chapter 3: Diversity in Living Organisms

- 3.1 Introduction ,Basis of classification, Taxonomy
- 3.2 The Hierarchy of classification, Systems of classification, Kingdom monera

Mathematics

Chapter 4: Coodinate Geometry

- 4.3 Problems based on linear equation in two variables
- 4.4 Solving linear equation in two variables using elimination and substitution method
- 4.5 Application of Linear Equations in two variables in Practical Problems

June, 2020 (Week 2)

Physics

Chapter 2: Force & laws of motion

- 2.3 Newton's third law of motion &
 conservation of linear momentum
- 2.4 Numericals based on Conservation of linear momentum

Chemistry

Chapter 3: Atoms and Molecules

3.1 Laws of Chemical Combinations

Biology

Chapter 3: Diversity in Living Organisms

- 3.3 Protista, Fungi, Thallophyta
- 3.4 Bryophyta, Pteridophyta, Gymnospermae, Angiosperm

Mathematics

Chapter 5: Introduction To Euclid's Geometry

- 5.1 Introduction, Euclid's Definitions, Undefined elements of geometry, Well defined terms, Euclid's Axioms, Euclid's five postulates, Playfair's axiom (equivalent versions, fifth postulate)
- 5.2 Theorems on parallel lines and intersecting lines, Plane and its properties



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June, 2020 (Week 3)

Physics

Chapter 2: Force & laws of motion

- 2.5 Connected motion
- 2.6 Friction & Spring Force

Chemistry

Chapter 3: Atoms and Molecules

3.2 Atoms and Molecules

Biology

Chapter 3: Diversity in Living Organisms

- 3.5 Basic of classification
 - 3.6 Non-chordata

Mathematics

Chapter 6: Lines and Angles

- 6.1 Basics of Lines & Angles, types of ☐ angles, complementary and supplymentary angles
- 6.2 Pairs of angles, Linear pair axioms and problem based on pair of angles

June, 2020 (Week 4)

Physics

Chapter 2: Force & laws of motion

- 2.7 Numericals based on Connected motion
- 2.8 Previous Year Questions NTSE STAGE-1 & STAGE- 2

Chemistry

Chapter 3: Atoms and Molecules

3.3 lons

Biology

Chapter 3: Diversity in Living Organisms

3.5 Chordate

Chapter 4: Why Do We Fall III?

4.1 Human health and disease

Mathematics

Chapter 6: Lines and Angles

- 6.3 Transversal line & angle made by it with two lines
- 6.4 Problem based on Transversal line & angle made by it with two lines
- 6.5 Theorem and Problems based on Transversal and angle made by them
- 6.6 Angle sum property of a triangle
 Exterior angle theorem



July, 2020 (Week 1)

Physics

Chapter 3: Gravitation

- 3.1 Universal law of Gravitation
- 3.2 Acceleration due to gravity & variation in acceleration due to gravity

Chemistry

Chapter 3: Atoms and Molecules

3.4 Molecular weight, Formiula mass

Biology

Chapter 4: Why Do We Fall Ill?

4.2 Types of diseases

Mathematics

Chapter 6: Lines and Angles

- 6.7 Problem Discussion Based on Lines & Angles
- 6.8 Problem Discussion Based on Lines & Angles
- 6.9 Problem Discussion Based on Lines & Angles

July, 2020 (Week 2)

Physics

Chapter 3: Gravitation

- 3.3 Numericals based on motion under gravity (Advance Problems)
- 3.4 Kepler's laws of planetary motion

Chemistry

Chapter 3: Atoms and Molecules

3.5 Mole Concept

Biology

Chapter 4: Why Do We Fall Ill?

4.3 Principle of prevention

Mathematics

Chapter 7: Triangles

- 7.1 Introduction, Classification of triangles: On basis of Sides, On basis of Angles, Some important terms related to a triangle, Concept of congruence, Congruent triangles
- 7.2 Criteria of congruence of two triangles, SAS congruence criterion
- 7.3 ASA congruence criterion, AAS
 Congruence criterion



July, 2020 (Week 3)

