

ANNUAL SYLLABUS
DIRECTORATE OF EDUCATION, GNCT OF DELHI
CLASS: IX (2026-27)
SUBJECT: SCIENCE AT ADVANCED LEVEL (Optional)

S. No.	Chapters	Activity
1.	Measurement - Foundation of Science Introduction: What is Measurement?, Different Systems of units, Need for a Common System of Units, International System of Units (SI), Conversions of Units between different Systems	1.1: Measuring the area of the classroom floor 1.2: Let's play an estimation game 1.3: Let us Compare
2.	Understanding Motion Through Experience What is Motion, Frame of Reference, Scalars and Vectors, Vector Addition (Graphical Method), Equations of Motion, Reflect and Discuss, Project Based Learning	2.1: Let's observe 2.2: Motion is Relative 2.3: Direction Matters 2.4: Graphical Addition of Displacements 2.5: Observing Accelerated Motion Using a Toy Car
3.	Newton's Laws of Motion Limitations of Newton's Laws in Accelerating Frames, Gravitation, Turning Forces (Moment of Force/Torque)	3.1: Let us observe 3.2: Movement of the bob in a circular motion 3.3: Let us observe
4.	The Geometry of Power - Advanced Simple Machines Introduction, Wheel and Axle – The Steering Mastery, Tension	4.1: How machines are helping us multiply force or increase speed 4.2: Think and Answer 4.3: Stretching of the bob
5.	Work and Energy Conservative and Non-Conservative Forces, Potential Energy of a spring	5.1: Recollect some common occurrences 5.2: The extension of the spring increases with the added weight
6.	Structure of Atom Discovery of Subatomic Particle, Spectrum, Line Spectrum of Hydrogen, Limitation of Rutherford Model of Atom, Bohr's model	6.1: The white light passes through a glass prism
7.	Chemical Bonding Octet rule, Metallic Bonding	

8.	Mixtures and their Separation Chromatography, Fractional Distillation, How is it different from simple distillation?, Application	8.1: Column Chromatography 8.2: Separation of different components of crude oil by fractional distillation
9.	Microscope and Microscopy What is a Microscope?, A Quick historical Journey of Microscopes, How Does a Microscope Work?, Microscopy Skills, Types of Microscopes, What is new in Microscopy? What are the limits?, Where do we use Microscopes ?	9.1: Let us think and write: If you could shrink yourself and travel inside a leaf, what would you see? 9.2: A Timeline Strip 9.3: Let us examine a compound microscope 9.4: Let us prepare, observe and compare leaf peels of monocot and dicot leaves 9.5: Let us observe permanent slides of leaf peel of a monocot and dicot leaf
10.	Engineering Life: Miracles in Biotechnology Introduction to Biotechnology, Traditional vs Modern Biotechnology, Microbes as Tools in Biotechnology, Applications of Biotechnology in Daily Life, Bioreactors: Powering Large-Scale Biotechnology Applications, Ethical Issues in Biotechnology	10.1: Observe Fermentation at Home 10.2: Traditional Biotechnology around you Activity 10.3: Fermentation at home
The entire syllabus is to be completed for Annual Examination by January 30, 2027 .		

Note:

As per CBSE guidelines,

- Science Advanced will be optional, and meant for students who wish to study additional topics beyond the common syllabus.
- Students opting for the Advanced level will take an additional examination of 25 marks (1 hour) at a higher level, based on the above prescribed content.
- The marks obtained in the Advanced Examination shall not be added to the overall aggregate or total score of the student.

For more information kindly visit to CBSE Academic:

https://cbseacademic.nic.in/web_material/CurriculumMain27/SecPart1/ScienceAd_SecP1_2026-27.pdf