## Remote Curriculum

Plymstock School
Achieving Excellence through Curriculum and Culture

## Year 11 Maths

## 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 <br> 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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1/1/24 | B | Monday |  |  |  |
|  |  | Tuesday |  |  |  |
|  |  | Wednesday | 1. Add two surds <br> 2. Subtract two surds | 1. Plot a cumulative frequency diagram <br> 2. Find quartiles and IQR from cumulative frequency | 1. Solving two step equations <br> 2. Solving equations with brackets |
|  |  | Thursday | 1. Add two surds with simplifying <br> 2. Subtract two surds with simplifying | 1. Find quartiles and IQR from cumulative frequency <br> 2. Find quartiles from a list of data | 1. Solving equations with unknowns on both sides <br> 2. Substitute a positive into a formula |
|  |  | Friday | 1. Multiply two surds and simplify <br> 2. Multiplying two surds with coefficients | 1. Find quartiles from a list of data <br> 2. Plot a boxplot and compare | 1. Substitute a positive into a formula <br> 2. Substitute a negative into a formula |
| 8/01/24 | A | Monday | 1. Expanding single brackets with surds <br> 2. Expanding double brackets with surds | 1. Plot a boxplot and compare <br> 2. Listing outcomes in a sample space diagram | 1. Substitute a negative into a formula <br> 2. Change the subject of a formula |
|  |  | Tuesday | 1. Expanding double brackets with surds <br> 2. Dividing surds (part 1) | 1. Listing outcomes in a sample space diagram <br> 2. Calculate experimental probabilities | 1. Change the subject of a formula <br> 2. Changing the subject of a formula with squares and square roots |


|  |  | Wednesday | 1. Dividing surds (part 1) <br> 2. Dividing surds (part 2) | 1.Calculate experimental probabilities <br> 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 <br> 2. Rationalising surds (part 1) | 1.Find probabilities form Venn diagrams 2. Find probabilities from frequency trees | 1. Plot simple quadratic equations <br> 2. Plot other quadratic equations |
|  |  | Friday | 1. Rationalising surds (part 1) <br> 2. Rationalising surds (part 2) | 1. Find probabilities from frequency trees <br> 2. Tree diagram for independent events | 1. Plot other quadratic equations 2. Solving quadratics graphically |
| 15/01/24 | B | Monday | 1. Rationalising surds (part 2) <br> 2. Adding two algebraic fractions | 1. Tree diagram for independent events <br> 2. Calculate probabilities of independent events | 1. Solving quadratics graphically <br> 2. Identify and interpret roots of quadratics |
|  |  | Tuesday | 1. Subtracting algebraic fractions <br> 2. Solving algebraic fractions | 1. Calculate probabilities of independent events <br> 2.Draw tree diagrams for dependent events | 1.Identify and interpret roots of quadratics <br> 2.Distance time graphs |
|  |  | Wednesday | 1. Solving algebraic fractions <br> 2. Solving algebraic fractions with adding or subtracting | 1.Draw tree diagrams for dependent events <br> 2. Plot simple quadratic equations | 1. Distance time graphs <br> 2. Calculate speed from a distance time graph |
|  |  | Thursday | 1. Solving algebraic fractions with adding or subtracting <br> 2. Proof by counter example | 1. Plot simple quadratic equations <br> 2. Plot other quadratic equations | 1.Calculate speed from a distance time graph <br> 2. Velocity time graph |
|  |  | Friday | 1. Proof by counter example <br> 2. Proof an expression will be a multiple | 1. Plot other quadratic equations <br> 2. Solving quadratic equations graphically | 1. Velocity time graph <br> 2. Acceleration from a velocity time graph |
| 22/01/24 | A | Monday | 1. Proof an expression will be a multiple <br> 2. Consecutive number proofs | 1. Solving quadratic equations graphically <br> 2.Identify and interpret roots, intercepts and turning points | 1. Acceleration from a velocity time graph <br> 2. Solve linear simultaneous equations |
|  |  | Tuesday | 1. Consecutive number proofs <br> 2. Odd and even number proofs | 1. Identify and interpret roots, intercepts and turning points <br> 2. Drawing quadratic graph $a>1$ | 1. Solve linear simultaneous equations <br> 2. Solve linear simultaneous equations where you have to multiply |
|  |  | Wednesday | 1. Rationalising <br> 2. Translate and describe an object | 1. Drawing quadratic graph $a>1$ <br> 2. Drawing cubic functions using tables | 1. Solve linear simultaneous equations where you have to multiply <br> 2. Solve linear simultaneous equations, multiplying both |
|  |  | Thursday | 1. Translate and describe a 2D vector <br> 2. Represent a column vector as a diagram | 1. Drawing cubic functions using tables <br> 2. Plot a histogram | 1. Solve linear simultaneous equations, multiplying both <br> 2. Solve linear simultaneous equations, rearranging firs |
|  |  | Friday | 1. Represent a column vector as a diagram | 1. Plot a histogram <br> 2. Find a frequency from a histogram | 1. Solve linear simultaneous equations, rearranging first |



