

St Columba's Catholic Boys' School
A Performing & Visual Arts College



Year 11
Curriculum & Careers Evening

Essential Dates & Exam
Requirements
2009 – 2010

Tuesday 10 November 2009
6.30 to 8.30 p.m.
Location: School Hall

English

English Literature

Students have been given a letter to order Revision Guides at a reduced cost. Deadline was Friday 23rd October 2009.

Students will be sitting two exams for the Mocks in December 2009:

English

Paper 1 Section A – Media and non-fiction section A (1 hour). They can use the BBC Bite Size website to prepare for this and the revision booklet.

Paper 1 Section B –

$\frac{3}{4}$ hour – writing to argue / persuade/ advise. **Students must plan for this section.**

Bite Size website can be used for revision, plus the homework tasks students have been set.

English Literature

Section A ($\frac{3}{4}$ hour) students will have studied **Lord of the Flies** with Mr Paull, OR **Of Mice and Men** with Mrs Keevey, Ms Lahiff and Mr O’Sullivan OR **Catcher in the Rye** with Mr Waterhouse.

Poetry – Section B – 1 hour

Students will need to compare two modern poets, such as Seamus Heaney and Gillian Clark (Mr Waterhouse, Mr Paull, Ms Forbes , Mr O’Sullivan and Mrs Keevey’s groups) OR Carol Ann Duffy and Simon Armitage (Ms Lahiff’s groups) and compare with pre 1914 poets like R Browning, T Hardy and Shakespeare.



Again the BBC Bite Size website has lots of activities for students to do regarding revision.

All written Coursework must be completed by Christmas 2009.

There is a very high correlation between good coursework grades and the final grades in August. Work should be redrafted so that it is the best that the boy can achieve and will therefore prepare him well for the examinations in the Summer Term.

Maths

The current year 11 cohort have been doing modular mathematics since 2008. They have already completed unit 1, Data Handling and Unit 2, Number and Algebra. They are due to sit unit 3 in June 2010. They will do a mock exam for this in December 2009. The breakdown of percentages for the three units is:

<u>Unit 1</u>	20%	Data Handling
<u>Unit 2</u>	30%	Number and Algebra
<u>Unit 3</u>	50%	Terminal Paper

The topics covered in the mock exam are:

Year 11 mock exams – Foundation revision list

Dec 2009

Foundation Tier- Unit 1

Collecting data

Understand the meaning of quantitative, qualitative, discrete, continuous, primary and secondary data
Understand the meaning of the words population and census and the reason for sampling a population
Understand and use a sampling frame
Understand bias and be able to minimise it
Understand random as a word, and random sampling
Generate and use random numbers and be able to select a random sample
Be able to select a stratified sample
Understand the use of a control group
Understand and know the rules for designing a questionnaire and recognise deficiencies in a question

Charts and graphs

Collect data in a tally table and grouped frequency tables
Be able to draw and interpret pictograms, bar charts and histograms (with equal class widths)
Shape of distributions of data including positive and negative skew
Be able to construct draw and understand vertical line graphs
Be able to draw and interpret frequency polygons

Small data sets

Be able to calculate the mean, median, mode and range from simple data
Interpret results and understand the advantages and disadvantages of each of the three averages
Be able to draw and interpret stem and leaf diagrams, including back-to-back diagrams.

Probability 1

Understand the meaning of the words event and outcome, impossible, certain, highly likely, likely, unlikely, possible, events
Be able to put outcomes in order on a probability scale
Understand the terms random, and equally likely
Write down theoretical probabilities of an event happening
Understand the terms mutually exclusive and exhaustive
Know that for mutually exclusive outcomes the sum of the probabilities is =1
Know that for mutually exclusive outcomes that $p(A') = 1 - p(A)$
Be able to draw and interpret two-way tables
Understand and be able to estimate probability from relative frequency
List outcomes for one or two events in a systematic way
Be able to produce, understand and use a sample space

Pie charts

Be able to draw and interpret pie charts

Scatter graphs

Can draw a scatter diagram given a set of data

Can classify data on a scatter diagram as having positive correlation, negative correlation or no correlation

Can draw and use a line of best fit on a scatter diagram by eye

Time series

Plot points as a time series and draw a trend line by eye

Calculate and use appropriate moving averages

Plot moving averages

Identify seasonal variation by visual inspection of time series graphs

Large data sets

Be able to calculate the mean, mode and median of discrete data presented as a frequency distribution

Be able to calculate estimates for the mean and the class interval containing the median from a grouped frequency table

Be able to identify the modal class from a grouped frequency table for discrete and continuous data

Foundation Tier- Unit 2 Stage 1 (Non-Calculator Multiple Choice)

Whole numbers

Understand place value in whole numbers.

Read, write and order whole numbers, including negatives.

Round numbers to any given power of 10, 100, 1000.

Round to one significant figure and use for estimating, eg $29 \times 31 \approx 30 \times 30$

Recall all positive integer complements to 100, eg $37 + 63 = 100$

Recall all multiplication facts to 10×10 and corresponding division.

Add, subtract, multiply and divide integers including negative integers

Understand simple instances of BIDMAS, eg work out $12 \times 5 - 24 \div 8$

Use standard column procedures for addition and subtraction of integers

Multiply or divide any number by powers of 10

Use standard column procedures for multiplication of integers



Decimals

Use decimal notation and recognise that each terminating decimal is a fraction. eg $0.137 = 137/1000$

Order decimals

Recall the fraction-to-decimal conversion of familiar simple fractions ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{8}$)

Round to the nearest integer and to a given number of decimal places

Estimate answers to problems involving decimals by rounding to 1sf and derive unknown facts from those they know eg estimate $\sqrt{85}$

Mentally add and subtract numbers with up to two decimal places eg $13.76 - 5.21$,

Mentally multiply and divide numbers with no more than one decimal digit eg 14.3×4 , $56.7 \div 7$

Know that, eg $13.5 \div 0.5 = 135 \div 5$

Use standard column procedures for addition and subtraction of decimals

Use standard column procedures for multiplication of decimals

Angles 1

Distinguish between acute, obtuse, reflex and right angles and estimate the size of an angle.

Measure and draw angles with a protractor.

Solve angle problems at a point, on a straight line and through opposite angles at a vertex.

Measurement 1

Decide on the appropriate units to use in real life problems

Read measurements from instruments: scales; analogue and digital clocks; thermometers, etc

Convert between metric units for length, capacity and weight.

Coordinates

Plot and locate points in all four quadrants.

Understand that one coordinate identifies a point on a number line, two coordinates identify a point in a plane and three coordinates identify a point in space, using the terms '1-D', '2-D' and '3-D'.

Find the coordinates of the fourth vertex of a parallelogram given the other 3.

Find the coordinates of the midpoint of a line connecting two points.

Identify the coordinates of the vertex of a cuboid on a 3-D grid

Factors and multiples

Use the concepts and vocabulary of factor, multiple, common factor, highest common factor (HCF), least common multiple (LCM), prime number.

Be able to find the HCF and LCM of 2 numbers.

Write a number as a product of its prime factors, eg $108 = 2 \times 2 \times 3 \times 3 \times 3$

Patterns and sequences

Be able to continue common integer sequences, including sequences of odd, even, squared integers, powers of 2 and 10, triangular numbers.

Generate terms of a sequence using term-to-term definitions.

Generate terms of a sequence using position-to-term definitions.

Use linear expressions to describe the nth term of an arithmetic sequence.

Shapes

Classify quadrilaterals by their geometric properties and recall the essential properties and definitions of square, rectangle, parallelogram, trapezium, rhombus and kite.

