Remote Curriculum

Year 11 Maths

Plymstock School
Achieving Excellence through Curriculum and Culture

How it Works:

1. Find the column for your Maths set.
2. Find the correct week commencing row.
3. Find today`s day - There are up to 4 different lessons in each day – you won't run out of work.
4. Chose a lesson – hold ctrl and click the chosen link.
    a. If you don't recognise the work, it appears too difficult or it doesn't load:
        i. Try another task – look at the previous/next lesson or look at other days to find something familiar – You won't run out of work.
5. Some lessons have links to PowerPoints and other resources beneath the video and/or Starter Quiz (LSQ)
6. Complete any starter quizzes.
    a. Write your answer down
    b. Mark your answers and write down any corrections
7. Watch the videos and take notes.
8. Pause if/when instructed to do so to answer questions or respond.
9. Complete and go onto the next one.

Week Commencing	Week	Lesson	Sets 1 to 3 Higher **Hold ctrl and click**	Sets 4 and 5 Higher **Hold ctrl and click**	Sets 5 to 9 Foundation **Hold ctrl and click**
1	B	Monday			
		Tuesday			
		Wednesday	1. Add two surds 2. Subtract two surds	1. Plot a cumulative frequency diagram 2. Find quartiles and IQR from cumulative frequency	1. Solving two step equations 2. Solving equations with brackets
		Thursday	1. Add two surds with simplifying 2. Subtract two surds with simplifying	1. Find quartiles and IQR from cumulative frequency 2. Find quartiles from a list of data	1. Solving equations with unknowns on both sides 2. Substitute a positive into a formula
		Friday	1. Multiply two surds and simplify 2. Multiplying two surds with coefficients	1. Find quartiles from a list of data 2. Plot a boxplot and compare	1. Substitute a positive into a formula 2. Substitute a negative into a formula
2	A	Monday	1. Expanding single brackets with surds 2. Expanding double brackets with surds	1. Plot a boxplot and compare 2. Listing outcomes in a sample space diagram	1. Substitute a negative into a formula 2. Change the subject of a formula
		Tuesday	1. Expanding double brackets with surds 2. Dividing surds (part 1)	1. Listing outcomes in a sample space diagram 2. Calculate experimental probabilities	1. Change the subject of a formula 2. Changing the subject of a formula with squares and square roots

		Wednesday	1. Dividing surds (part 1) 2. Dividing surds (part 2)	1. Calculate experimental probabilities 2. Find probabilities form Venn diagrams	1. Changing the subject of a formula with squares and square roots 2. Plot simple quadratic equations
		Thursday	1. Expanding double brackets with surds 2. Rationalising surds (part 1)	1. Find probabilities form Venn diagrams 2. Find probabilities from frequency trees	1. Plot simple quadratic equations 2. Plot other quadratic equations
		Friday	1. Rationalising surds (part 1) 2. Rationalising surds (part 2)	1. Find probabilities from frequency trees 2. Tree diagram for independent events	1. Plot other quadratic equations 2. Solving quadratics graphically
8	B	Monday	1. Rationalising surds (part 2) 2. Adding two algebraic fractions	1. Tree diagram for independent events 2. Calculate probabilities of independent events	1. Solving quadratics graphically 2. Identify and interpret roots of quadratics
		Tuesday	1. Subtracting algebraic fractions 2. Solving algebraic fractions	1. Calculate probabilities of independent events 2. Draw tree diagrams for dependent events	1. Identify and interpret roots of quadratics 2. Distance time graphs
		Wednesday	1. Solving algebraic fractions 2. Solving algebraic fractions with adding or subtracting	1. Draw tree diagrams for dependent events 2. Plot simple quadratic equations	1. Distance time graphs 2. Calculate speed from a distance time graph
		Thursday	1. Solving algebraic fractions with adding or subtracting 2. Proof by counter example	1. Plot simple quadratic equations 2. Plot other quadratic equations	1. Calculate speed from a distance time graph 2. Velocity time graph
		Friday	1. Proof by counter example 2. Proof an expression will be a multiple	1. Plot other quadratic equations 2. Solving quadratic equations graphically	1. Velocity time graph 2. Acceleration from a velocity time graph
9	A	Monday	1. Proof an expression will be a multiple 2. Consecutive number proofs	1. Solving quadratic equations graphically 2. Identify and interpret roots, intercepts and turning points	1. Acceleration from a velocity time graph 2. Solve linear simultaneous equations
		Tuesday	1. Consecutive number proofs 2. Odd and even number proofs	1. Identify and interpret roots, intercepts and turning points 2. Drawing quadratic graph a>1	1. Solve linear simultaneous equations 2. Solve linear simultaneous equations where you have to multiply
		Wednesday	1. Rationalising 2. Translate and describe an object	1. Drawing quadratic graph a>1 2. Drawing cubic functions using tables	1. Solve linear simultaneous equations where you have to multiply 2. Solve linear simultaneous equations, multiplying both
		Thursday	1. Translate and describe a 2D vector 2. Represent a column vector as a diagram	1. Drawing cubic functions using tables 2. Plot a histogram	1. Solve linear simultaneous equations, multiplying both 2. Solve linear simultaneous equations, rearranging first
		Friday	1. Represent a column vector as a diagram	1. Plot a histogram 2. Find a frequency from a histogram	1. Solve linear simultaneous equations, rearranging first

