

**Kothari international School, Noida**  
**Cambridge Lower Secondary Grade LS 3 (Grade 8)**  
**Annual Curriculum Overview for the Session 2024-2025**

**SUBJECT - ENGLISH**

<b><u>TOPIC/UNIT</u></b>	<b><u>CONTENT</u></b>
UNIT 1: GOING UNDERGROUND	<p>Writing</p> <ul style="list-style-type: none"> <li>● Writing contemporary fantasy</li> <li>● Writing a formal review</li> <li>● Writing a drama scene</li> <li>● Producing a travel writing</li> </ul> <p>Language</p> <ul style="list-style-type: none"> <li>● Punctuation for rhetorical effect</li> <li>● Extended Metaphors</li> </ul>
UNIT2: LAW AND ORDER	<p>Writing</p> <ul style="list-style-type: none"> <li>● Summarising views</li> <li>● Descriptive writing</li> <li>● Analysing character</li> <li>● Making Deductions</li> </ul> <p>Language</p> <ul style="list-style-type: none"> <li>● Amalgamating Sentence Types</li> <li>● Punctuation: Colon and Semicolon</li> </ul>
UNIT 3: ‘THE RED-HEADED LEAGUE’	<p>Writing</p> <ul style="list-style-type: none"> <li>● Comparing characters</li> <li>● Analysing structure</li> <li>● Writing a Report</li> <li>● Writing a story ending</li> <li>● Descriptive Writing</li> </ul>

	<p>Language</p> <ul style="list-style-type: none"> <li>● Types of Imagery</li> <li>● Introduction to modals</li> </ul>
<p>Unit 4: TIME</p>	<p>Writing</p> <ul style="list-style-type: none"> <li>● Writing different types of poems</li> <li>● Writing a speech</li> <li>● Writing a story opening</li> </ul> <p>Language</p> <ul style="list-style-type: none"> <li>● Tenses</li> <li>● Conditionals and Modals</li> <li>● Verb Choices</li> </ul>
<p>Unit 5: THAT’S ENTERTAINMENT</p>	<p>Writing</p> <ul style="list-style-type: none"> <li>● Writing a dramatic structure</li> <li>● Writing a comedy scene</li> <li>● Writing a discursive response</li> <li>● Imaginative Writing</li> </ul> <p>Language</p> <ul style="list-style-type: none"> <li>● Asides and Dramatic Irony</li> <li>● Layers of meaning in figurative language</li> </ul>
<p>Unit 6: A SENSE OF PLACE</p>	<p>Writing</p> <ul style="list-style-type: none"> <li>● Poetry analysis</li> <li>● Analysing Spatial Metaphors</li> <li>● Writing Sonnet Lines</li> <li>● Homecoming Writing</li> </ul> <p>Language</p> <ul style="list-style-type: none"> <li>● Rhyme couplets and imperfect rhyme</li> <li>● Pathetic Fallacy</li> </ul>

Unit 7: 'The Journey Within' Unit 8: DIFFERENT LIVES	Writing <ul style="list-style-type: none"> <li>● Short fantasy account</li> <li>● Imaginative monologue</li> <li>● Writing a persuasive Speech</li> <li>● Writing a feature article</li> </ul> Language <ul style="list-style-type: none"> <li>● Motifs</li> <li>● Levels of formality</li> <li>● Dramatic conflict via language</li> <li>● Pronoun choices</li> </ul>
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**SUBJECT - GLOBAL PERSPECTIVES**

<u>TOPIC/UNIT</u>	<u>SKILL DEVELOPMENT</u>
UNIT-1 What makes us human?	<ul style="list-style-type: none"> <li>● Research: Getting started and choosing a research question;</li> <li>● Collaboration: Working as a team</li> <li>● Analysis: Recognising arguments and checking the evidence</li> <li>● Communication- Debating the answer</li> </ul>
UNIT-2 Water Crisis	<ul style="list-style-type: none"> <li>● Research: Choosing your agenda, choosing your sources and summarising your findings</li> <li>● Collaboration: Working as a team</li> <li>● Communication: Sharing your work powerfully</li> </ul>
UNIT-3 Beliefs about food	<ul style="list-style-type: none"> <li>● Research: finding numbers, asking why and thinking about whom to ask</li> <li>● Analysis: Making connections</li> <li>● Collaboration: Sharing Tasks</li> </ul>

