

Birkdale High School		Mathematics Department Foundation Stage	Curriculum Map
Unit 14: Construction and scale drawings		Year Group: 8	
INTENT: Aims of the Unit	IMPLEMENTATION: Knowledge and delivery	IMPACT: Assessment	
<p>In Mathematics Year 8 we are looking at students completing the Mastery approach to learning. In this unit we are looking at building on work on angles covered in Unit 9.</p> <p>Students are introduced to the idea of bearings, scale drawings and construction of triangles using compasses, protractors and rulers</p>	<p>Knowledge</p> <ul style="list-style-type: none"> • Bearings • Scale drawings • Construction of triangles <p>Delivery</p> <ul style="list-style-type: none"> • Teacher led instruction using activstudio • Class discussion • WAGOLLS • Random/Targeted Questioning • Textbook questions • Tutorial lessons <p>Possibly to include</p> <ul style="list-style-type: none"> • Variation theory • Treasure hunts • Puzzles • Mathsbox settlers 	<p>What knowledge are you assessing?</p> <ul style="list-style-type: none"> • Know how to read and draw a bearing • Conversion of metric units of length • Calculate scaled measurements using ratio • Draw accurate scaled drawings • Construct triangles knowing ASA, SAS or SSS <p>Which elements of fluency of knowledge are you assessing?</p> <ul style="list-style-type: none"> • Draw scaled diagrams and calculate bearings from real life scenarios • Draw accurate scaled drawings using scale in ratio format • Construct any triangle given some lengths or angles using protractor, compass and ruler. 	
Enabling Learning		Key Vocabulary	Wider Learning
<ul style="list-style-type: none"> • Know how to use a compass • Know how to measure and draw angles • Know the properties of triangles 		<p><i>Tier 2: High frequency / Multiple meaning</i> multiple, factor, prime</p> <p><i>Tier 3: Subject related.</i> cube root, square root, prime factorisation, perfect square</p>	<p>SMSC / RWCM / CEIAG</p>

Birkdale High School		Mathematics Department Foundation Stage	Curriculum Map	
Unit 15: Collecting, Organising and Displaying data			Year Group: 8	
INTENT: Aims of the Unit	IMPLEMENTATION: Knowledge and delivery		IMPACT: Assessment	
<p>In Mathematics Year 8 we are looking at students completing the Mastery approach to learning. In this unit we are looking at our first unit of statistics.</p> <p>Students are introduced to data and different ways to collect, organise and display data.</p>	<p>Knowledge</p> <ul style="list-style-type: none"> • Data handling cycle • Frequency diagrams • Pictograms • Bar Charts (dual and composite) • Vertical Line charts • <p>Delivery</p> <ul style="list-style-type: none"> • Teacher led instruction using activstudio • Class discussion • WAGOLLS • Random/Targeted Questioning • Textbook questions • Tutorial lessons <p>Possibly to include</p> <ul style="list-style-type: none"> • Variation theory • Treasure hunts • Puzzles • Mathsbox settlers 	<p>What knowledge are you assessing?</p> <ul style="list-style-type: none"> • understand the data handling cycle • construct a frequency table from raw data • construct a grouped frequency table from raw data • Draw and read a pictogram • Draw and read a bar chart (dual and composite) • Draw and read a vertical line graph <p>Which elements of fluency of knowledge are you assessing?</p> <ul style="list-style-type: none"> • Read or correctly construct a frequency table for raw data • Read or correctly construct a grouped frequency table using appropriate class intervals • Interpret and analyse pictograms, vertical line graph and bar charts • Construct accurately pictograms, vertical line graphs and bar charts 		
Enabling Learning				
<ul style="list-style-type: none"> • know how to express one quantity as a percentage of another or as part of a whole • understand the inequality signs 				
Key Vocabulary		Wider Learning		
<p><i>Tier 2: High frequency / Multiple meaning</i> experiments, surveys, data, frequency, uniform, compound</p>		<p><i>Tier 3: Subject related.</i> statistics, tally, class intervals, grouped data, class width, pictogram, vertical line graph, bar charts</p>		
		SMSC / RWCM / CEIAG		