

## Year 8 Autumn 1

**Emerging (Support)**

**Expected (Core)**

**Exceeding (Extension)**

### Sequences

- Function machine
- Term-to-term rule
- Sequence from nth term
- Sequences from practical context
- Sequences and problem solving

- Non-linear sequence
- Sequence from nth term
- Finding nth term
- Sequences from practical context
- Nth term and ICT
- Sequences and problem solving

- Non-linear sequence
- Sequence from nth term
- Finding nth term
- Sequences from practical context
- Missing terms of quadratic sequence
- Nth term and ICT
- Is a number a term in the sequence?
- Sequences and problem solving

### Statistical Inquiry

- Two-way table
- Drawing frequency diagrams
- Completing frequency tables
- Stem-and-leaf diagram
- Component and multiple bar chart
- Statistical inquiry and problem solving

- Two-way table
- Two-way table and worded problems
- Stem-and-leaf diagram
- Component and multiple bar chart
- Pie chart
- Scatter graph
- Statistical inquiry and problem solving

- Two-way table and worded problems
- Stem-and-leaf diagram
- Component and multiple bar chart
- Pie chart
- Scatter graph
- Cumulative frequency curve
- Frequency polygon
- Statistical inquiry and problem solving

**Assessment 1 (Last Week of the Half-term)**

**Properties of Number**

<ul style="list-style-type: none"> <li>• Adding and subtracting large numbers</li> <li>• Multiply large numbers by 1 and 2 digits</li> <li>• Divide large numbers</li> <li>• Multiplying and dividing numbers by 10, 100, 1000, 0.1, 0.01, 0.001.</li> <li>• BIDMAS</li> <li>• Prime numbers</li> <li>• Prime factor decomposition</li> <li>• Numbers and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Divide large numbers</li> <li>• Multiplying and dividing numbers by 10, 100, 1000, 0.1, 0.01, 0.001.</li> <li>• BIDMAS</li> <li>• Prime numbers</li> <li>• Prime factor decomposition</li> <li>• LCM and HCF</li> <li>• Indices</li> <li>• Numbers and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Divide large numbers</li> <li>• Multiplying and dividing numbers by 10, 100, 1000, 0.1, 0.01, 0.001.</li> <li>• BIDMAS</li> <li>• Prime factor decomposition</li> <li>• LCM and HCF</li> <li>• Indices</li> <li>• Estimate sum</li> <li>• Standard form</li> <li>• Numbers and problem solving</li> </ul>
--	--	--

<b>Year 8 Autumn 2</b>		
<b>Emerging (Support)</b>	<b>Expected (Core)</b>	<b>Exceeding (Extension)</b>
<b>Angle Properties</b>		
<ul style="list-style-type: none"> <li>• Identifying parallel lines</li> <li>• Identifying perpendicular lines</li> <li>• Angles on a straight line, at a point and a quadrilateral</li> <li>• Isosceles and equilateral triangles</li> <li>• Angle properties and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Isosceles and equilateral triangles</li> <li>• Parallel lines and angle properties</li> <li>• irregular polygon</li> <li>• Regular polygons</li> <li>• Forming and solving equations in polygon and parallel lines</li> <li>• Angle properties and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Parallel lines and angle properties</li> <li>• irregular polygon</li> <li>• Regular polygons</li> <li>• Forming and solving equations in polygon and parallel lines</li> <li>• Properties of regular polygon and problem solving</li> <li>• Angle properties and problem solving</li> </ul>
<b>Algebraic manipulations</b>		
<ul style="list-style-type: none"> <li>• Expressions and algebra</li> </ul>	<ul style="list-style-type: none"> <li>• Expressions and algebra</li> </ul>	<ul style="list-style-type: none"> <li>• Expressions and algebra</li> </ul>

<ul style="list-style-type: none"> <li>• Collecting like terms</li> <li>• Multiplying algebra</li> <li>• Expanding simple brackets</li> <li>• Algebraic expressions for Area, perimeter, and volume</li> <li>• Factorising</li> <li>• Algebra and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Terms, formula, identities expressions, equations and formulae</li> <li>• Collecting like terms</li> <li>• Algebraic expressions for Area, perimeter, and volume</li> <li>• Expanding and simplifying two brackets</li> <li>• Factorising</li> <li>• Algebra and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Terms, formula, identities expressions, equations and formulae</li> <li>• Algebraic expressions for Area, perimeter, and volume</li> <li>• Expanding and simplifying two brackets</li> <li>• Product of two linear brackets</li> <li>• Difference between two squares</li> <li>• Factorise quadratic expressions</li> <li>• Algebra and problem solving</li> </ul>
--	--	---

**Fractions**

<ul style="list-style-type: none"> <li>• Change mixed numbers to top-heavy fractions and vice versa</li> <li>• Shading fractions of shapes</li> <li>• Fractions of quantities</li> <li>• Ordering fractions</li> <li>• Add fractions with common denominators</li> <li>• Fractions and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Change mixed numbers to top-heavy fractions and vice versa</li> <li>• Fractions of quantities</li> <li>• Adding and subtracting fractions with non common denominators</li> <li>• Multiply and divide fractions</li> <li>• Reciprocal of numbers</li> <li>• Fractions and problem solving</li> </ul>	<ul style="list-style-type: none"> <li>• Change mixed numbers to top-heavy fractions and vice versa</li> <li>• Fractions of quantities</li> <li>• Adding and subtracting fractions with non common denominators</li> <li>• Multiply and divide fractions</li> <li>• Multiply mixed numbers</li> <li>• Reciprocal of numbers</li> <li>• Fractions and problem solving</li> </ul>
---	---	---

**Autumn 2 Assessment (Last two weeks before Christmas Holiday)**