Physics

Chapter 3: Gravitation

- 5.5 Thrust, Pressure & Floatation
- 3.6 Advance problems (floatation)
 PART-1

Chemistry

Chapter 3: Atoms and Molecules

3.6 Concentration Terms

Biology

Chapter 5: Natural Resources

5.1 Natural Resources, The breath of life – Air

Mathematics

Chapter 7: Triangles

- 7.4 Properties of an isosceles triangle
- 7.5 SSS congruence criterion
- 7.6 RHS congruence criterion

July, 2020 (Week 4)

Physics

Chapter 3: Gravitation

- 3.7 Advance problems (floatation)
 PART-2
- 3.8 Previous Year Questions NTSE STAGE-1 & STAGE- 2

Chemistry

Chapter 3: Atoms and Molecules

3.7 Questions on Concentration terms

Biology

Chapter 5: Natural Resources

5.2 Rain and its mechanism

Mathematics

Chapter 7: Triangles

- 7.7 Inequalities of triangles
- 7.8 Problems on inequalities in triangles
- 7.9 Problems on inequalities in triangles



August, 2020 (Week 1)

Physics

Chapter 4: Work and Energy

4.1 Work & Types of work, Introduction to energy

Chemistry

Chapter 3: Atoms and Molecules

3.8 Assignment Discussion

Biology

Chapter 5: Natural Resources

5.3 Water pollution

Mathematics

Chapter 8: Quadrilaterals

8.1 Introduction & angle sum property

8.2 Types of quadrilaterals Properties
of parallelograms

August, 2020 (Week 2)

Physics

Chapter 4: Work and Energy

4.2 Kinetic & Potential energy

Chemistry

Chapter 3: Atoms and Molecules

3.9 Assignment Discussion

Biology

Chapter 5: Natural Resources

5.4 Biogeochemical cycles

Mathematics

Chapter 8: Quadrilaterals

- 8.3 Properties of parallelograms
- Problems based on the properties of parallelograms
- 3.5 Parallel lines & their intercepts



August, 2020 (Week 3)

Physics

Chapter 4: Work and Energy

4.3 Transformation of energy & Power

Chemistry

Chapter 4: Structure of Atom

4.1 Introduction to structure of Atom

Biology

Chapter 6: Improvement in Food Resources

6.1 Introduction to Agricultural Crops

Mathematics

Chapter 8: Quadrilaterals

- 8.6 Problem Discussion based on theorems and properties of quadrilaterals
- 8.7 Problem Discussion based on theorems and properties of quadrilaterals

August, 2020 (Week 4)

Physics

Chapter 4: Work and Energy

4.4 Numericals based on work and energy

Chemistry

Chapter 4: Structure of Atom

4.2 Rutherford's Atomic Model, Bohr's Atomic model

Biology

Chapter 6: Improvement in Food Resources

6.2 Improvement in Crop Yield

Mathematics

Chapter 9: Areas Of Parallelograms And Triangles

- 9.1 Introduction, Figures on the same ☐ base and between same parallels & theorem based on it
- 9.2 Problem Discussion Figures on the same base and between same parallels



October, 2020 (Week 1)

Physics

Chapter 4: Work and Energy

4.5 Previous Year Questions NTSE STAGE-1 & STAGE- 2

Chemistry

Chapter 4: Structure of Atom

4.3 Neutron, Isobars, isotopes, Isoelectronic species, Isodiaphers

Biology

Chapter 6: Improvement in Food Resources

6.3 Crop Production and Management-1

Mathematics

Chapter 9: Areas Of Parallelograms And Triangles

- 9.3 Formula to find the area of the given plane figure
- 9.4 Triangles on the same base and between the same parallels
- 9.5 Problems based on theorem and properties based on parallelograms

October, 2020 (Week 2)

Physics

Chapter 5: Sound

5.1 Production & propagation of Sound

Chemistry

Chapter 4: Structure of Atom

4.4 Electronic Configuration

Biology

Chapter 6: Improvement in Food Resources

6.4 Crop Production and Management-2

Mathematics

Chapter 9: Areas Of Parallelograms And Triangles

9.6 Problems based on theorem and properties based on parallelograms

Chapter 10: Circles

0.1 Introduction to Circles and Important Terms Related to Circles



October, 2020 (Week 3)

