

ACADEMIC PLANNER 2026-27 | GRADE 8 | SCIENCE – CURIOSITY (NCERT)

MONTH / PERIOD	CONTENT	CW / HW / ASSIGNMENT	ACTIVITY & INTERDISCIPLINARY	LEARNING OUTCOMES
BRIDGE ACTIVITIES APRIL 1-4	Bridge Activities	Students explore astronomy concepts through app-based navigation, cultural calendar making, eclipse observation, and reflective creative writing.	Day-1: Virtual Navigation with Stellarium App Day-2: Making and Understanding Indian Vikram Samvat Calendar Day-3: Understanding the Phenomenon of Solar and Lunar Eclipse Day-4: Reflection Activity – Students may write a poem, story, or reflective essay about the night sky, solar system, or universe, integrating scientific knowledge with personal impressions.	Students will be able to: <ul style="list-style-type: none"> ◆ Navigate the night sky digitally and identify celestial objects using the Stellarium app ◆ Understand the structure and cultural significance of the Indian Vikram Samvat calendar ◆ Explain the scientific phenomena of solar and lunar eclipses with proper reasoning ◆ Integrate scientific understanding with creative expression through reflective writing

APRIL 2026 5 – 15 (11 days)	Ch. 1 – Exploring the Investigative World of Science	T.B.Q's Key Terms Diagrams Worksheets of Chapter-1	<ul style="list-style-type: none"> • Act 1 (Puri puffing): Observe variables that affect puffing — change one variable at a time • Act (Systematic investigation):(Shrinking bright part of moon) Record observations in a table and identify patterns • Interdisciplinary: Mathematics – Recording data in tables and graphs; English – Writing observation reports 	Students will be able to learn: <ul style="list-style-type: none"> ✦ Ask scientific questions ✦ Identify variables in an investigation ✦ Conduct systematic investigations ✦ Make accurate observations & record data
APRIL 2026 16 – 30 (13 days)	Ch. 2 – The Invisible Living World: Beyond Our Naked Eye	T.B.Q's Key Terms Diagrams Worksheets of Chapter-2	<ul style="list-style-type: none"> • Act 2.2: Prepare onion peel slide, observe under microscope/magnifier • Act 2.9: Curd formation — observe role of microbes in fermentation • Interdisciplinary: Health & Hygiene – Role of microbes in disease and food; Social Science – Historical use of fermentation across cultures 	Students will be able to learn: <ul style="list-style-type: none"> ✦ Contributions of Hooke & Leeuwenhoek ✦ Cell structure & functions ✦ Differences: plant, animal & bacterial cell ✦ Types & roles of microorganisms ✦ Decomposition, fermentation & nitrogen fixation ✦ Importance of microalgae (Spirulina)

MAY 2026 1 – 15 (6 days)	Ch. 3 – Health: The Ultimate Treasure	T.B.Q's Key Terms Diagrams Worksheets of Chapter-3	<ul style="list-style-type: none"> • Act 3.2: Students list their daily habits and classify as healthy/unhealthy • Act - Contributions of Indian Scientists in the field of health and diseases. • Interdisciplinary: Physical Education – Link between daily habits and fitness; Social Science – Healthcare systems and public health 	Students will be able to learn: <ul style="list-style-type: none"> ✦ WHO definition of health ✦ Types of diseases & their prevention ✦ Role of immunity & vaccines ✦ Healthy lifestyle & clean environment
SUMMER BREAK				
JULY 2026 1 – 15 (12 days)	Ch. 4 – Electricity: Magnetic and Heating Effects	T.B.Q's Key Terms Diagrams Worksheets of Chapter-4	<ul style="list-style-type: none"> • Act 4.1: Place compass near a current-carrying wire — observe needle deflection • Act 4.3: Wind wire around iron nail, connect to battery — make an electromagnet 	Students will be able to learn: <ul style="list-style-type: none"> ✦ Magnetic effect of electric current ✦ Construction & applications of electromagnet ✦ Heating effect & household
JULY 2026 16 – 31 (14 days)	Ch. 5 – Exploring Forces	T.B.Q's Key Terms Diagrams Worksheets of Chapter-5	<ul style="list-style-type: none"> • Act 5.6/5.7: Rub comb/balloon on hair — demonstrate electrostatic charge Act 5.9-measure the weight using spring balance. • Interdisciplinary: Mathematics – Calculating force, weight, and measurement using spring balance; Geography – Forces in nature (gravity, friction) 	Students will be able to learn: <ul style="list-style-type: none"> ✦ Types of forces & their effects ✦ Contact vs non-contact forces ✦ Factors affecting friction ✦ Difference between gravity, weight & mass ✦ Buoyant force & Archimedes' principle