|  |  |  | 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 <br> 2. Consecutive number proofs | 1. Change the subject of a formula <br> 2. Changing the subject of a formula with squares and square roots | 1. Finding missing exterior angle of a polygon <br> 2. Finding the sum of the interior angles of a polygon |
|  |  | Friday | 1. Rationalising surds (part 1) <br> 2. Rationalising surds (part 2) | 1.Changing the subject of a formula with squares and square roots <br> 2. Adding two algebraic fractions | 1. Finding the sum of the interior angles of a polygon <br> 2. Finding number of sides when given sum of interior angles |
| 26/02/24 | A | Monday | 1. Consecutive number proofs <br> 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 <br> 2. $\frac{\text { Finding missing angles when }}{\text { polygons are ioined }}$ |
|  |  | Tuesday | 1. Find a particular value of $f(x)$ <br> 2. Solve equations using $f(x)=$ | 1. Subtracting algebraic fractions <br> 2. Solving algebraic fractions | 1. Finding missing angles when polygons are joined <br> 2. Write the equations of a straight line |
|  |  | Wednesday | 1. Solve equations using $f(x)=$ <br> 2. Composite functions | 1. Solving algebraic fractions <br> 2. Solving algebraic fractions with adding or subtracting | 1. Write the equations of a straight line <br> 2. Writing the equation of a line parallel to another line |
|  |  | Thursday | 1. Composite functions <br> 2. Find inverse functions | 1. Solving algebraic fractions with adding or subtracting <br> 2. Add two surds | 1. Writing the equation of a line parallel to another line <br> 2. Find the equation of a line through two points |
|  |  | Friday | 1. Find inverse functions <br> 2. Graphs of cubic functions | 1. Add two surds <br> 2. Subtract two surds | 1. Find the equation of a line through two points <br> 2. Interpret gradient and intercept |
| 4/03/24 | B | Monday | 1. Sketching graphs of cubics <br> 2. Interpreting cubic graphs | 1. Subtract two surds <br> 2. Add two surds with simplifying | 1. Interpret gradient and intercept <br> 2. Translate and describe an object |
|  |  | Tuesday | 1. Interpreting cubic graphs 2. Graph of reciprocal function | 1. Add two surds with simplifying <br> 2. Multiply two surds and simplify | 1. Translate and describe an object <br> 2. Translate and describe a 2D vector |
|  |  | Wednesday | 1. Graph of reciprocal function <br> 2. Knowing the trigonometric graphs | 1. Multiply two surds and simplify <br> 2. Multiplying two surds with coefficients | 1. Translate and describe a 2D vector <br> 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 <br> 2. Expanding single brackets with surds | 1. Represent a column vector as a diagram <br> 2. Write a column vector from a diagram |