Mark parallel lines in a diagram

Use angle properties of triangles and quadrilaterals to find missing angles

Fractions

Understand a fraction as a part of a whole and visualise diagrammatically.

Understand equivalent fractions

Simplify a fraction by cancelling all common factors

Rewrite fractions with a common denominator to allow ordering or size comparison.

Write an improper fraction as a mixed fraction.

Perimeter and area

Calculate the perimeter of shapes.

Calculate area by counting squares.

Calculate areas of rectangles and triangles

Calculate areas of shapes made from triangles and rectangles

Calculate areas of parallelograms and trapeziums.

Foundation Tier- Unit 2 Stage 2 (Calculator)

Angles 2

Use bearings to specify direction – measuring and drawing.

Identify and name the circle parts- centre, radius, chord, diameter, circumference, tangent, arc, sector and segment.

Measurement 2

Make estimates of lengths, volumes and weights in real life context and choose appropriate units of measure.

Know that measurements to the nearest whole unit can be inaccurate by up to one half in either direction and have upper and lower bounds.

Know rough metric equivalents of pounds, feet, miles, pints and gallons.

Calculations involving time, including the use of timetables and calendars

Powers and roots

Use the terms square, positive and negative square root, cube and cube root.

Recall integer squares from 2 to 15 and the corresponding square roots.

Recall the cubes of 2, 3, 4, 5 and 10.

Use the square, square root, cube and cube root functions of a calculator.

Understand and use reciprocals

Use index notation for simple integer powers and powers of 10.

Do calculations involving powers. Eg. $2^3 + 3^2$

Write a number in standard index form and interpret standard index form from a calculator display

Algebra

Simplify algebraic expressions in one or more like terms by adding and subtracting.

Distinguish the meaning between the words 'equation', 'formula', 'identity' and 'expression'

Multiply and divide with letters and numbers

Shapes and parallel lines

Find missing angles using properties of corresponding angles and alternate angles, giving reasons.

Find the three missing angles in a parallelogram when one of them is given

Prove that the angle sum of a triangle is 180 degrees and that the exterior angle of a triangle is equal to the sum of the interior angles at the other two vertices.

Explain why the angle sum of a quadrilateral is 360°

Percentages

Understand that a percentage is a fraction in hundredths

Write a percentage as a decimal; or as a fraction in its simplest terms

Write one number as a percentage of another number

Calculate the percentage of a given amount (including in context, eg money)

Linear graphs

Draw graphs of the form $y = mx + c$ (values for m and c are given), eg $y = 2x + 3$

Recognise that equations of the form $y = mx + c$ correspond to straight-line graphs and that lines are parallel when they have the same value of m

Recognise and draw graphs of the form, eg $y = 3$ and $x = 7$

Plot graphs of the form $x + y = c$, eg $x + y = 7$

Plot linear graphs from tabulated data for real-world examples

Interpret graphs modelling real situations, including conversion graphs and distance-time graphs.

Solve graphically simultaneous equations, eg find when/where the car overtakes the bus.

Surface area

Calculate the surface area of cuboids eg a cuboid of dimensions 7cm \times 8cm \times 9cm

Calculate the surface area of simple prisms

Powers and brackets

Multiply a single term over a bracket eg. $5(2x + 3) = 10x + 15$ and simplify if necessary

Factorise an expression eg $9x - 3 = 3(3x - 1)$ or $x^2 - 3x = x(x - 3)$

Expand the product of two linear expressions eg $(x + 2)(x - 5) = x^2 - 3x - 10$

Simplify expressions using the index laws for multiplication and division of integer powers, eg $5^6 \div 5^2 = 5^4$

Compound measures

Use the relationship between distance, speed and time to solve problems

Convert between metric units of speed, eg km/h to m/s

Know that density is found by mass \div volume

Use the relationship between density, mass and volume to solve problems

Convert between metric units of density, eg kg/m³ to g/cm³

Volume

Find volumes by counting cubes.

Know and use the formula for the volume of a cuboid.

Calculate volumes of shapes made from cubes and cuboids.

Calculate volumes of right prisms

Isometric drawing of cuboids and shapes made from cuboids.

Foundation Tier- Unit 3

2-D shapes

- Be able to draw triangles and other 2-D shapes using a ruler and protractor.
- Be able to draw triangles and other 2-D shapes using a ruler and compass.
- Be able to construct an equilateral triangle with a given side.
- Understand congruence
- Be able to construct the bisector of an angle.
- Be able to construct the midpoint and perpendicular bisector of a line segment.
- Be able to construct the perpendicular from a point to a line.
- Can construct loci by reasoning, e.g. a region bounded by a circle and an intersecting line.

Adding and subtracting fractions

- Add and subtract fractions by writing them with a common denominator.
- Addition and subtraction of mixed numbers.

Multiplying and dividing fractions

- Calculate a fraction of a given quantity
- Express a number as a fraction of another.
- Convert a fraction to a decimal and a decimal to a fraction.
- Multiply a fraction by an integer.
- Divide a fraction by an integer.
- Multiply a fraction by a fraction.
- Simplify multiplication of fractions by first cancelling common factors
- Use a calculator for fraction calculations.
- Divide a fraction by a fraction
- Find the reciprocal of whole numbers, fractions and decimals, eg find the reciprocal of 0.4

Linear equations

- Be able to distinguish in meaning between the words 'equation', 'formula', 'identity' and 'expression'
- Solve simple equations where the unknown appears on one side involving one operation, e.g. $5x = 20$, $p + 3 = 10$.
- Solve simple equations where the unknown appears on one side involving two operations, e.g. $2x + 7 = 19$.
- Solve simple equations where the unknown appears on both sides, e.g. $4x + 3 = 2x + 15$.
- Solve linear equations that involve brackets, including those that have negative signs occurring anywhere in the equation, and those with a negative solution.
- Set up simple equations e.g. find the angle a in a triangle with angles a , $a + 10$, $a + 20$.
- Solve simple linear inequalities in one variable, and represent the solution set on a number line.

3-D shapes

- Recognise and name examples of solids, including prisms.
- Count the vertices, faces and edges of 3-D shapes
- Draw planes of symmetry in 3-D shapes
- Draw and interpret plans and elevations.
- Draw 2-D representations of 3-D objects.
- Draw nets of solids and recognise solids from their nets

Applications of percentages

- Write one quantity as a percentage of another quantity.
- Find a percentage increase/decrease of an amount
- Calculate using a multiplier, e.g. a 15% increase is equivalent to multiplication by 1.15.

Linear graphs

- Recognise the equations of vertical and horizontal lines.
- Recognise lines in the form $y = mx + c$ and be able to write down the gradient and intercept of lines from its equation
- Understand that parallel lines have the same gradient.
- Be able to solve two linear simultaneous equations graphically.
- Interpret linear and non-linear graphs from real situations including conversion graphs, graphs of the depth of water in a container as it empties and distance-time graphs

Ratio and proportion

Understand what is meant by ratio and its links to fractions (i.e. ratio of 1:2 is divided into 1/3 and 2/3).
Reduce a ratio to its simplest form
Use the unitary method to solve ratio and proportion problems.
Share a quantity in a given ratio e.g. share £15 in the ratio of 1:2
Interpret map/model scales as ratio

Using formulae

Use and write a word formula.
Substitute positive and negative numbers into an algebraic formula including expressions with powers.
Change the subject of a formula.

Polygons

Explain why the angle sum of a quadrilateral is 360 degrees.
Know, or work out, the relationship between the number of sides of a polygon and the sum of its interior angles
Calculate and use the sums of the interior angles of quadrilaterals, pentagons and hexagons, octagons and decagons.
Know that the sum of the exterior angles of any polygon is 360°
Find the size of each exterior/interior angle of a regular polygon
Inscribe a regular polygon by equal divisions of a circle.