			2. Write a column vector from a diagram		2.Know and understand Pythagoras' Theorem
3	B	Monday	1. Write a column vector from a diagram 2. Add two column vectors	1. Find a frequency from a histogram 2. Find a median from a histogram	1. Find Hypotenuse 2. Find shorter side
		Tuesday	1. Add two column vectors 2. Add and subtract two column vectors	1. Find a median from a histogram 2. Find probabilities from a histogram	1.Find shorter side 2.Finding missing length
		Wednesday	1. Add and subtract two column vectors 2. Multiply a vector by a scalar	1. Find probabilities from a histogram 2. Circle theorem, angle at the centre	1.Finding missing length 2.Showing a triangle is right angled
		Thursday	1. Multiply a vector by a scalar 2. Add and subtract two column vectors part 2	1.Circle theorem, angle at the centre 2.Circle theorem, angle in a semi-circle	1.Showing a triangle is right angled 2.Finding length of line segment
		Friday	1. Add and subtract two column vectors part 2 2. Find the length of a column vector	1.Circle theorem, angle in a semi-circle 2.Circle theorem, same segment	1.Finding length of line segment 2.Pythagoras with isosceles
4	A	Monday	1. Find the length of a column vector 2. Simple vector diagrams	1.Circle theorem, same segment 2.Circle theorem, cyclic quadrilateral	1.Pythagoras with isosceles 2.Pythagoras with two triangles
		Tuesday	1. Simple vector diagrams 2. Vector diagrams involving midpoints	1.Circle theorem, cyclic quadrilateral 2.Circle theorem, tangent and radius	1. Pythagoras with two triangles 2. Pythagoras Theorem
		Wednesday	1. Vector diagrams involving midpoints 2. Vector diagrams involving ratios	1. Circle theorem, tangent and radius 2. Circle theorem, alternate segment	1. Pythagoras Theorem 2. Pythagoras theorem 2
		Thursday	1. Vector diagrams involving ratios 2. Prove that two vectors are parallel	1. Circle theorem, alternate segment 2. Circle theorem, perpendicular	1. Angles in parallel lines 2. Angles in parallel lines part 2
		Friday	1. Prove that two vectors are parallel 2. Conditions of congruent triangles	1. Circle theorem, perpendicular 2. Mixed circle theorem problems	1. Angles in parallel lines part 2 2. Finding missing exterior angles
5	B	Monday			
		Tuesday	1. Conditions of congruent triangles 2. Prove triangles are congruent	1. Substitute a positive into a formula 2. Substitute a negative into a formula	1. Finding missing exterior angles 2. Solving problems involving exterior angles
		Wednesday	1. Proof by counter example	1. Substitute a negative into a formula	1. Solving problems involving exterior angles

			2. Proof an expression will be a multiple	2. Change the subject of a formula	2. Finding missing exterior angle of a polygon
		Thursday	1. Proof an expression will be a multiple 2. Consecutive number proofs	1. Change the subject of a formula 2. Changing the subject of a formula with squares and square roots	1. Finding missing exterior angle of a polygon 2. Finding the sum of the interior angles of a polygon
		Friday	1. Rationalising surds (part 1) 2. Rationalising surds (part 2)	1.Changing the subject of a formula with squares and square roots 2.Adding two algebraic fractions	1. Finding the sum of the interior angles of a polygon 2. Finding number of sides when given sum of interior angles
10	A	Monday	1. Consecutive number proofs 2. Odd and even number proofs	1. Adding two algebraic fractions 2. Subtracting algebraic fractions	1. Finding number of sides when given sum of interior angles 2. Finding missing angles when polygons are joined
		Tuesday	1. Find a particular value of f(x) 2. Solve equations using f(x)=	1. Subtracting algebraic fractions 2. Solving algebraic fractions	1. Finding missing angles when polygons are joined 2. Write the equations of a straight line
		Wednesday	1. Solve equations using f(x)= 2. Composite functions	1.Solving algebraic fractions 2.Solving algebraic fractions with adding or subtracting	1. Write the equations of a straight line 2. Writing the equation of a line parallel to another line
		Thursday	1. Composite functions 2. Find inverse functions	1. Solving algebraic fractions with adding or subtracting 2. Add two surds	1. Writing the equation of a line parallel to another line 2. Find the equation of a line through two points
		Friday	1. Find inverse functions 2. Graphs of cubic functions	1. Add two surds 2. Subtract two surds	1. Find the equation of a line through two points 2. Interpret gradient and intercept
11	B	Monday	1.Sketching graphs of cubics 2.Interpreting cubic graphs	1. Subtract two surds 2. Add two surds with simplifying	1. Interpret gradient and intercept 2. Translate and describe an object
		Tuesday	1.Interpreting cubic graphs 2.Graph of reciprocal function	1. Add two surds with simplifying 2. Multiply two surds and simplify	1. Translate and describe an object 2. Translate and describe a 2D vector
		Wednesday	1.Graph of reciprocal function 2.Knowing the trigonometric graphs	1. Multiply two surds and simplify 2. Multiplying two surds with coefficients	1. Translate and describe a 2D vector 2. Represent a column vector as a diagram
		Thursday	1.Knowing the trigonometric graphs 2.Graphs of exponential functions	1. Multiplying two surds with coefficients 2. Expanding single brackets with surds	1. Represent a column vector as a diagram 2. Write a column vector from a diagram