UNIT TEST-1 (20 JULY TO 25 JULY) CHAPTERS-1,2,3

<p>AUG 2026 1 – 15 (11 days)</p>	<p>Ch. 6 – Pressure, Winds, Storms, and Cyclones</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-6</p>	<ul style="list-style-type: none"> • Act 6.2: Liquids exert pressure on the walls of container • Act 6.6: Blow between two hanging balloons — show high-speed wind reduces pressure • Interdisciplinary: Geography – Cyclones, storms, and weather patterns; Mathematics – Measuring pressure and calculating force over area 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ✦ Concept of pressure & its SI unit (pascal) ✦ Liquid & atmospheric pressure ✦ Wind formation due to pressure differences ✦ Formation of thunderstorms, lightning & safety ✦ Structure of a cyclone & role of IMD
<p>AUG 2026 16 – 31 (11 days)</p>	<p>Ch. 7 – Particulate Nature of Matter</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-7</p>	<ul style="list-style-type: none"> • Act 7.2: Dissolve sugar in water — observe disappearance of particles into spaces • Act 7.8: Add KMnO_4 crystals to still water — observe diffusion of particles • Interdisciplinary: Mathematics – Understanding ratios in solutions; Chemistry – States of matter and particle theory 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ✦ Matter is composed of tiny particles ✦ Interparticle forces & spacing in states of matter ✦ Properties of solids, liquids & gases ✦ Diffusion & particle movement
<p>SEPT 2026 1-15 (11 days)</p>	<p>Revision for half Yearly Examination (Chapter 1-7)</p>			
<p>SEPT 2026 16-30 (13 days)</p>	<p>HALF YEARLY EXAMINATION</p>	<p>(14 SEPT-28 SEPT)</p>		

<p>OCT 2026 1 – 15 (11 days)</p>	<p>Ch. 8 – Nature of Matter: Elements, Compounds & Mixtures</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-8</p>	<ul style="list-style-type: none"> • Act - Design and create comic strip from real life examples to differentiate between elements, compounds and mixtures. • Act 8.5: Mix iron filings and sulfur; separate with magnet vs heat to form compound • Interdisciplinary: Social Science – Mining and use of elements in history; Art – Designing comic strips to visualize scientific concepts 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ✦ Distinguish mixtures from pure substances ✦ Identify uniform & non-uniform mixtures ✦ Define elements & compounds with examples ✦ Compare mixture vs compound (Fe + S) ✦ Identify minerals as elements or compounds
<p>OCT 2026 16 – 31 (9 days)</p>	<p>Ch. 9 – The Amazing World of Solutes, Solvents & Solutions</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-9</p>	<ul style="list-style-type: none"> • Act 9.1: Keep adding salt to water till no more dissolves — demonstrate saturation • Act 9.5: measuring volume of liquid using measuring cylinder • Interdisciplinary: Mathematics – Measuring volume and concentration; Geography – 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ✦ Define solution, solute & solvent ✦ Distinguish saturated & unsaturated solutions ✦ Effect of temperature on solubility ✦ Define & calculate density (Mass/Volume)