UNIT-4 Looking at the future	<ul style="list-style-type: none"> <li>● Evaluation: what is the aim of an outcome</li> <li>● Reflection: expansion of critical thinking</li> <li>● Research</li> <li>● Communication and synthesising</li> </ul>
UNIT-5 Sustainability	<ul style="list-style-type: none"> <li>● Collaboration</li> <li>● Communication</li> <li>● Research</li> <li>● Evaluation</li> </ul>
UNIT-6 Employment	<ul style="list-style-type: none"> <li>● Collaboration: teamwork challenges</li> <li>● Research: work and wages and forced labour</li> <li>● Analysis: unpaid work</li> <li>● Analysis and Evaluation: Your Personal goals</li> </ul>

**SUBJECT - MATHEMATICS**

<u>TOPIC/UNIT</u>	<u>CONTENT</u>
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<p><b><u>UNIT-1</u></b></p> <p>NUMBER AND CALCULATION</p> <p>DECIMALS</p> <p>FRACTIONS</p>	<ul style="list-style-type: none"> <li>● Irrational numbers</li> <li>● Standard form</li> <li>● Indices</li>   <li>● Multiplying and dividing by powers of 10</li> <li>● Multiplying and dividing decimals</li> <li>● Understanding compound percentages</li> <li>● Understanding upper and lower bounds</li>   <li>● Fractions &amp; recurring decimals</li> <li>● Multiplying/dividing fractions</li> </ul>
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<p>RATIO &amp; PROPORTION</p>	<ul style="list-style-type: none"> <li>● Using ratios</li> <li>● Direct &amp; inverse proportion</li> </ul>
<p><b><u>UNIT-2</u></b>  EXPRESSIONS &amp; FORMULAE   EQUATIONS AND INEQUALITIES</p>	<ul style="list-style-type: none"> <li>● Substituting into expressions</li> <li>● Constructing Expressions</li> <li>● Expressions &amp; indices</li> <li>● Expanding brackets</li> <li>● Algebraic fractions</li>   <li>● Constructing and solving equations</li> <li>● Simultaneous equations</li> <li>● Inequalities</li> </ul>
<p><b><u>UNIT-3</u></b>  ANGLES   SHAPES &amp; SYMMETRY   SHAPES. AREA &amp; VOLUME</p>	<ul style="list-style-type: none"> <li>● Calculating angles</li> <li>● Interior angles of polygons</li> <li>● Exterior angles of polygons</li> <li>● Constructions</li> <li>● Pythagoras' theorem</li>   <li>● Circumference &amp; area of a circle</li> <li>● Areas of compound shapes</li> <li>● Large and small units</li>   <li>● Calculating the volume of prisms</li> <li>● Calculating the surface area of triangular prisms, pyramids and cylinders</li> <li>● Symmetry in three-dimensional shapes</li> </ul>
<p><b><u>UNIT-4</u></b>  PROBABILITY</p>	<ul style="list-style-type: none"> <li>● Mutually exclusive events</li> <li>● Independent events</li> <li>● Combined events</li> <li>● Chance experiments</li> </ul>

<p><b><u>UNIT-5</u></b> SEQUENCES &amp; FUNCTIONS</p> <p>GRAPHS</p>	<ul style="list-style-type: none"> <li>● Generating sequences</li> <li>● Using the nth term</li> <li>● Representing functions</li>   <li>● Functions</li> <li>● Plotting graphs</li> <li>● Gradient &amp; intercept</li> <li>● Interpreting graphs</li> </ul>
<p><b><u>UNIT-6</u></b> POSITION &amp; TRANSFORMATION</p>	<ul style="list-style-type: none"> <li>● Bearings &amp; scale drawings</li> <li>● Points on a line segment</li> <li>● Transformations</li> <li>● Enlarging shapes</li> </ul>
<p><b><u>UNIT-7</u></b> COLLECTING DATA</p> <p>INTERPRETING &amp; DISCUSSING RESULTS</p>	<ul style="list-style-type: none"> <li>● Types of Data</li>   <li>● Interpreting &amp; drawing frequency polygons</li> <li>● Scatter graphs</li> <li>● Back-to-back stem-and-leaf diagrams</li> <li>● Calculating statistics for grouped data</li> </ul>