|  |  | Friday | 1. Graphs of exponential functions <br> 2. Transformations of graphs | 1. Expanding single brackets with surds <br> 2. Expanding double brackets with surds | 1.Write a column vector from a diagram <br> 2. Add two column vectors |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11/03/24 | A | Monday | 1.Transformations of graphs 2. Reflections of graphs | 1. Expanding double brackets with surds <br> 2. Rationalising surds (part 1) | 1. Add two column vectors <br> 2. Add and subtract two column vectors <br> 3. |
|  |  | Tuesday | 1. Reflections of graphs <br> 2. Estimate the gradient of a curve | 1. Rationalising surds (part 1) <br> 2. Rationalising surds (part 2) | 1. Add and subtract two column vectors <br> 2. Multiply a vector by a scalar |
|  |  | Wednesday | 1. Estimate the gradient of a curve <br> 2. Estimate and interpret the gradient of a curve | 1. Rationalising surds (part 2) <br> 2. Solve linear simultaneous equations | 1.Multiply a vector by a scalar <br> 2. Add and subtract two column vectors part 2 |
|  |  | Thursday | 1. Estimate and interpret the gradient of a curve <br> 2. Find the area under a straight line | 1.Solve linear simultaneous equations <br> 2. Solve linear simultaneous equations where you have to multiply | 1. Add and subtract two column vectors part 2 <br> 2. Use and apply the speed formula |
|  |  | Friday | 1. Find the area under a straight line <br> 2. Estimate the area under a curve | 1. Solve linear simultaneous equations where you have to multiply <br> 2. Solve linear simultaneous equations, multiplying both | 1. Use and apply the speed formula <br> 2. Use and apply the density formula |
| 18/03/24 | B | Monday | 1. Estimate the area under a curve <br> 2. Simple direct proportion | 1. Solve linear simultaneous equations, multiplying both <br> 2. Solve linear simultaneous equations, rearranging firs | 1. Use and apply the density formula <br> 2. Use and apply the pressure formula |
|  |  | Tuesday | 1.Simple direct proportion <br> 2. Other direct proportion relationships | 1. Solve linear simultaneous equations, rearranging first <br> 2. $\frac{\text { Translate and describe an }}{\text { object }}$ | 1. Use and apply the pressure formula <br> 2. Solve simple kinematic problems |
|  |  | Wednesday | 1.Other direct proportion relationships 2.Inverse proportion | 1. Translate and describe an object <br> 2. Represent a column vector as a diagram | 1. Solve simple kinematic problems <br> 2. $\frac{\text { Adding two numbers in }}{\text { standard form }}$ |
|  |  | Thursday | 1. Inverse proportion <br> 2. Further proportionality | 1. Represent a column vector as a diagram <br> 2. Write a column vector from a diagram | 1. Adding two numbers in standard form <br> 2. Subtracting two numbers in standard form |


|  |  | Friday | 1. Further proportionality <br> 2. Draw and recognise circle graphs | 1. Write a column vector from a diagram <br> 2. Add two column vectors | 1. Subtracting two numbers in standard form <br> 2. Multiplying two numbers in standard form |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 25/03/24 | A | Monday | 1. Draw and recognise circle graphs <br> 2. Whether a point lies in, on or outside a circle | 1. Add two column vectors <br> 2. Add and subtract two column vectors | 1. Multiplying two numbers in standard form <br> 2. Dividing two numbers in standard form |
|  |  | Tuesday | 1. Whether a point lies in, on or outside a circle <br> 2. Intersection of lines and circles | 1. Add and subtract two column vectors <br> 2. Multiply a vector by a scalar | 1. Dividing two numbers in standard form <br> 2. Ratio and fractions |
|  |  | Wednesday | 1. Intersection of lines and circles <br> 2. Finding the equation of a tangent to a circle | 1. Multiply a vector by a scalar <br> 2. Add and subtract two column vectors part 2 | 1. Ratio and fractions <br> 2. Compare the cost of two items |
|  |  | Thursday | 1. Finding the equation of a tangent to a circle <br> 2. Further proportionality | 1. Add and subtract two column vectors part 2 <br> 2. Find the length of a column vector | 1. Compare the cost of two items <br> 2. Proportion problems |
|  |  | Friday |  |  |  |