<p>NOV 2026 1 – 15 (9 days)</p>	<p>Ch. 10 – Light: Mirrors and Lenses</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-10</p>	<ul style="list-style-type: none"> • Act 10.3/10.9: Image formation by spherical mirror and lens • Act 10.4/10.5: Shine torch on mirror — verify angle of incidence = angle of reflection • Interdisciplinary: Mathematics – Angles of incidence and reflection; Art – Drawing ray diagrams accurately 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ✦ Distinguish concave & convex mirrors ✦ Describe images formed by spherical mirrors ✦ State & apply laws of reflection ✦ Explain convergence & divergence of light ✦ Distinguish convex & concave lenses ✦ Identify everyday uses of mirrors & lenses
<p>NOV 2026 16 – 30 (12 days)</p>	<p>Ch. 11 – Keeping Time with the Skies</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-11</p>	<ul style="list-style-type: none"> • Act 11.2: Use ball and torch to simulate Moon phases in darkened classroom • Act 11.3: Measure shadow length at different times — track apparent Sun movement • Interdisciplinary: Geography – Earth's rotation and time zones; Mathematics – Measuring shadow angles and calculating time 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ✦ Explain phases of the Moon with a diagram ✦ Distinguish lunar, solar & luni-solar calendars ✦ Define mean solar day, month & solar year ✦ Concept of leap year ✦ Relate Indian festivals to Moon phases ✦ Uses of artificial satellites & ISRO missions

DEC 2026 1 – 15 (12 days)	Ch. 12 – How Nature Works in Harmony	T.B.Q's Key Terms Diagrams Worksheets of Chapter-12	<ul style="list-style-type: none"> • Act 12.2: Mark 1m × 1m in school garden; count & record population of organisms • Act 12.6: Draw grassland food chain using given organisms (grass, grasshopper, frog, snake, eagle) • Interdisciplinary: Social Science – Human impact on ecosystems; Mathematics – Population counting and data representation 	Students will be able to learn: <ul style="list-style-type: none"> ✦ Define habitat, population & community ✦ Distinguish biotic & abiotic components ✦ Describe aquatic & terrestrial ecosystems ✦ Identify producers, consumers & decomposers ✦ Construct food chains & food webs ✦ Explain trophic levels
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UNIT TEST-2 (7 DEC-14 DEC) CHAPTERS-8,9,10

DEC 2026 16 – 31 (13 days)	Ch. 12 – How Nature Works in Harmony (contd.)		<ul style="list-style-type: none"> • Interdisciplinary: Environmental Studies – Biodiversity conservation; Social Science – Community responsibility for ecosystem protection 	
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<p>JAN 2027 1 – 15 (5 days)</p>	<p>Ch. 13 – Our Home: Earth, a Unique Life Sustaining Planet</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-13</p>	<ul style="list-style-type: none"> • Act 13.1: List features of Earth taken for granted — discuss why each matters for life • Act 13.3: Plant money plant cutting / potato eye in soil — observe vegetative propagation • Interdisciplinary: Geography – Earth's unique features and climate; Social Science – Human dependence on Earth's resources 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ◆ Explain why Earth is unique among solar system planets ◆ Describe greenhouse effect & habitable zone ◆ Role of Earth's size, atmosphere, ozone & magnetic field ◆ Interaction of hydrosphere, geosphere, biosphere & atmosphere ◆ Distinguish asexual & sexual reproduction ◆ Triple planetary crisis & conservation measures
<p>JAN 2027 16 – 30 (12 days)</p>	<p>Ch. 13 – Our Home: Earth, a Unique Life Sustaining Planet (Continued...)</p>	<p>T.B.Q's Key Terms Diagrams Worksheets of Chapter-13</p>	<ul style="list-style-type: none"> • Act 13.1: List features of Earth taken for granted — discuss why each matters for life • Act 13.3: Plant money plant cutting / potato eye in soil — observe vegetative propagation • Interdisciplinary: Geography – Earth's unique features and climate; Social Science – Human dependence on Earth's resources 	<p>Students will be able to learn:</p> <ul style="list-style-type: none"> ◆ Explain why Earth is unique among solar system planets ◆ Describe greenhouse effect & habitable zone ◆ Role of Earth's size, atmosphere, ozone & magnetic field ◆ Interaction of hydrosphere, geosphere, biosphere & atmosphere ◆ Distinguish asexual & sexual reproduction ◆ Triple planetary crisis & conservation measures
<p>FEB 2027 1 – 15 (12 days)</p>	<p>Annual Exam Revision</p>	<p>Chapter- 4,5,7,8,9,10,11,12,13</p>		

FEB 2027 16 onwards (12 days)	ANNUAL EXAMINATION			
MARCH 2027 1-31 (24 days)	ANNUAL EXAMINATION			

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