**SUBJECT - SCIENCE**

<b><u>TOPIC/UNIT</u></b>	<b><u>CONTENT</u></b>
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<p>UNIT 1</p> <p>PHOTOSYNTHESIS AND CARBON CYCLE</p>	<ul style="list-style-type: none"> <li>● 1.1 Photosynthesis</li> <li>● 1.2 More about photosynthesis</li> <li>● 1.3 The carbon cycle</li> <li>● 1.4 Climate change</li> </ul>
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<p>UNIT 2</p> <p>PROPERTIES OF MATERIALS</p>	<ul style="list-style-type: none"> <li>● 2.1 Atomic structure and the Periodic table</li> <li>● 2.2 Trends in groups within the Periodic table</li> <li>● 2.3 Why elements react to form compounds</li> <li>● 2.4 Simple and giant structures</li> </ul>
<p>UNIT 3</p> <p>FORCES AND ENERGY</p>	<ul style="list-style-type: none"> <li>● 3.1 Density</li> <li>● 3.2 Heat and temperature</li> <li>● 3.3 Conservation of energy</li> <li>● 3.4 Moving from hot to cold</li> <li>● 3.5 Ways of transferring thermal energy</li> <li>● 3.6 Cooling by evaporation</li> </ul>
<p>UNIT 4</p> <p>MAINTAINING LIFE</p>	<ul style="list-style-type: none"> <li>● 4.1 Plants and water</li> <li>● 4.2 Transpiration</li> <li>● 4.3 Excretion in humans</li> <li>● 4.4 Keeping a fetus healthy</li> </ul>
<p>UNIT 5</p> <p>REACTIVITY</p>	<ul style="list-style-type: none"> <li>● 5.1 Reactivity and displacement reactions</li> <li>● 5.2 Using the reactivity series and displacement reactions</li> <li>● 5.3 Salts</li> <li>● 5.4 Other ways of making salts</li> <li>● 5.5 Rearranging atoms</li> </ul>
<p>UNIT 6</p> <p>SOUND AND SPACE</p>	<ul style="list-style-type: none"> <li>● 6.1 Loudness and pitch of sound</li> <li>● 6.2 Interference of sound</li> <li>● 6.3 Formation of the moon</li> <li>● 6.4 Nebulae</li> <li>● 6.5 Tectonics</li> </ul>
<p>UNIT 7</p> <p>GENES AND INHERITANCE</p>	<ul style="list-style-type: none"> <li>● 7.1 Chromosomes, genes and DNA</li> <li>● 7.2 Gametes and inheritance</li> <li>● 7.3 Variation</li> <li>● 7.4 Natural selection</li> </ul>
<p>UNIT 8</p> <p>RATES OF REACTION</p>	<ul style="list-style-type: none"> <li>● 8.1 Measuring the rate of reaction</li> <li>● 8.2 Surface area and the rate of reaction</li> </ul>

	<ul style="list-style-type: none"> <li>● 8.3 Temperature and the rate of reaction</li> <li>● 8.4 Concentration and the rate of reaction</li> </ul>
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<b>SUBJECT - ICT</b>
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<u>TOPIC/UNIT</u>	<u>CONTENT</u>
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<b>Types and components of a computer system</b>  <b>HTML : Project</b>	<ul style="list-style-type: none"> <li>● Hardware and Software</li> <li>● Main components of computer system</li> <li>● Operating Systems</li> <li>● Types of computer</li>   <li>● Basic tags</li> <li>● Tables</li> <li>● Lists</li> <li>● CSS in HTML</li> </ul>
<b>Makecode Arcade</b>	<ul style="list-style-type: none"> <li>● Function</li> <li>● Array</li> <li>● Array with loops</li> </ul>
<b>Digital Literacy: Dilemmas</b>	<ul style="list-style-type: none"> <li>● Who am I</li> <li>● Types of social media</li> <li>● Your digital footprint</li> <li>● Digital privacy · Ethics of care</li> <li>● Healthy balance</li> </ul>
<b>Data manipulation</b>	<ul style="list-style-type: none"> <li>● Create a database structure</li> <li>● Manipulate data · Present data</li> </ul>
<b>Python</b>	<ul style="list-style-type: none"> <li>● Loops revision · List</li> <li>● Tuples</li> <li>● Functions</li> </ul>
<b>Artificial intelligence</b>	<ul style="list-style-type: none"> <li>● The birth of AI · What is AI</li> <li>● What can Artificial Intelligence do</li> </ul>



	<ul style="list-style-type: none"> <li>● today</li> <li>● Implementing AI</li> <li>● Philosophers views on AI</li> </ul>
<b>Multimedia:creating and sharing digital media assets</b>	<ul style="list-style-type: none"> <li>● Plan a media Project</li> <li>● Understand requirements</li> <li>● Make technology choices</li> <li>● Create and share content</li> <li>● Make a rough cut of your video</li> <li>● Make and share the final cut</li> </ul>