Transformations

Understand Reflection and Rotational Symmetry
Be able to reflect in a given mirror line or the x -axis, y -axis, $x = a$, $y = b$ and $y = x$ or $y = -x$.
Be able to rotate a shape specified by a centre and an (anticlockwise) angle, measuring the angle of rotation using right angles, simple fractions of a turn or degrees.
Be able to translate a shape specified by a horizontal and vertical shift.
Understand and use vector notation for translations.
Be able to transform shapes using a combination of transformations.
Describe the single transformation equivalent to a combination of transformations.
Enlarge a shape by a given scale factor (positive whole numbers and positive fractions)
Identify the scale factor of an enlargement.
Understand tessellation
Enlarge a shape by a given scale factor from a given point

Scale factors

Use integer and simple non-integer scale factors to find the length of a missing side in each of two similar shapes, given the lengths of a pair of corresponding sides
Know the relationship between linear, area and volume scale factors of similar shapes
Deduce the areas and volumes of similar shapes after they have been enlarged by simple scale factors
Read and construct scale drawings.

Circles and dimensions

Know and use the formula for the circumference of a circle, including simple fractional parts.
Know and use the formula for the area of circles, including simple fractional parts.
Use π in exact calculations, without a calculator
Be able to calculate the volume of a cylinder.
Distinguish between formulae for perimeter, area and volume by considering dimensions.
Convert between area measures, including square centimetres and square metres, and volume measures, including cubic centimetres and cubic metres.

Quadratic graphs

Generate points and plot graphs of quadratic functions, e.g. $y = x^2$, $y = 3x^2 + 4$, $y = x^2 - 2x + 1$
Find approximate solutions of a quadratic equation from its graph.

Trial and improvement

Use trial and improvement to find solutions of equations where there is no simple analytical method of solving them.
Solve equations of the type $ax^2 = b$



Pythagoras' theorem

Use Pythagoras' theorem to find the hypotenuse.

Use Pythagoras' theorem to find the shorter side.

Use Pythagoras' theorem to find the length of a line segment on a coordinate grid.

Year 11 mock exams - Higher revision list

Dec 2009

Higher Tier- Unit 1

Collecting data

Understand the meaning of quantitative and qualitative, primary and secondary, discrete and continuous data

Understand the meaning of the words population, census and sampling frame

Understand the reason for sampling a population

Understand random as a word, and random sampling

Generate and use random numbers

Be able to select a random sample

Be able to select a stratified sample

Understand bias and how to minimise it

Be able to select and justify a sampling scheme

Understand and know the rules for designing a questionnaire

Charts and graphs

Be able to draw and interpret pictograms & bar charts

Be able to construct draw and understand vertical line graphs

Be able to draw and interpret population pyramids for continuous data

Be able to interpret Choropleth maps

Be able to draw and interpret stem and leaf diagrams, including back-to-back diagrams

Be able to draw and interpret pie charts

Be able to draw and interpret frequency polygons

Scatter graphs

Can draw a scatter diagram given a set of data

Can classify data on a scatter diagram as having positive correlation, negative correlation or no correlation

Can draw a line of best fit on a scatter diagram by eye

Averages

Be able to calculate the mean, median, mode and range from simple data

Be able to calculate the mean, mode, median and range of discrete data presented in a frequency table

Be able to calculate estimates for the mean and the class containing the median from a grouped frequency table

Be able to identify the modal class from a grouped frequency table

Understand the appropriateness, advantages and disadvantages of each of the three averages.

Probability

Understand the meaning of the words event and outcome, impossible, certain, likely, unlikely, possible, random, events

Be able to put probabilities in order on a probability scale

Be able to estimate probability from theoretical models

Understand the terms mutually exclusive and exhaustive

Know that for mutually exclusive outcomes the sum of the probabilities is =1

Know that if the probability of an event occurring is p then the probability of it not occurring is $1 - p$

Be able to find the missing probability from a list or table

Find estimates of probabilities by considering relative frequency in experimental results (including two-way tables)

Be able to produce, understand and use a sample space diagram

Know that the probability of A or B is $P(A) + P(B)$

Know that the probability of A and B is $P(A) \times P(B)$

Be able to use tree diagrams "with replacement"

Be able to use tree diagrams "without replacement"

Time series

Plot points as a time series

Draw a trend line by eye

Calculate and use appropriate moving averages

Plot moving averages

Identify and discuss the significance of seasonal variation by visual inspection of time series graphs

Establish a trend line with its equation, based on moving averages

Recognise seasonal effect at a given data point and average seasonal effect

Cumulative Frequency

Be able to draw up a cumulative frequency table

Be able to draw a cumulative frequency curve

Be able to use a cumulative frequency curve to calculate the median, quartiles and IQR

Be able to identify outliers using the IQR

Be able to draw and interpret Box & Whisker diagrams (Box Plots)

Be able to use Box & Whisker diagrams to identify negative and positive skew

Histograms

Understand the differences between a bar chart and a histogram

Be able to complete a frequency table from a histogram

Be able to draw a histogram from a frequency table

Higher Tier- Unit 2 Stage 1 (Non-Calculator Multiple Choice)

Whole numbers

Read, write and order whole numbers, including negatives.

Round numbers to any given power of 10, 100, 1000.

Know and be able to use BIDMAS, eg work out $12 \times 5 - 24 \div 8$

Round to one significant figure and use for estimating, eg $29 \times 31 \approx 30 \times 30$

Round to a given number of significant figures

Add, subtract, multiply and divide integers including negative integers

Use standard column procedures for addition and subtraction of integers

Use standard column procedures for multiplication of integers

Use standard procedures for division of integers

Be able to solve problems of the type, given $87 \times 132 = 11484$ find 870×1320

Decimals

Order decimals

Round to a given number of decimal places or significant figures and use for estimation

Mentally add and subtract numbers with up to two decimal places eg $13.76 - 5.21$,

Mentally multiply and divide numbers with no more than one decimal digit eg 14.3×4

Know that, eg $13.5 \div 0.5 = 135 \div 5$ and be able to solve problems of the type, given $2.31 \times 3.47 = 8.0157$, what is 0.231×3470

Use standard column procedures for addition and subtraction of decimals

Use standard procedures for multiplication and division of decimals

Convert between ordinary and Standard Index Form numbers

Fractions

Understand equivalent fractions

Simplify a fraction by cancelling all common factors

Order or compare the sizes of fractions by using a common denominator

Write an improper fraction as a mixed fraction and vice-versa

Coordinates

Plot and locate points in all four quadrants.

Understand that one coordinate identifies a point on a number line, two coordinates identify a point in a plane and three coordinates identify a point in space, using the terms '1-D', '2-D' and '3-D'.

Find the coordinates of the fourth vertex of a parallelogram given the other 3.

Find the coordinates of the midpoint of a line connecting two points.

Identify the coordinates of the vertex of a cuboid on a 3-D grid

Geometry 1

Be able to measure and draw angles using a protractor.

Solve angle problems at a point, on a straight line and through opposite angles at a vertex.

Know and be able to identify equilateral, isosceles, scalene and right-angled triangles

Use angle properties of triangles to find missing angles

Use bearings to specify direction – measuring and drawing.

Classify quadrilaterals by their geometric properties and recall the essential properties and definitions of square, rectangle, parallelogram, trapezium, rhombus and kite.

Mark parallel lines in a diagram

Factors and multiples

Use the terms square, positive and negative square root, cube and cube root.

