INTERMEDIATE 1 COURSE OUTLINE
2007/2008

NEW TIMETABLE

UNIT 1

1. Basic calculations 2 weeks find a percentage of a quantity **express one quantity as a percentage of another** round calculations to a given degree of accuracy: to nearest whole number to nearest 10, 100, 1000 to a given number of decimal places solve simple problems on direct proportion 2. Basic geometric properties 2 weeks find the are of simple composite shapes find the volumes of cubes and cuboids find the area and circumference of a circle	Pupils must meet calculations in contexts such as discount, VAT, simple interest for whole year and **for a fraction of a year**. Composite shapes should include rectangles and right-angled triangles and **semi-circles**.
TERM 5.1 1/2. Basic calculations/Basic geometric properties 1/2 weeks 3. Expressions and formulae 1 week evaluate expressions evaluate formulae expressed in words evaluate simple formulae express in symbols	Since there will be a significant number of new pupils in each class, revision of this work is essential. The amount of time spent on this revision may need to be altered depending on the background of the pupils in the class. Teachers should use their professional judgement – time is not usually an issue when delivering this course. Expressions and formulae will involve at least two variables.

4.	Calculations in everyday contexts 2 weeks carry out calculations involving money in appropriate social contexts use exchange rate to convert from: pounds sterling to a foreign currency **foreign currency to pounds sterling**	 eg wage rises, commission, overtime, hire purchase, insurance

UNIT ASSESSMENT

As with all unit assessments, pupils should be given ample opportunity to attempt practice papers – two should be enough for most pupils. If possible, let pupils have the first of these before the end of September even though they will still have to complete some of the final outcome. Aim to have this completed before the end of September.

Time allowed – Approximately 45 minutes. Some flexibility may be allowed to suit individual circumstances.

Re-sits – Where a pupil has not attained the standard necessary to pass a particular outcome or outcomes, they need only be reassessed on the outcomes failed. Only in exceptional circumstances will a second re-sit be allowed.

COURSE ASSESSMENT

A course assessment is available.

All pupils should sit this. It will allow pupils to appropriate the difference between the standard required in the final exam and that required for the unit assessment. The evidence generated by the course assessment can be used for appeals.

TERM 5.1 UNIT 2 1. Integers 1/2 weeks plot and read coordinates in all four quadrants add and subtract positive and negative integers subtract a negative integer from an integer multiply two integers where one is positive and one is negative and divide a negative integer by a positive integer multiply and divide two integers where both are negative and multiply three or more integers	Pupils should be made aware of practical contexts in which such calculations would occur eg temperature, height above sea-level etc.
TERM 5.2 2. Speed, distance and time 2 weeks interpret distance-time graphs recognise the significance of the point of intersection of two graphs, where the graphs are in context calculate time intervals, including those over midnight or midday on the 12 hour clock distance, speed, time – calculate one, given the other two	Examples would involve straightforward quantities of time such as quarter of an hour.
3. The Theorem of Pythagoras 2 weeks solve problems in right-angled triangles using the Theorem of Pythagoras	

4.	Simple graphs, charts and tables 2 weeks	
	extract and interpret data from bar graphs, line graphs, pie charts and stem-and-leaf diagrams	
	construct bar graphs, line graphs and stem-and-leaf diagrams	Data could be in the form of an ungrouped frequency table.
	interpret tends in graphs	
	construct a frequency table from data without class intervals	
	construct and interpret a scattergraph	The scattergraph should show high positive or negative correlation ie indicate the connection between the variables.
	draw a best-fitting straight line by eye on a scattergraph and use it to estimate the value of one variable given the other	
5.	Use of simple statistics 2 weeks	
	calculate the mean, median, mode and range from a data set	At this level a "data set" denotes a matrix of raw data ie data as it was collected, having had nothing done to it.
	calculate the mean, median, mode and range of data presented in an ungrouped frequency table	
	interpret calculated statistics	eg compare mean or range for two data sets; compare individual data points with the mean/mode (commenting "well above average" or "about average"). Pupils can also be required to compare the different measures of central tendency: "normally shaped" distributions will illustrate that the mean, mode and median are often very close, but in skewed distributions they can be very different and the use of one particular statistic can be misleading.
	state the probability of a simple outcome	eg a 5 from rolling a normal die; one value from a given frequency table.

UNIT ASSESSMENT

As with all unit assessments, pupils should be given ample opportunity to attempt practice papers. One should be enough for most pupils.

Aim to have the unit assessment before the Christmas break.

Time allowed – Approximately 45 minutes. Some flexibility may be allowed to suit individual circumstances.

Re-sits – Where a pupil has not attained the standard necessary to pass a particular outcome or outcomes, they need only be reassessed on the outcomes failed. Only in exceptional circumstances will a second re-sit be allowed.

COURSE ASSESSMENT

A course assessment is available, but since the prelim exam is scheduled for the period following the INSET days in February, the course assessment should be done only if time permits.

PRELIM

The prelim will be based principally on Units 1 and 2 only. Unit 3 content will be included only after consultation with class teachers.

TERM 5.3

UNIT 3

1.	Simple algebraic operations 2/3 weeks	If this outcome is completed before the prelim, questions based on its content could be included.
	evaluate formula expressed in symbols	This is largely a repetition of work covered in Unit 1.
	manipulate algebraic expressions involving brackets: multiply expressions remove brackets and collect like terms	An extensive list of exemplars is given in the arrangement. Teachers can access the up-to-date arrangements on the SQA website.
	factorise expressions – common factor	
	solve simple linear equations	
	solve simple inequalities	
2.	Graphical relationships 1 week	
	know the equation y = mx + c as the equation of a straight line	Pupils should also meet lines with equations of the form x = k and y = k
	draw a straight line given its equation in the form y = mx + c by drawing up a table of values	
3.	Trigonometry in a right-angled triangle 2 weeks	
	Solve right-angled triangles using sine, cosine and tangent	Exclude cases where the unknown in the ratio is in the denominator.
4.	Standard form (Scientific notation) 1 week	
	interpret index notation as used in standard form	ie write numbers given in standard form in full.
	rewrite large and small numbers using standard form	
	interpret calculator display	This refers only to those calculators which do not display numbers in standard form in the usual way eg 3.1E-2
	perform simple calculations using standard form	

UNIT ASSESSMENT

As with all unit assessments, pupils should be given ample opportunity to attempt practice papers. One should be enough for most pupils.

Aim to have the unit assessment before the Spring break if possible.

Time allowed – Approximately 45 minutes. Some flexibility my be allowed to suit individual circumstances.

Re-sits – Where a pupil has not attained the standard necessary to pass a particular outcome or outcomes, they need only be reassessed on the outcomes failed. Only in exceptional circumstances will a second re-sit be allowed.

COURSE ASSESSMENT

A course assessment is available and **must** be taken by all pupils. This assessment will usually provide the only evidence for Unit 3 in an appeal. This can be left until after the Spring break.