



Mathematics

Year 7

Week 1 and 2: Handling Data (Statistics) (8hrs)

	Level	Objectives
Recording Data	4	<ul style="list-style-type: none"> Record data in a tally chart.
	Extension	<ul style="list-style-type: none"> Use equal class intervals for tally charts.
Displaying Data	4	<ul style="list-style-type: none"> Construct bar charts.
	5	<ul style="list-style-type: none"> Construct pictograms.
	Extension	<ul style="list-style-type: none"> Construct pie charts by constructing angles.
	Extension	<ul style="list-style-type: none"> Draw grouped frequency diagrams.
Interpreting Data	4	<ul style="list-style-type: none"> Interpret bar charts.
	5	<ul style="list-style-type: none"> Interpret pictograms.
	5	<ul style="list-style-type: none"> Interpret pie charts.

Week 3 & 4: Percentages (8 hrs)

Arithmetic	5	<ul style="list-style-type: none"> Find fractions and percentages of quantities
	5	<ul style="list-style-type: none"> Use four rules with decimals
	6	<ul style="list-style-type: none"> Use the 4 operations with fractions, including mixed numbers
Increase and Decrease	6	<ul style="list-style-type: none"> Solve problems involving percentage increases and decrease.
	7	<ul style="list-style-type: none"> Use fractions to solve problems involving repeated proportional change

Week 5 & 6: Averages (8hrs)

Averages	4	<ul style="list-style-type: none"> Find the mode and median of sets of data.
	5	<ul style="list-style-type: none"> Find the mean and range of sets of data.
	5	<ul style="list-style-type: none"> Find the average that most accurately represents a set of data.
	6	<ul style="list-style-type: none"> Solve problems using mean, median and mode.

Week 8 & 9: Transformations (8hrs)

Reflection	4	<ul style="list-style-type: none"> Reflect simple shapes in a mirror line.
	6	<ul style="list-style-type: none"> Give equations of mirror lines.
Rotation	5	<ul style="list-style-type: none"> Rotate 2D shapes around a given centre of rotation.
	6	<ul style="list-style-type: none"> Find a centre of rotation.
Enlargement	5	<ul style="list-style-type: none"> Enlarge shapes by a positive integer scale factor.
Rotation	5	<ul style="list-style-type: none"> Translate a 2D shape.
	Extension	<ul style="list-style-type: none"> Use vector notation for translations.

Week 10-12: Survey

This is a project based unit. Pupils choose a hypothesis and test it using the resources from [Census at School](http://www.censusatschool.ntu.ac.uk). (www.censusatschool.ntu.ac.uk). Pupils should write up their report using ICT.

Nets and Solids

This is a project based practical unit. Pupils work through the booklet and present their work as a report at the end.

Week 13 & 14: Revision and test/exam week

Week 15: Year 8 Mathematics

Introducing Numbers	5	<ul style="list-style-type: none">Understand addition, subtraction, multiplication and division as they apply to whole numbers and decimals.
	5	<ul style="list-style-type: none">Use standard column procedures to add and subtract whole numbers and decimals with up to two places.
	6	<ul style="list-style-type: none">Round positive whole numbers to the nearest 10, 100 or 1000 and decimals to the nearest whole number or one decimal place.
	6	<ul style="list-style-type: none">Consolidate the rapid recall of number facts, including positive integer complements to 100 and multiplication facts to 10 x 10, and quickly derive associated division facts.