Recall integer squares from 2 to 15 and the corresponding square roots.

Recall the cubes of 2, 3, 4, 5 and 10.

Use the square, square root, cube and cube root functions of a calculator.

Know what a factor is

Know what a prime factor is

Write a number as a product of its prime factors, eg $108 = 2^2 \times 3^3$

Be able to find the Highest Common Factor (HCF) of 2 or more numbers

Be able to find the Lowest Common Multiple (LCM) of 2 or more numbers

Sequences

Be able to continue common integer sequences, including sequences of odd, even, squared integers, powers of 2 and 10, triangular numbers.

Generate terms of a sequence using term-to-term definitions.

Generate terms of a sequence using position-to-term definitions.

Use linear expressions to describe the nth term of an arithmetic sequence.

Explain why a number is, or is not, a member of a given sequence.

Perimeter and area

Calculate areas of rectangles and triangles.

Calculate perimeters and areas of shapes made from triangles and rectangles

Convert between metric units for length, capacity and weight.

Know rough metric equivalents of pounds, feet, miles, pints and gallons.

Make estimates of lengths, volumes and weights in real life context and choose appropriate units of measure.

Know that measurements to the nearest whole unit can be inaccurate by up to one half in either direction and have upper and lower bounds.

Algebra

Be able to simplify by collecting like terms.

Be able to expand a single bracket, e.g. $3(2x + 4)$

Be able to factorise involving a single bracket

Be able to expand two linear brackets and simplify the resultant expression, e.g. $(x + 2)(x - 4)$, $(3x - 4)(2x + 5)$

Be able to factorise quadratic expressions

Be able to factorise quadratic expressions using difference of two squares

Cancel common factors in algebraic fractions

Compound measures 1

Use the relationship between distance, speed and time to solve problems
Convert between metric units of speed, eg km/h to m/s

Surface area

Calculate the surface area of cuboids, eg a cuboid of dimensions 7cm × 8cm × 9cm
Calculate the surface area of simple prisms
Convert between area measures, including square centimetres and square metres.

Higher Tier- Unit 2 Stage 2 (Calculator)

Fractions and decimals

Understand what is meant by a terminating and a recurring decimal.
Be able to convert between decimals and fractions
Be able to convert a recurring decimal to a fraction, eg show that $0.123123... = 41/333$

Geometry 2

Find missing angles using properties of corresponding angles and alternate angles, giving reasons.
Find the three missing angles in a parallelogram when one of them is given
Prove that the angle sum of a triangle is 180 degrees and that the exterior angle of a triangle is equal to the sum of the interior angles at the other two vertices.

Circles

Know the terms centre, circumference, chord, radius, diameter and tangent, arc, sector, segment in relation to a circle
Understand that the tangent at any point on a circle is perpendicular to the radius at that point
Understand tangents from a point to a circle are equal
Understand that inscribed regular polygons can be constructed by equal division of a circle.

Percentages

Write a percentage as a decimal; or as a fraction in its simplest terms
Write one number as a percentage of another number
Calculate the percentage of a given amount (including in context, eg money)

$y = mx + c$

Draw graphs of the form $y = mx + c$ (values for m and c are given), eg $y = 2x + 3$ by substituting values of x into linear functions to find corresponding values of y
Recognise that equations of the form $y = mx + c$ correspond to straight-line graphs and that lines are parallel when they have the same value of m
Recognise and draw graphs of the form, eg $y = 3$ and $x = 7$
Plot graphs of the form eg $2x + 3y = 12$

Compound measures 2

Know that density is found by mass ÷ volume
Use the relationship between density, mass and volume to solve problems
Convert between metric units of density, eg kg/m to g/cm

Volume

Know and use the formula for the volume of a cuboid.
Calculate volumes of shapes made from cubes and cuboids.
Solve a range of problems involving volume, eg given the volume and length of a cube find the height
Calculate volumes of right prisms

Powers and standard form

Understand and be able to use index notation

Understand and be able to use index rules for multiplication and division, positive, negative and fractional indices to simplify and calculate numerical expressions involving powers, eg $(2^3 \times 2^5) \div 2^4$, 4^0 , $8^{-2/3}$

Be able to convert between ordinary numbers and Standard Index Form.

Be able to use a calculator for Standard Index Form

Be able to multiply and divide two numbers using Standard Index Form

Higher Tier- Unit 3

Fractions 2

Be able to calculate a fraction of a given quantity

Be able to express a given number as a fraction of another

Can perform division to write a fraction as a decimal

Be able to add and subtract fractions, including mixed numbers, by writing them with a common denominator

Can multiply and divide a fraction by an integer

Can multiply and divide a fraction by another fraction, including mixed numbers

Know that, eg multiplying by $\frac{1}{4}$ is the same as dividing by 4

2-D shapes

Be able to draw triangles and other 2-D shapes using a ruler and protractor or compass.

Be able to construct an equilateral triangle with a given side.

Inscribe a regular polygon by equal divisions of a circle.

Understand congruence

Be able to construct the bisector of an angle and the angles 60° , 30° and 45°

Be able to construct the midpoint and perpendicular bisector of a line segment.

Be able to construct the perpendicular from a point to a line.

Can construct loci by reasoning, e.g. a region bounded by a circle and an intersecting line.

Percentages 2

Calculate the percentage of a given amount (including in context, eg money)

Find a percentage increase and decrease of an amount

Use a multiplier to increase/decrease by a given percent, eg 1.15×64 increases 64 by 15%

Find a reverse percentage, eg find the original cost of an item given the cost after a 10% deduction

Be able to execute repeated proportional change by using a multiplier raised to a power

Be able to calculate compound interest

Solving linear equations

Solve simple equations where the unknown appears on one side involving two operations, e.g. $2x + 7 = 19$.

Solve simple equations where the unknown appears on both sides, e.g. $4x + 3 = 2x + 15$.

Solve equations that have negative signs occurring anywhere in the equation, and those with a negative solution.

Solve linear equations that involve brackets

Set up simple equations e.g. find the angle a in a triangle with angles a , $a + 10$, $a + 20$.

Be able to solve linear equations with fractions e.g. $\frac{2x-3}{6} + \frac{x+2}{3} = \frac{5}{2}$

Polygons

Explain why the angle sum of a quadrilateral is 360 degrees.

Know the relationship between the number of sides of a polygon and the sum of its interior angles

Calculate and use the sums of the interior angles of quadrilaterals, pentagons and hexagons, octagons and decagons.

Know that the sum of the exterior angles of any polygon is 360°

Find the size of each exterior/interior angle of a regular polygon

3-D shapes

Recognise and name examples of solids, including prisms.

Count the vertices, faces and edges of 3-D shapes and draw planes of symmetry.

Draw nets of solids and recognise solids from their nets

Draw and interpret plans and elevations.

Draw 2-D representations of 3-D objects.

Formulae

Know the meaning of and using the words 'equation', 'formula', 'identity', and 'expression'

Substitute positive and negative numbers into an algebraic formula.

Substitute positive and negative numbers into expressions with powers.

Change the subject of a simple formula eg make x the subject of $y=mx + c$

Change the subject of a formula where the subject occurs more than once, or where a power of the subject occurs

Circle theorems

Know that the angle subtended by arc at centre is twice angle on circumference

Can use the fact that the angle subtended by arc at centre is twice angle on circumference to solve problems

Know angles in a semi-circle are right angles

Know angles in the same segment are equal

Know opposite angles of a cyclic quadrilateral are $= 180$ degrees

Know what a tangent is and that two tangents from the same point are equal

Know that a radius that meets the circumference at the same point as a tangent makes a right-angle with the tangent

Know alternate segment theorem

$y = mx + c$ (2)

Recognise that equations of the form $y = mx + c$ and $ax + by = c$ correspond to straight-line graphs and that lines are parallel when they have the same value of m

Know that the line perpendicular to $y = mx + c$ has gradient $-1/m$

To be able to find the equation of a line given information about its gradient and a point it passes through.

