

Subject	Year 7 Thresholds Concepts – Autumn Term	How to support students learning
Mathematics	<p><b>Number sense</b></p> <ul style="list-style-type: none"> <li>• Integer place value - M704</li> <li>• Decimal place value - M552</li> <li>• Using number lines - M763</li> <li>• Rounding integers - M111</li> <li>• Rounding decimals - M431</li> <li>• Adding integers - M928</li> <li>• Adding decimals - M429</li> <li>• Subtracting integers - M347</li> <li>• Subtracting decimals - M152</li> <li>• Multiplying and dividing by 10, 100 and 1000 - M113</li> <li>• Multiplying and place value - M911</li> <li>• Using a written method to multiply integers - M187</li> <li>• Using a written method to multiply decimals - M803</li> <li>• Dividing numbers into equal groups - M462</li> <li>• Using a written method to divide integers - M354</li> <li>• Dividing with a remainder - M873</li> <li>• Using a written method to divide by integers to get a decimal answer - M262</li> <li>• Using a written method to divide by decimals - M491</li> <li>• Ordering negative numbers - M527</li> <li>• Adding and subtracting negative numbers - M106</li> <li>• Multiplying and dividing negative numbers - M288</li> <li>• Calculating with roots and powers - M135</li> <li>• Using the correct order of operations - M521</li> <li>• Using the commutative laws - M952</li> <li>• Using the associative laws - M409</li> </ul> <p><b>Equations</b></p> <ul style="list-style-type: none"> <li>• Solving equations with one step - M707</li> <li>• Solving equations of the form <math>ax+b=c</math> - M634</li> <li>• Solving equations of the form <math>x/a +b=c</math> - M647</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage your child to practise their times tables up to 15 at home.</li> <li>• Encourage your child to set their work out using the correct columns for place value.</li> <li>• Encourage your child to estimate answers by rounding e.g. shopping costs by rounding to the nearest £.</li> <li>• Encourage your child to look at where they may use negative numbers in real life.</li>   <li>• Homework will be set on Sparx – teachers will provide your child with a login and password. Use the Sparx codes provided next to the concepts to support them when required.</li> </ul>

**Time & Measures**

- Converting units of time - M515
- Using clocks - M892
- Calculating with time - M627
- Estimating and measuring length, mass and capacity - M828
- Converting units of length, mass and capacity - M774
- Using appropriate units - M487

**Expressions & Substitution**

- Algebraic notation - M813
- Algebraic terminology - M830
- Simplifying expressions containing a single variable - M795
- Simplifying expressions containing multiple variables - M531
- Simplifying expressions containing non-linear terms - M949
- Substituting into expressions with one operation - M417
- Substituting into expressions with multiple operations - M327
- Substituting into algebraic formulae - M208
- Substituting into real-life formulae - M979

**Lines & Shapes**

- Line properties - M814
- Shape properties - M276
- Symmetry - M523

**Co-ordinates**

- Reading and plotting co-ordinates - M618
- Solving shape problems involving co-ordinates - M230