



PUTTING THE FUN BACK  
INTO LEARNING!

Dear Parents and Guardians,

Welcome to the Mathematics Department's March Curriculum Guide.

The Maths Department would like to share with you a very useful online resource for all grades:  
[www.corbettmaths.com](http://www.corbettmaths.com)

If you follow the links from the homepage, the website contains videos, practice questions (with answers) and for IGCSE students there is a further option for exam style questions.

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## Curriculum Content for March

Each grades' curriculum is aligned so that the progression from Grade 6 to Grade 10 is transparent, relevant and evident in all of the pupils' tasks.

### Grade 6:

- Convert between fractions decimals and percentages
- Compare different proportions using percentages
- Calculate percentages with and without a calculator
- Calculate percentage increase/decrease/reverse percentages
- Problem solving with percentages
- Write and solve one-step equations
- Solve multi-step equations (With two steps and brackets)
- Solve complex equations and (With unknowns on both sides)
- Form and solve equations
- Problem solve with equations

*Keywords: decimals, increase, decrease, terms, equation, expression, formula.*

### Grade 7:

- Draw accurate nets of 3D solids
- Draw diagrams to scale
- Construct perpendicular bisectors and angle bisectors
- Construct SAS/ASA and SSS triangles

- Draw diagrams following locus rules
- Use loci to solve problems

Keywords: *face, vertices, edges, compass, angle, bisect, locus.*

### **Grade 8:**

- Read and analyse information from different types of graphs
- Plot co-ordinates in all four quadrants
- Draw and Interpret distance time graphs
- Calculate the midpoint of line segments
- Calculate the equation of a straight line
- Use proportion to solve problems
- Use direct and inverse proportion
- Convert between metric and imperial units

Keywords: *coordinate, quadrant, axis, gradient, intercept, millimeter, centimeter, metre, kilometer, milliliter, litre.*

### **Grade 9:**

Topics taught for IGCSE have been set specifically for the students taking this course, students will complete a selection of the following depending upon their group.

The Higher and Foundation tier candidates are studying towards the following objectives:

- Calculate area of compound shapes including parallelogram/trapezium
- Calculate surface area and volume of different types of prisms and problem solve
- Understand apply and problem solve with circle rules
- Calculate the circumference/area of circles including semi/quarter circles
- Calculate sectors and arc lengths of circles including semi/quarter circles
- Calculate volume and surface area of cylinders/spheres and problem solve
- Calculate volume and surface area of cones and problem solve.
- Investigate  $y=mx+c$
- Understand the use for gradients and intercepts.
- To work with parallel and perpendicular lines.

Keywords: *parallelogram, trapezium, polygon, formula, prism, cross section, circumference, area, volume, sphere, cone, cylinder, gradient, intercept.*

### **Grade 10:**

As this Grade will be sitting IGCSE examinations at the end of this year topics will be taught in tandem to revision of last year's topics.

As most of the Grade 10 students have completed the curriculum, lessons will be focused on revisiting topics that have been highlighted from the mock examinations as needing further work as well as practising past papers in preparation for the IGCSE examinations.

**Please note, after school revision sessions will be continuing for the month of March.**

The topics each group will be focusing their revision on are listed below

## **Foundation**

- Solving equations and inequalities
- Rearranging formula
- Further statistics: stem and leaf, pie charts and analysis.
- Further algebra to include interpreting graphs of equations.
- Proportion and graphs, real life context.
- Exam preparation and exam techniques.

## **Higher**

- Use of vectors, concentrating and direction and magnitude.
- Circle theorems and their use including algebra.
- The use of surds and the ability to rationalize the denominator.
- Applying trigonometric functions and rules to real life questions.
- Exam preparation and exam techniques.

*Keywords: direction, magnitude, hypotenuse, denominator, rationalize, amount, frequency, cumulative, averages, range, area, variables, terms, proportion.*

## **How can you help?**

Make sure your child comes to school prepared.

Teach them to check and pack their own school bags so that they know exactly what is inside them.

Make sure their books and stationery are marked with their name.

Ensure their pencil case is always stocked with stationery which MUST include:

HB pencils, a rubber, a sharpener, a blue or black pen, a red pen, a 30cm-ruler, a Geometry Set, a scientific calculator, a glue stick, a whiteboard pen and eraser and scissors

Regularly check Bric and guide the children towards the completion of the task given as homework.

Do not complete homework for your children or we cannot assess their needs and progress accurately.

Encourage your child to speak to their teacher with regard to interactive websites for further study as well as electronic guides that can help their studies as appropriate to their grade.

Thank you for your ongoing support

The Maths Department