Interpret graphs modelling real situations, including distance-time graphs, travel graphs and graphs of water filling containers

Similar shapes

Use integer and non-integer scale factors to find the length of a missing side using similar shapes, given the lengths of a pair of corresponding sides

Know and use the relationship between linear, area and volume scale factors of similar shapes

Prove formally that two triangles are congruent using SAS, SSS, ASA, RHS arguments

Circles 2

Know and use the formula for the circumference of a circle, including simple fractional parts.

Find the perimeter of shapes made up from triangles, rectangles and parts of a circle

Know and use the formula for the area of circles, including simple fractional parts.

Find the area of shapes made up from triangles, rectangles and parts of a circle

Use π in exact calculations, without a calculator

Be able to calculate lengths of arcs of circles and the area of a sector of a circle

Ratio and scale

Understand what is meant by ratio and its various links to fraction notation (i.e. ratio of 1:2 is divided into $1/3$ and $2/3$).

Reduce a ratio to its simplest form

Interpret map/model scales as ratio

Use the unitary method to solve ratio and proportion problems.

Share a quantity in a given ratio e.g. share £15 in the ratio of 1:2

Proportion

Be able to model problems involving direct proportion as algebraic functions, eg $y \propto x^2$ as $y = kx^2$

Use algebraic functions for direct proportionality, with their value of k , to find unknown values

Be able to model problems involving inverse proportion as algebraic functions, eg $y \propto 1/x$ as $y = k/x$

Use algebraic functions for inverse proportionality, with their value of k , to find unknown values

Recognise and sketch the graphs for direct and inverse proportions ($y \propto x$, $y \propto x^2$, $y \propto x^3$, $y \propto 1/x$, $y \propto 1/x^2$)

Simultaneous equations

Be able to solve two simultaneous equations involving two linear equations without having to pre-multiply either equation

Be able to solve two simultaneous equations involving two linear equations having to pre-multiply one or both equations

Be able to interpret and solve simultaneous linear equations graphically

Be able to solve simple examples of simultaneous equations involving one linear & one quadratic expression in one variable, e.g. $y = 3x + 2$ and $y = x^2$

Be able to interpret and solve simultaneous linear and quadratic equations graphically

Be able to solve simultaneous equations involving one linear equation and the equation of a circle centred on the origin.

Index notation and surds

Understand and be able to use index rules for multiplication and division, positive, negative and fractional indices to simplify and calculate numerical expressions involving powers, eg $(2^3 \times 2^5) \div 2^4$, 4^0 , $8^{-2/3}$

Be able to convert between ordinary numbers and Standard Index Form.

Be able to multiply and divide two numbers using Standard Index Form

Be able to use a calculator for Standard Index Form

Rationalise the denominator of fractions containing surds, eg $1/\sqrt{3} = \sqrt{3}/3$, and eg write $(\sqrt{18} + 10) \div \sqrt{2}$ in the form $p + q\sqrt{2}$

Inequalities

Rearrange and solve linear inequalities in one variable

Show the solution set on a number line, or write down all the integer solutions

Draw the graphs of linear inequalities in two variables

Interpret the solution sets given by regions on the graph.

Quadratic functions

Can plot the graph of a quadratic function

Can use the graph to solve quadratic equations by considering intercept on the x-axis

Solve quadratic equations by factorising where a is equal to 1

Solve quadratic equations by factorising where a not equal to 1

Understand and be able to use completing the square as a method of solving quadratic equations

Use completing the square to write down the maximum/minimum of the function

Understand and be able to use the quadratic formula as a method of solving quadratic equations

Trial and improvement

Solve functions by successive substitution of values of x

Transformations

Be able to reflect in a given mirror line or the x -axis, y -axis, $x = a$, $y = b$ and then $y = x$ or $y = -x$.

Be able to rotate a shape specified by a centre and an (anticlockwise) angle, measuring the angle of rotation using right angles, simple fractions of a turn or degrees.

Be able to translate a shape specified by a horizontal and vertical shift.

Understand and use vector notation for translations.

Be able to transform shapes using a combination of transformations.

Describe the single transformation equivalent to a combination of transformations.

Enlarge a shape by a positive integer scale factor from a centre of enlargement.

Enlarge a shape by a positive fractional scale factor from a centre of enlargement.

Identify the scale factor of an enlargement as the ratio of the lengths of any two corresponding line segments.

Distinguish properties that are preserved under transformations, eg write down the angles of a triangle that has been enlarged.

Enlarge a shape by a negative scale factor from a centre of enlargement

Right-angled triangles

Use Pythagoras' theorem to find the hypotenuse or a shorter side.

Use the trigonometric ratios to calculate unknown lengths in right-angled triangles

Use trigonometric ratios (sine, cosine and tangent) to calculate angles in right-angled triangles

Non-right-angled triangles

Know and be able to use the Sine Rule in calculations

Know and be able to use the Cosine Rule in calculations

Calculating the area of a triangle using $\frac{1}{2} ab \sin C$

Trigonometry in 3-D

Use Pythagoras in 3-D to find the length of a line segment

Calculate the diagonal through a cuboid, or across the face of a cuboid

Find the angle between the diagonal through a cuboid and the base of the cuboid

Find the angle between a sloping edge of a pyramid and the base of the pyramid

Bearings problems involving trigonometry

Vectors

Understand the definition of a vector as being a displacement in the plane (with an associated direction)

Be able to calculate the magnitude of a vector

Be able to calculate and draw the sum/difference of two or more vectors

Understand the commutative and associative properties of vector addition

Understand that $2\mathbf{a}$ is parallel to \mathbf{a} and twice its length

Understand that \mathbf{a} is parallel to $-\mathbf{a}$ and in the opposite direction

Solve geometrical problems in 2-D, eg show that joining the midpoints of the sides of any quadrilateral forms a parallelogram

3-D shapes and dimensions

Be able to calculate the surface area of prisms (including cylinders)

Be able to calculate the surface area of pyramids & cones

Be able to calculate the volume of prisms (including cylinders)

Be able to calculate the volume of pyramids & cones

Be able to calculate the surface area of a sphere

Be able to calculate the volume of a sphere

Be able to identify an expression as a length, area or volume by considering its dimensionality

Further functions

Can plot, recognise and sketch cubic and reciprocal graphs

Can draw a circle of radius r centred at the origin

Use the graphs of these functions to find approximate solutions to equations, eg given x find y (and vice versa)

Can plot, sketch and be able to interpret $y = pq^x$

Given two points on the curve $y = pq^x$, can calculate the values of p and q

Can plot, recognise and sketch \sin , \cos , \tan graphs

Graphical transformations

Can understand $f(x)$ notation

Given the graph of $f(x)$ and the value a , can sketch the graph of $y = f(x) + a$

Given the graph of $f(x)$ and the value a , can sketch the graph of $y = f(x-a)$

Given the graph of $f(x)$ and the value a , can sketch the graph of $y = f(ax)$

Given the graph of $f(x)$ and the value a , can sketch the graph of $y = a.f(x)$

Can sketch the graph of combinations of transformations, e.g. $y = a.f(bx)$

Apply the above transformations to sin and cos curves

Pupils can access this information as it is in the maths folder on the shared area. Revision guides and practice exam papers can be purchased from the Maths department. If you require any more information contact me at school.

