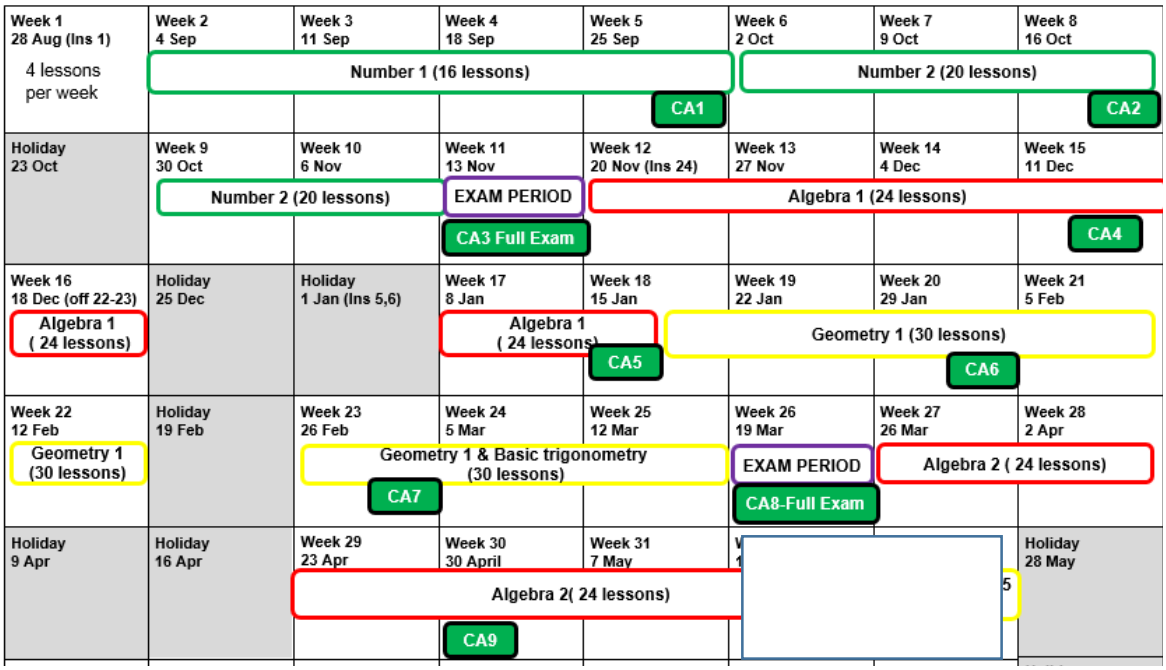
EOY Exam - Year 10 Set 3 Revision list



Two exam 50 mins each BOTH NON CALC – 1 will be Higher, the other Foundation – We will be using this to decide on the suitability for Higher/Foundation GCSE - Week beginning 11th June

Exam could be on any topic that we have covered this year up to algebra 2,

Higher topics Highlighted

Topics that could be tested

- **Number**
- Multiplying/Dividing whole numbers and decimals
- Properties of numbers - Factors, multiples and primes
- Highest common factor and lowest common multiple – HCF/LCM
- Fraction essentials – Ordering, equivalent, cancelling and mixed numbers
- Fractions – Add/Subtract/Multiply and divide
- Estimates
- Ratio – Splitting, equivalents, 3 way problems, ratio in context
- Direct and inverse proportion (not involving k)
- Conversion graphs
- Negative numbers – add, subtract, multiply and divide
- Fraction, decimal and percentage conversions
- Recurring decimals as fractions
- Increase and decrease percentages (non calc)
- Percentage profit and loss
- Using a calculator/BIDMAS
- Standard form – converting numbers and calculating in standard form add, subtract, multiply and divide (non calc)
- Substitution into formulas

- Conversions – Metric and imperial conversions
- Error intervals

- **Algebra 1**
- Writing expressions, simplifying
- Expanding and simplifying, expand 3 brackets
- Factorising (single brackets)
- Solving equations (including fractional)
- Nth term of linear/nth term quadratic sequences
- Geometric and arithmetic progressions
- Draw linear graphs and real life graphs
- Composite functions
- Naming straight line graphs
- Solve simultaneous equations from graphs and algebraically
- Factorising quadratics (and when a>1)

- **Geometry**
- Missing angles in triangles/quadrilaterals/line/point/parallel lines etc
- Shape properties of quadrilaterals and triangles
- Exterior and interior angles in polygons
- Congruent and similar shapes using proofs
- Loci and constructions
- Pythagoras
- Area of basic 2D shapes – rectangle, triangle, trapezium etc
- Area of composite shapes
- Area/circumference of circles (in terms of pi)
- Area of sectors (in terms of pi)
- Surface area of shapes – Cuboids, cylinders, prisms, cones, spheres
- Volume of shapes including - Cuboids, cylinders, prisms, cones, spheres
- Similarity – To find lengths areas and volumes

- **Algebra 2**
- Change the subject of a formula including (unknowns on both sides)
- Inequalities – including drawing on a number line, reading
- Solving quadratic and linear inequalities
- Shading regions using inequalities
- Direct and inverse proportion (easy numbers to substitute)
- Recognise and plot curved graphs
- Midpoints and length of lines

You may wish to use Mathswatch, Kerboodle, your exercise book and old assessment passports to help with revision

Any questions ask your maths teacher

Good luck