Show Education Trust Knowledge Organiser - Mathematics Angles, Statistics, Proportion					
•	Topic	Information	Examples	Sparx Clip	
1	Angles	Use a ruler, pencil and protractor to draw and measure angles. Acute angles are less than 90° Obtuse angles are between 90° and 180° Reflex angles are greater than 180°	Acute Obtuse Reflex	M502, M541, M780, M331	
2	Finding unknown angles	Angles around a point sum to 360° Angles on a straight line sum to 180° Angles in a triangle sum to 180° When 2 straight lines cross, vertically opposite angles are equal.	a=360-(72+50+112) c=180-129 ?=180-(55+82) Vertically opposite are equal	M502, M707, M509, M818, M163, M351	
3	Averages and range	Mean - Add all the values, and divide by the number of values Median - the middle value when the numbers are put in order Mode - the number that appears the most Range - the highest value subtract the lowest value	131 cm 102 cm 145 cm 127 cm 119 cm 132 cm 102 cm 123 cm Mode = 102 cm Median = 125 cm Mean = 122.6 cm Range = 43 cm	M763, M704, M928, M429, M347, M152, M187, M803, M354, M262, M328, M934, M841, M940	
4	Handling data and statistical diagrams	Frequency tables, two-way tables, tally charts, pictograms and bar charts are all diagrams that can be used to display data.	Transport Tally Frequency Walk	M899, M597, M644, M460, M738 M328, M934, M841, M940, M899, M597, M644, m460, M738, M945, M450, M127, M440	
6	Proportion word problems	A recipe for 6 pancakes uses 300 ml of milk. How much milk is needed to make 3 pancakes? For every 6 pancakes there is 300 ml of milk. + 2 For every 3 pancakes there is 150 ml of milk.	3 cakes cost £1.50. How much will 5 cakes cost? £1.50 ÷ 5 = £0.50 £0.50 x 5 = £2.50 A 6-pack of pop costs £2.40. How much will a 10-pack cost? £2.40 ÷ 6 = £0.40 £0.40 x 10 = £4.00	M757, M478	