Miss M.McMenamin

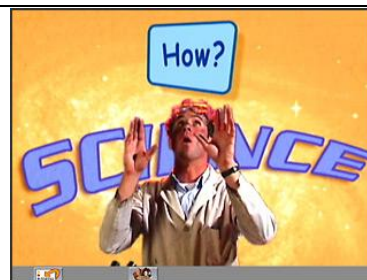
Head of Maths

(mmn@st-columbas.bexley.sch.uk)

Science

Triple Science - MOCK EXAMS

- 3 exams Biology, Chemistry & Physics
- Each exam will consist of two papers; 20 minute multiple choice and a 30 minute structured (written) paper.
- A separate grade will be awarded for each subject.
- A list of topics to revise is shown below



Biology	Chemistry	Physics
<u>Topic 1</u> Inside Living Cells	<u>Topic 5</u> Synthesis	<u>Topic 9</u> As fast as you can
<u>Topic 2</u> Divide & Develop	<u>Topic 6</u> In your element	<u>Topic 10</u> Roller coasters & relativity
<u>Topic 3</u> Energy Flow	<u>Topic 7</u> Chemical structures	<u>Topic 11</u> Putting radiation to use
<u>Topic 4</u> Interdependence	<u>Topic 8</u> How fast? How furious?	<u>Topic 12</u> Power of the atom

Additional Science (Sets 11.2, 11.3, 11.4,) –MOCK EXAMS

- 3 exams Biology, Chemistry & Physics
- Each exam will consist of two papers; 20 minute multiple choice and a 30 minute structured (written) paper.
- An overall science grade will be calculated from the 3 exams.
- A list of topics to revise is shown below

Biology	Chemistry	Physics
<u>Topic 1</u> Inside Living Cells	<u>Topic 5</u> Synthesis	<u>Topic 9</u> As fast as you can
<u>Topic 2</u> Divide & Develop	<u>Topic 6</u> In your element	<u>Topic 10</u> Roller coasters & relativity

BTEC Applied Science (11.5, 11.6, 11.7)

- **NO MOCK EXAM**

Deadlines for Science Coursework

- Triple science & GCSE Additional Science have **NO** coursework.
- BTEC applied Science Diploma Level 2 (sets 11.5, 11.6)
See teachers for deadlines
- BTEC applied Science Level 2 (11.7)
See teachers for deadlines

Key Dates

20 th November 2009	Re-sits for GCSE Science
Wk beginning 30 th November 2009	Mock exams
March 2010	Modular exams (multiple choice and structured paper for each science) – <i>Triple science only</i>
May / June 2010	<ul style="list-style-type: none"> • Additional Science exams (multiple choice and structured paper for each science) • Triple Science extension papers

Religious Education

GCSE entries 2009

Having revised our curriculum offer to ensure pupils achieve their full potential we are going to enter all of sets: 11CRE1, 11CRE2, 11CRE3, 11SRE1, and 11SRE2 for the full course GCSE Religious Studies with OCR exam board.

Materials can be found at www.OCR.ORG.UK and follow links:

Qualifications

By Subject

Religious Studies

GCSE Religious Studies A: World Religions

This link will take you to the Specification and details of what the pupils need to know.


The rest of the cohort – 11SRE3, 11SRE4 will be entered for an online ICT based exam which is a Level 2 Certificate in Understanding Equality and Diversity. It is accredited by the NCFE. Successful completion of this course after external moderators have visited will bring the equivalent of a 'B' grade at GCSE in points value.

Further information is available from www.visions2learn.com

Any queries please contact class teacher in the first instance or Miss Quinn

ICT

COURSEWORK DEADLINES

PME 11S2 & 11S4	Unit 1 > 18/12/09	Unit 23 > 18/02/10	
PME 11s7	Level 1 Unit 1 > 30.11.09	Level 1 Unit 2 > 18/12/09	
PME option gp (1 gcse)	Unit 6 > 18/12/09	Unit 22 > 31/03/10	
PME option gp (2 gcse)	Unit 4 > 18/02/10	Unit 2 > 31/03/10	
DWT 11Sc1 Units 1 & 23(should be complete)	Unit 4 complete by 18/12/09	Unit 22 complete by 1/03/10	
DWT 11Sc5	Unit 1 complete by 18/12/09	Unit 23 complete by 31/03/10	
LWS 11s3	Unit 1 > 31/10/09	Unit 4 > 14/02/10	
LWS 11s6	Unit 1 > 14/02/10	Unit 22 > 30/04/10	
LWS option gp	Unit 2 > 30/11/09	Unit 7 > 30/04/10	

Expressive Arts



Work that needs to be completed by set deadlines. Please be aware that there will be no extensions given on any unit. If the work is not completed by the set date, you will not be assessed for that unit, which will then mean you have failed that unit. There is not a lot more work to do if you ensure that you focus in lesson and get as much work done as you possibly can. The following is not unachievable! You are more than able to complete ALL this work by the set dates.

AUTUMN TERM - COMPLETING UNIT 1 ~ (To be completed by 12 February 2010)

- * Pupils to have completed their music videos, including all editing etc.
- * Pupils to have also completed their storyboards and the music video essay which you will be given to do once you have completed all editing.
- * Each student will receive a portfolio that will include three separate sections for each unit of study. You must decide which practitioners you are going to use to influence your studies. All 13 practitioners will be put into your portfolio along with an annotation as to why you used them and how they have influenced you and your work. You must know details about most of these practitioners as the examiner will ask you questions about them and why you used them.

TRENCH WAR PROJECT - UNIT 2 ~ (To be completed by 12 February 2010)

- * Students will read through Trench War stories with RMI. We will also look at paintings by a famous artists and author of that time.
- * Pupils to write a diary with a minimum of 10 entries as a soldier in WW1, stuck in the trenches. You must have a minimum of 4 lengthy entries.
- * Write a script to support a storyline from that period in history.
- * Choose a piece of music that could support their diary entries and script.
- * Find paintings, pictures from that time that you can include in your portfolio. You can also draw something.
- * Prepare and present a monologue to complete this 2nd unit.

After this is completed, you will need to start preparing for UNIT 3, which is when we have the external examiner in to assess your performance for your final grade. The above work needs to be finished by 12 February 2010. NO EXCUSES!

Pupils are retaining this course. Lots of mock examinations will take place in term 1 and 2, as well as completion of all coursework that RMI sets. Unit breakdown and coursework breakdown is set out above.

Drama

OUTSTANDING COURSE WORK FOR YEAR 11 DRAMA STUDENTS

1. Spider diagrams- brainstorming on the word loyalty and the themes from the text (Self delusion, Loyalty, Mistaken Identity and Corruption). These must be done in spider diagram format.
2. The Jerry Springer episode- Students to write a quarter of an A4 page on their performance of the Jerry Springer episode. What part they played? What their performances entailed? A brief evaluation.
3. Character Byte- a quarter of an A4 page on a character they have chosen from the text The Government Inspector. Must include the characters name, prop, costume, and quote that the character would use. This is all written, no drawings will be accepted.
4. Loyalty essay- 1 full A4 page which is the 'good copy' of their year 10 exam paper.
5. Monologue- half an A4 page based on a character from the text.
6. Drunken Speech- half an A4 page as a person who has gone to a school reunion 10 years after leaving school. They have not done very well for themselves but they're making out that they are multi millionaires.
7. Ideal Set Design- 1 A4 page as a set design for the Mayor's office. Money is no object and they can include whatever they like.
8. Developing a Section of Text for presentation- 2 A4 pages on the section of text for presentation that pupils were assessed on.
9. Evaluation of live performance- 'All About It' 4x A4 pages filling yellow section of portfolio.