**SUBJECT - ART AND DESIGN**

<u>TOPIC/UNIT</u>	<u>CONTENT</u>
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<p>Elements of Art</p>          <p>Principal of Design</p>	<ul style="list-style-type: none"> <li>● Introducing the basic building blocks of visual art, including line, shape, form, colour, texture, space, and value.</li> <li>● Explaining fundamental principles that govern the organisation of visual elements in art, such as balance, contrast, emphasis,</li> <li>● movement,</li> <li>● pattern, rhythm,</li> <li>● and unity.</li> </ul>
<p>Drawing Fundamentals</p> <p>Understanding One point Prospective</p> <p>Two point Prospective</p> <p>Three point Prospective</p>	<ul style="list-style-type: none"> <li>● Teaching foundational drawing skills, including observation, contour drawing, gesture drawing and basic perspective.</li> <li>● Explain that one-point perspective is a drawing technique used to create the illusion of depth and space on a two-dimensional surface.</li> <li>● Introduce two-point perspective as a method for drawing objects</li> </ul>

	<p>that recede into the distance while maintaining their width and height.</p>
<p>Colour Theory</p>	<ul style="list-style-type: none"> <li>● Introducing concepts such as the colour wheel, primary, secondary, and tertiary colours, colour harmony, value, saturation, and temperature.</li> </ul>
<p>Understanding Compositions Basics Painting Techniques</p>	<ul style="list-style-type: none"> <li>● Understanding Composition: Explaining how to arrange elements within a picture plane to create visually pleasing compositions, including concepts like focal point, rule of thirds, and framing</li> <li>● Basic Painting Techniques: Introducing students to various painting techniques using watercolours, acrylics, or tempera, including colour mixing, blending, layering, and brushwork.: Explaining how to arrange elements within a picture plane to create visually pleasing compositions, including concepts like focal point, rule of thirds, and framing.</li> </ul>
<p>Introduction to Sculpture</p>	<ul style="list-style-type: none"> <li>● Introduction to Sculpture: Exploring three dimensional art forms through basic sculpting techniques using clay, paper mache, or found objects.</li> </ul>
<p>Art Materials and Tools</p>	<ul style="list-style-type: none"> <li>● Art Materials and Tools: Familiarising students with a range of art materials and tools, including pencils, erasers, brushes, paints, clay, carving tools,</li> </ul>

	<p>and safety precautions when using them. Art History Overview: Providing a broad overview of art history, highlighting key movements, styles, and artists from different cultures and time periods</p>
Understanding Body Proportions	<ul style="list-style-type: none"> <li>● Breaking down the human body into simplified shapes and proportions, emphasising the head to body ratio, limb lengths, and torso proportions.</li> <li>● Dynamic Poses: Practising sketching figures in dynamic and expressive poses to convey action, emotion, and energy.</li> <li>● Foreshortening: Introducing the concept of foreshortening and how it affects the appearance of body parts when viewed from different angles or perspectives.</li> </ul>

**SUBJECT - WELL BEING**

<u>TOPIC/UNIT</u>	<u>CONTENT</u>
<b>Introduction to Wellbeing</b>	<ul style="list-style-type: none"> <li>● Introduction</li> <li>● Aspects of wellbeing</li> </ul>
<b>Understanding myself</b>	<ul style="list-style-type: none"> <li>● Identifying emotions</li> <li>● Managing emotions</li> </ul>
<b>Understanding myself</b>	<ul style="list-style-type: none"> <li>● Healthy habits</li> </ul>

	<ul style="list-style-type: none"> <li>● Importance of healthy hab</li> </ul>
<b>My relationships</b>	<ul style="list-style-type: none"> <li>● Introduction to Healthy relationships</li> <li>● Traits of Healthy relationships</li> </ul>
<b>Navigating my world</b>	<ul style="list-style-type: none"> <li>● Introduction to Personal safety</li> <li>● Significance of Netiquette</li> </ul>
<b>Navigating my world</b>	<ul style="list-style-type: none"> <li>● Coping with healthy vs. unhealthy changes in life</li> <li>● Impact of healthy vs. unhealthy changes in life</li> <li>● Making a difference by creating a sustainable environment</li> <li>● Significance of protecting the environment</li> </ul>
<b>Academic Goal-setting</b>	<ul style="list-style-type: none"> <li>● Introduction to Academic goals</li> <li>● Significance of framing Academic goals</li> </ul>

**\*If any subject is not listed, we will provide the information for it by next week.**