Physics

Chemistry

Mathematics

Chapter 5: Sound

5.2 Fundamental characteristics of sound (loudness, Pitch, Quality)

Chapter 4: Structure of Atom

4.5 Assignment

Chapter 6: Improvement in Food Resources

6.5 Crop Protection Management

Biology

Chapter 10: Circles

- 10.2 Theorems and property related to perpendicular from centre to a chord
- 10.3 Chords and their Distance from Centre
- 10.4 Circle Through Three Points,
 Congruent Circles and Congruent

Physics

Chapter 5: Sound
5.3 Reflection of sound

Chemistry

Chapter 4: Structure of Atom

4.6 Assignment

Biology

Chapter 6: Improvement in Food Resources

☐ 6.6 Animal Husbandry

Mathematics

Chapter 10: Circles

October, 2020 (Week 4)

- 10.5 Arcs and Angle Substended By them
- 10.6 Arcs and Angle Substended by them, Cyclic Quadrilateral
- 10.7 Cyclic Quadrilateral



November, 2020 (Week 1)

Physics

Numericals

Chapter 5: Sound

Chemistry

Chapter 4: Structure of Atom

4.7 Ouestions Based on structure of atom

Biology

Chapter 6: Improvement in Food Resources

Poultry Farming and fish culture

Mathematics

Chapter 10: Circles

Problems Based on Theorems and **Properties of Circle**

Problems based on Theorems and \Box properties of circle

10.10 Problems based on Theorems and properties of circle

November, 2020 (Week 2)

Physics

Chapter 5: Sound

Previous Year Questions NTSE STAGE-1 & STAGE- 2

Chemistry

Chapter 4: Structure of Atom

4.8 Advanced Lecture

Biology

Chapter 6: Improvement in Food Resources

Fish culture, Apiculture 6.8

Mathematics

Chapter 11: Constructions

Perpendicular Bisector of a line segment

Some Construction of Triangles

Some Construction of Triangles



November, 2020 (Week 3)

Chemistry **Physics Biology Mathematics Revision of Previous Topics Chapter 4: Structure of Atom Chapter 12: Heron's Formula Revision of Previous Topics** Area of triangle, area of right triangle 4.9 Questions based on Advanced Area of an isosceles triangle lecture Area of triangle using Heron's Formula Questions based on Application of Heron's Formula November, 2020 (Week 4) Chemistry **Mathematics Physics Biology Chapter 13: Surface Areas and Volumes Revision of Previous Topics Revision of Previous Topics Revision of Previous Topics** Surface Areas and Volumes of Cube and Cuboid 13.2 Cube. Surface area of cube. Lateral surface area of cube. Volume of cube, Right circular cylinder, Surface area of right circular cylinder, Surface area of a hollow cylinder

December, 2020 (Week 1)

Physics	Chemistry	Biology		Mathematics
Revision of Previous Topics	Revision of Previous Topics	Revision of Previous Topics		Chapter 13: Surface Areas and Volumes 13.3 Volume of a cylinder, Volume of a hollow cylinder 13.4 Surface area and volume of a Right circular cone 13.5 Sphere and hemisphere, Section of a sphere by a plane, Surface area and volume of sphere, hemisphere and spherical shell
		Decer	nbe	er, 2020 (Week 2)
Physics	Chemistry	Biology		Mathematics
Revision of Previous Topics	Revision of Previous Topics	Revision of Previous Topics		Chapter 13: Surface Areas and Volumes 13.6 Problems based on Surface area and volumes of various 3d Shapes Chapter 14: Statistics 14.1 Introduction to Collection & Presentation of Data, Ungrouped & Grouped Frequency Distribution Table

December, 2020 (Week 3)

Physics	Chemistry	Biology	Mathematics
Revision of Previous Topics	□ Revision of Previous Topics	□ Revision of Previous Topics □	Chapter 14: Statistics 14.2 Grouped frequency distribution table, Graphical representation of data 14.3 Histogram 14.4 Frequency polygon 14.5 Measures of central tendency, Mean, Median, Mode
		Decemb	er, 2020 (Week 4)
Physics	Chemistry	Biology	Mathematics
Revision of Previous Topics	□ Revision of Previous Topics	□ Revision of Previous Topics □	Chapter 15: Probability 15.1 Introduction to Probability, Important ☐ Terms And Empirical Probability 15.2 Problems Based on Empirical ☐ Probability 15.3 Problems Based on Theoritical ☐ probability and cards



Thank You

ALL THE BEST FOR YOUR EXAMS!!