Pupils have all essay plans that support this course work. If misplaced, can be obtained from RMI.

2ND PORTFOLIO ON 'HEROES' DUE 12 February 2010

CHECKLIST FOR UNIT 1- HEROES

Red section- Response

Page 1: Spider diagrams - Heroes (1/3 side), definition of the word hero (1/3 side), Superhero play evaluation (1/3 side).

Page 2: Emmot and mother at the dinner table (1/2 side), food delivery scene (1/2 side).

Page 3: The family before and after the plague struck (1 side)

Page 4: Meeting in the village hall with Mompesson (1 side)

Orange section- Development

Page 5: Short account of a real persons story who lived in the time the Berlin Wall came down. Can be accessed via google/Wikipedia. (1/2 side). How did you put your escape play together? This must be based on an escape from East to West Berlin. (1/2 side).

Page 6: Write up on the plan of escape scene. Some pupils may not have completed this but can make this up. Try and get as close to 1 full A4 page as possible. PLEASE MAKE UP IF YOU HAVEN'T COMPLETED THIS IN CLASS!

Page 7: Write a short script from the play you performed. (1 side)

Page 8: Costume design for that scene including annotations. (1 side)

Yellow section- Evaluation

Page 9: Evaluation of your escape play. What you did? What character you played? Etc (1 side)

Page 10: evaluation of another groups performance (1 side)

Page 11: Evaluation of your superhero play you did at the beginning of the unit. (1 side)

Page 12: Spider diagrams (1/2 side), how my ideas of what a hero is has changed from the beginning of the unit until now. (1/2 side)

This work must all be stuck into your portfolio and completed by 3pm, 12th February, 2010.

Music

ALL DUE BY 12th February 2010.



Paper 1: Performing (30%)

This paper enables students to develop their skills in performing. During the course, all students should be given the opportunity to take part in ensemble performances as well as performing solo.

All candidates must offer both Solo performing (one piece) and Ensemble performing (one piece). However, it is a requirement that **either the solo or ensemble performance must be from the same Area of Study as composition 1**. Candidates may perform their composition if they wish but this is no longer a requirement. Candidates must therefore plan their performing pieces and compositions carefully to ensure that this requirement is met.

Solo performing (15%)

Candidates will perform (ie play, sing or sequence) one solo of their own choice, with or without accompaniment, in any tradition or style. There is no minimum time limit, but the piece should be of sufficient length and difficulty to represent adequately the candidate's standard of performance. It should not exceed five minutes. Candidates offering music technology (sequencing **only** for this component) must use a minimum of **three** simultaneously sounding voices or timbres. Improvised performances will be accepted for this part of the unit only if a chord scheme or other stimulus is supplied, together with as much information as possible about the candidate's working methods.

A recording on tape, CD or minidisc must be submitted for moderation purposes.

Ensemble performing (15%)

For the purposes of this examination, an ensemble must be two or more people performing independent parts together. This may be with or without additional accompaniment and/or backing track.

For Ensemble performing there is also a free choice of style. However, it is a requirement that **either the solo or ensemble performance must be from the same Area of Study as composition 1**.

Candidates have the opportunity to perform on a second instrument. Performances with other players may take place in the classroom, in school music groups or outside the school (for example in local choirs, bands, orchestras or rock groups) but all **MUST** be in the presence of the teacher.

Paper 2: Composing (30%)

In this paper candidates develop musical ideas in the form of compositions or arrangements. They will compose and submit for assessment **two** pieces lasting at least **three minutes in total**. Both pieces must be composed according to a brief which may be set by the teacher or chosen by the candidate. The briefs must be based on two different Areas of Study. Edexcel will not provide sample briefs either in 2008 or subsequently but the sample briefs on this specification may be used. **Group compositions are not acceptable**. The compositions will be marked by the teacher examiner and made available for moderation as required.

Each submission should comprise:

a notated score (either hand-written or printed) or written commentary

and

a recording (on CD, minidisk or cassette tape)

and

a completed 'Understanding the brief' pro forma.

Composition 1 must be from the same Area of Study as either the Solo performance or Ensemble performance.

Arrangement(s) may be submitted in lieu of composition(s). An arrangement is the creation of a new version of a piece, usually for different resources. It may involve changes to any or all of the musical elements, but to score high marks an arrangement should be significantly different from the original and should consist of more than a simple transcription of notes for different instruments. The original stimulus for the arrangement must be included in each candidate's submission of coursework to permit accurate evaluation of the extent of effective change. **Candidates may offer either two compositions, two arrangements or one of each.**

Understanding the brief — for both compositions, candidates will also complete a pro forma, 'Understanding the brief', in which they appraise the brief and evaluate their composition. Through this piece of writing they make connections between their composition, its performance (where appropriate) and the Area of Study.

They will answer the following questions.

- What was your composition (or arrangement) brief?
- How does your composition (or arrangement) meet the brief?
- What improvements did you make to your work when you were composing or arranging it? This could include any adjustments you made after performances of it.

Composition 1 (15%)

Composition 1 must be written according to a brief **based on one of the Areas of Study or one of the topics from within the Area of Study**. It may be for one or more instruments and/or voices and/or may involve music technology. This composition must be from the same Area of Study as either the solo performing piece or the ensemble performing piece submitted for paper 1. Candidates may perform composition 1 to fulfil this criteria, but this is no longer compulsory

Composition 2 (15%)

Composition 2 must be written according to a brief **based on one of the topics from a different Area of Study**. It may be for one or more instruments and/or voices and/or may involve music technology.

The following information applies to composition 1 and composition 2.

Composition briefs

The briefs may be given by the teacher or chosen by the candidate with the teacher's guidance and approval. Every brief will relate to an Area of Study. It may be particular to one of the 'topic areas' provided below for each Area of Study or it may relate to the Area of Study heading. The brief must describe the stimulus for the composition and provide a clear indication of the candidate's intentions. It should include reference to some or all of the following: purpose, resources, effect, time and place. Every brief should fulfil the requirements for the task associated with the topic.

- Area of Study 1: Structure in Western classical music 1600–1899 — ground bass and variations, ternary form, rondo
- Area of Study 2: Changing directions in Western classical music from 1900 — expressionism and serialism, minimalism, experimental and electronic music
- Area of Study 3: Popular music in context — dance music 1985 — present day, songs from musicals, Britpop and its influences
- Area of Study 4: Indian raga, African music and fusions — Indian raga, African music and fusions

The score may be handwritten or computer generated. Candidates must submit their work in a format appropriate to the style. This may be a fully notated score, a lead sheet or chord chart, track sheets, tables or diagrams.

Candidates not enclosing a score must submit a written commentary. It should give a detailed description of the composition (or arrangement) and the performance details. It should refer to the musical content throughout. Commentaries must not be a padded out version of the brief — they should contain similar information to that in a score; details of performance indications and the composer's intentions. A good commentary containing sufficient information for an acceptable realisation of the composer's intentions is acceptable for any style of music.

Media Studies

Examination date: 10 December 2009 at 9.00am - 1 hour 45 mins
 Examination topic: Textual Analysis: Moving Image



By the end of term each student should have the following pieces of coursework.

1. Media Languages and Categories : Show how genre and narrative are established in the opening five minutes of two films (2nd draft)
2. Media Messages and Values : Discuss the representation of “Britishness” in three media texts (1st draft)
3. Practical Production: Magazine front cover, contents page, two page spread and evidence of original photography. Audience research and a 500 word evaluation also required. (1st draft)

Note: The Media room is available Tues-Fri for help, advice or to do coursework.