		Friday	1.Graphs of exponential functions 2.Transformations of graphs	1. Expanding single brackets with surds 2. Expanding double brackets with surds	1.Write a column vector from a diagram 2.Add two column vectors
6	A	Monday	1.Transformations of graphs 2.Reflections of graphs	1. Expanding double brackets with surds 2. Rationalising surds (part 1)	1. Add two column vectors 2. Add and subtract two column vectors 3.
		Tuesday	1.Reflections of graphs 2.Estimate the gradient of a curve	1. Rationalising surds (part 1) 2. Rationalising surds (part 2)	1. Add and subtract two column vectors 2. Multiply a vector by a scalar
		Wednesday	1. Estimate the gradient of a curve 2. Estimate and interpret the gradient of a curve	1.Rationalising surds (part 2) 2.Solve linear simultaneous equations	1.Multiply a vector by a scalar 2.Add and subtract two column vectors part 2
		Thursday	1. Estimate and interpret the gradient of a curve 2. Find the area under a straight line	1.Solve linear simultaneous equations 2.Solve linear simultaneous equations where you have to multiply	1. Add and subtract two column vectors part 2 2. Use and apply the speed formula
		Friday	1. Find the area under a straight line 2. Estimate the area under a curve	1. Solve linear simultaneous equations where you have to multiply 2. Solve linear simultaneous equations, multiplying both	1. Use and apply the speed formula 2. Use and apply the density formula
7	B	Monday	1.Estimate the area under a curve 2.Simple direct proportion	1. Solve linear simultaneous equations, multiplying both 2. Solve linear simultaneous equations, rearranging first	1. Use and apply the density formula 2. Use and apply the pressure formula
		Tuesday	1.Simple direct proportion 2.Other direct proportion relationships	1. Solve linear simultaneous equations, rearranging first 2. Translate and describe an object	1. Use and apply the pressure formula 2. Solve simple kinematic problems
		Wednesday	1.Other direct proportion relationships 2.Inverse proportion	1. Translate and describe an object 2. Represent a column vector as a diagram	1. Solve simple kinematic problems 2. Adding two numbers in standard form
		Thursday	1. Inverse proportion 2. Further proportionality	1. Represent a column vector as a diagram 2. Write a column vector from a diagram	1. Adding two numbers in standard form 2. Subtracting two numbers in standard form

		Friday	1. Further proportionality 2. Draw and recognise circle graphs	1. Write a column vector from a diagram 2. Add two column vectors	1. Subtracting two numbers in standard form 2. Multiplying two numbers in standard form
12	A	Monday	1. Draw and recognise circle graphs 2. Whether a point lies in, on or outside a circle	1. Add two column vectors 2. Add and subtract two column vectors	1. Multiplying two numbers in standard form 2. Dividing two numbers in standard form
		Tuesday	1. Whether a point lies in, on or outside a circle 2. Intersection of lines and circles	1. Add and subtract two column vectors 2. Multiply a vector by a scalar	1. Dividing two numbers in standard form 2. Ratio and fractions
		Wednesday	1. Intersection of lines and circles 2. Finding the equation of a tangent to a circle	1. Multiply a vector by a scalar 2. Add and subtract two column vectors part 2	1. Ratio and fractions 2. Compare the cost of two items
		Thursday	1. Finding the equation of a tangent to a circle 2. Further proportionality	1. Add and subtract two column vectors part 2 2. Find the length of a column vector	1. Compare the cost of two items 2. Proportion problems
		Friday			