## The Camford International School

## ANNUAL LESSON PLAN 2023-2024

GRADE: 9
SUBJECT : Mathematics (041)

| MONTH | CHAPTER | TOPICS TO BE COVERED | PRACTICALS | AIL |
| :---: | :--- | :--- | :--- | :--- |
|  | 1.Real number <br> system | Introduction; Irrational numbers; Real <br> numbers and their decimal expansions; <br> Representing Real numbers on the number <br> line; Operations on real numbers; Laws of <br> Exponents for real numbers. | ACTIVITY 1: <br> Construction of <br> square root spiral |  |
| 2. Polynomials | Introduction, polynomials in one variable; <br> zeroes of a polynomial. Factorisation of <br> polynomials, Algebraic Identities |  |  |  |
|  | 3.Linear equations <br> in one variable | Introduction; Linear Equations; Solution of a <br> Linear Equation; Graph of a Linear Equation <br> in Two variables; Equations of Lines parallel <br> to x-axis and y-axis |  |  |
|  | 4.Coordinate <br> Geometry | Introduction; Cartesian system; plotting a <br> point in the plane if its coordinates are given |  |  |
| 6. Lines and Angles | Introduction; Basic terms and Definitions; <br> Intersecting Lines and Non-intersecting <br> Lines; Pairs of Angles; |  |  |  |
| JULY | 6. Lines and Angles | Parallel Lines and a Transversal; Lines <br> parallel to the same Line; Angle sum property |  |  |


|  |  | of a Triangle |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 7. Triangles | Introduction; Congruence of triangles; Criteria for congruence of triangles Some properties of a Triangle; Some more criteria for congruence of triangles; <br> (ASA Congruence without proof) | ACTIVITY 2: <br> Angle sum property of a triangle <br> ACTIVITY 3 : <br> Exterior angle property of a triangle |  |
|  | 8.Quadrilaterals | Introduction; Angle sum property of a quadrilateral; Types of quadrilaterals; properties of a parallelogram; The Mid-point Theorem. |  |  |
| AUGUST | 10. Circles | Introduction; Circles and its Related terms: A review; Angle subtended by a chord at a point; Perpendicular from the centre to a chord; Equal chords and their distances from the centre; Angles subtended by an arc of a circle; Cyclic quadrilaterals | ACTIVITY 4 : <br> Sum of opposite angles of a cyclic quadrilateral are supplementary |  |
|  | 11.Construction | Introduction; Basic constructions; Some constructions of triangles |  |  |
| SEPTEMBER | 12. Heron's formula | Heron's formula; Application of Heron's formula to find area of triangles. |  |  |
|  | 13. Surface area and volume | Introduction; Surface area of a cube and a cuboid; Surface area of a right circular cylinder and cone; Surface area of a sphere Volume of a cube and a cuboid; volume of a right circular cylinder and cone; Volume of a sphere. Volume of a cube and a cuboid; volume of a right circular cylinder and cone; Volume of a sphere | $\begin{aligned} & \hline \text { SUBJECT } \\ & \hline \text { ENRICHMENT } \\ & \hline \text { ACTIVITY: } \\ & \text { - } \quad \text { Seminar on } \\ & \text { surface area and } \\ & \text { volume } \\ & \text { PPT presentation } \end{aligned}$ | 4.1.2.1.2 <br> Study of manmade forms or objects like household items, buildings or as desired by students. (Using Bamboo |


|  |  |  |  | stick / Cardboard) |
| :--- | :--- | :--- | :--- | :--- |
| OCTOBER | 14. Statistics | Introduction; Collection of data; Presentation <br> of data- Tabular form | ACTIVITY 5: <br> Drawing histogram <br> by collecting data <br> from the population | 4.5.3.2 <br> Chart tabulation of <br> music, <br> Costume, <br> Religion, <br> Language <br> association etc. |
|  | 15. Probability | Introduction; Probability-an experimental <br> approach |  |  |