Art and Design

Student portfolio work should show evidence of Art history and Artists’ work and techniques. A wide range of materials should have been used and explored within project work. Student work should also show that major Art pieces have been developed in a personal way within each project.



Students are expected to submit sketchbook/diary work. These books should document personal drawings, paintings as well as record research work and reference sources. All book work and portfolio work should be annotated to show progress within the course.

The Art GCSE mock examination is on the 1st and 2nd December 2009. A folder of untimed preparation work will be set by the teacher when the exam topic is issued in November 2009. This work is a vital requirement set by AQA and will be assessed with the main examination piece.

<p><u>Unit 1</u></p> <p>Deadline for portfolio – March 2010</p>	<p><u>Controlled Assessment</u></p> <p>Project based work. (A portfolio is required displaying a wide range of styles and techniques.) Three major projects to be completed by deadline.</p>	<p>60% of final grade</p>
<p><u>Unit 2</u></p> <p>Examination paper issued – March/April 2010</p> <p>Examination - Spring/Summer Term 2010</p>	<p><u>Externally set task</u></p> <p>Examination paper. (Portfolio of research, observational drawings and exploration of materials and ideas for chosen topic.) Plus ten hour formal examination for main examination piece</p>	<p>40% of final grade</p>

History

Coursework

Assignment 1 - "Russia"

Two pieces should have been handed in by July 2009. There will be an opportunity to improve these pieces in January 2010.

Assignment 2 - "USA"

This will be completed in January / February 2010. Must be finished by the end of February 2010 half term.

Easter Revision Package

This will be distributed to all candidates for completion over the Easter holidays – can parents please ensure that their sons complete **ALL** tasks before they return to school for the Summer Term.

Any questions on this option for your son – please speak to Mr Fripps OR Mr Sullivan



Geography

Greenwich Coursework Deadline: 5 November 2009

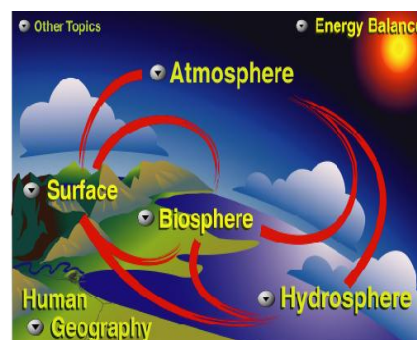
Bangladesh Coursework Deadline: 12 February 2010

Mock Exams

One paper: 1½ hrs

Covering the following Units of work:

- * People, Work and Development
- * Urban Patterns and Processes
- * Climate, People and the Environment



PE BTEC

The coursework deadlines for **ALL Units** in the B-TEC Diploma and Certificate is the 30th May 2009.

The deadline for **ALL JSLA Units** is the 2nd April 2009.

My tips for the candidates and parents, is to try and achieve the pass criteria for all the Units by April. After this, candidates can concentrate on achieving merits and distinctions for all units.

By Christmas the candidates will have a list of assignments they still need to pass by April.



Design & Technology

GCSE Product Design

Examination Board: OCR
Syllabus No: J901



Synopsis of Syllabus

This syllabus involves candidates in activities that develop innovation and flair when designing products.

The specification is a combination of all Design Technology subjects. Candidates will develop their skills through work in a range of designing, modelling, materials for production and media including the use of ICT.

Scheme of Assessment:

A*-G No Tiers

The GCSE is made up of 4 units, including coursework, a 6-hour controlled activity and two papers.

Unit B801 – *Developing and Applying Design Skills (30%)*

Unit B802 – *Designing and Making Innovation Challenge (20%)*

Unit B803 – *Making, Testing and Marketing Products (30%)*

Unit B804 – *Designing Influences (20%)*

B801 Deadline – Wk beginning 19/10/09

B802 Deadline – Wk beginning 14/12/09

Pupils can access the workshops on Tuesday, Wednesday or Thursday evenings between 2:30 and 3:30pm to work on this coursework.

B803 and B804 will take place in June 2010. Guidance will follow as to when revision classes will run.

Pupils already have coursework guidance sheets for all objectives.

Contact Miss Blaney or Mr Challis for further guidance.

Modern Languages

Option 1 – Modular (Deadlines)

<u>Module 1</u>	<u>Module 2</u>	<u>Module 3</u>	<u>Module 4</u>
27 January 2010	8 June 2010	13 January 2010	Listening – 10 June 2010 Reading – 14 June 2010 Written – 14 June 2010

Option 2 – Linear (Deadline)

Orals – 7 March – 15 May 2010
 Listening – 10 June 2010
 Reading – 14 June 2010



Same course content as Modular – coursework instead of writing paper.

ASDAN – Career Planning

This is a grade B GCSE equivalent course which is made up entirely of course work. There are 3 units to be completed (Self-Development, Career Management, Career Exploration).

Deadline - Thursday 17th December 2009:

ALL course work for Unit 1 Self-Development must be completed by this deadline.

Any outstanding Work experience files, which were due to be returned in September **MUST** also be completed and returned by this date.

Miss Estaugh and Mr Hills will be available on Tuesdays after school for those pupils needing additional support.

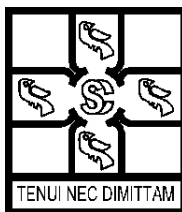
Deadline – Monday 22nd February 2010:

ALL course work for Unit 2 Career Management must be completed by this deadline.

Deadline – Monday 26th April 2010:

ALL course work for Unit 3 Career Exploration must be completed by this deadline, work will not be accepted after this date.





Year 11 Mock Exams

DATE	SUBJECT	START TIME	Duration
27/11/09	Product Design	09:00	All Day
1 & 2/12/09	Art	09:00	All Day (2 days)
3/12/09	Geography	09:00	1½ hrs
4/12/09	English	09:00	1¾ hrs
4/12/09	Maths	13:30	1¼ hrs
7/12/09	History	09:00	2 hrs
7/12/09	Religious Education	13:30	1 hr
8/12/09	Maths	09:00	1¼ hrs
8/12/09	Biology	11:00	1 hr
8/12/09	Chemistry	13:30	1 hr
9/12/09	English	09:00	1¾ hrs
9/12/09	Physics	13:30	1 hr
10/12/09	Media Studies	09:00	1¾ hrs
11/12/09	Religious Education	09:00	1½ hrs
11/12/09	History	13:30	1½ hrs
14/12/09	Music	09:00	1½ hrs
14/12/09	French	13:30	1 hr

- **All 9:00 Exams** - You must go to registration before you go to the examination room.
- **All 11:00 Exams** – Do not go to your Period 3 lesson, please go straight to your examination room after break.
- **All 13:30 Exams** – Do not go to your Period 5 lesson, please go straight to your examination room after lunch.
- **Do not take into the examination room any of the following:**
 - Mobile phones
 - iPods
 - Or any other electronic devices
- **Remember to bring your equipment:**
 - black pen
 - pencil
 - rubber
 - ruler
 - protractor
 - compass
 - scientific calculator
- **Do not – talk, communicate or disturb** other students once you have entered the examination room.
- **You will be unable to take your exam if you do not arrive with the correct equipment.**
- **If you are found with a mobile phone in the exam room you will be disqualified from the exam.**
- **Details of your examination room & seat number will be displayed on the notice board outside the Hall** – please remember to look **before** your exam is due to start.
- **If you are absent or late on the day of your exam** please phone the Attendance Officer/Front Office, advising them that you are due to take an exam. All missed exams will be re-scheduled.

Notes

Notes

Learning Providers and Employers

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Goldsmith's, University of London

Greenwich Community College

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