## Syllabus for MYP extended Baseline test

## **Numbers:**

- Write exponents in expanded form.
- Evaluate expressions with negative and zero exponents.
- Simplify exponents with negative exponents.
- Know how to write a number as a power of 10.
- Write standard number in scientific notation.
- Know how to multiply by a power of 10.
- Know how to use the multiplication of properties to solve.
- Know how to multiply scientific notation numbers and standard numbers.
- Know how to use the division properties of exponents .

• Know how to divide scientific notation

- Know how to find Square roots and cube roots
- Know how to convert square roots a exponents
- Know how to simplify fractional exponents .
- Able to investigate using patterns and evidence and form conjectures
- Solve real life problem related to exponents
- Understand the terminology in exponents as given below

Indices, exponents, Power, base, factors perfect square, perfect cube, standard notation, scientific notation, radicals, square root, cube root.

## Algebra:

- Solving basic equations involving algebraic fractions
- Factorizing linear and quadratic expressions
- Finding and justifying general rules/formulae for sequences

## **Geometry and Measurements**

- Solving problems involving triangles by using Pythagoras' theorem and its converse
- Calculate area and perimeter of composite shapes
- Convert units of measurement
- Calculate perimeter of 2D-shapes
- Calculate area of 2D-shapes
- Find volume and surface area of 3D shapes all types
- Find capacity of 3D objects