

Edexcel GCSE Maths Linear Exam Topic List - FOUNDATION

NUMBER	
Add, subtract, multiply, divide	<input type="checkbox"/> Write numbers in words <input type="checkbox"/> Write numbers from words <input type="checkbox"/> Add, subtract, multiply, divide whole numbers, integers, negatives, fractions, and decimals and numbers in index form <input type="checkbox"/> Multiply and divide any number between 0 and 1. <input type="checkbox"/> Divide decimals up to 2 decimal places <input type="checkbox"/> Solve a problem involving division by a decimal (up to two decimal places) <input type="checkbox"/> Know the fraction-to-decimal conversion of familiar fractions
Order numbers	<input type="checkbox"/> Put in order of size, integers, decimals and fractions <input type="checkbox"/> Understand and use positive and negative numbers on a number line
Factors, multiples and primes	Understand the terms; <ul style="list-style-type: none"> <input type="checkbox"/> Odd and even <input type="checkbox"/> Factor <input type="checkbox"/> Multiple <input type="checkbox"/> Common factor <input type="checkbox"/> Highest common factor <input type="checkbox"/> Lowest (least) common multiple <input type="checkbox"/> Prime number <input type="checkbox"/> Be able to identify factors, multiples and primes from a list of numbers <input type="checkbox"/> Express a number as a product of prime factors (factor tree) <input type="checkbox"/> Find common multiples or common factors of two numbers <input type="checkbox"/> Find the highest common factor (HCF) or the lowest common multiple (LCM) of two numbers.

Squares, square roots, cubes and cube roots	<input type="checkbox"/> Know all the square numbers from $2^2 = 4$ up to $15^2 = 225$ <input type="checkbox"/> Know all the cube numbers from $2^3 = 8$ up to $5^3 = 125$ and also $10^3 = 1000$ <input type="checkbox"/> Find squares and cubes <input type="checkbox"/> Find square roots and cube roots
Index notation	<input type="checkbox"/> Use index notation for squares and cubes, eg. 5^3 <input type="checkbox"/> Use index notation for powers of 10, eg. 10^6 <input type="checkbox"/> Understand indices in calculations
Index laws	<input type="checkbox"/> Multiply and divide by adding or subtracting indices <input type="checkbox"/> Calculate using index laws when indices are fractions or negative
Equivalent fractions and adding and subtracting fractions	<input type="checkbox"/> Find equivalent fractions <input type="checkbox"/> Simplify a fraction to its simplest form <input type="checkbox"/> Convert between improper fractions and mixed numbers <input type="checkbox"/> Add and subtract fractions
Decimals, including recurring decimals	<input type="checkbox"/> Know fraction to decimal conversions for simple fractions <input type="checkbox"/> Convert between fractions and decimals <input type="checkbox"/> Understand that all recurring decimals are exact fractions, and that some exact fractions are recurring decimals <input type="checkbox"/> Convert between recurring decimals and fractions
Percentages	<input type="checkbox"/> Understand percentages <input type="checkbox"/> Convert between fractions, decimals and percentages
Using fractions, decimals and percentages	<input type="checkbox"/> Find a fraction of a quantity <input type="checkbox"/> Find a percentage of a quantity <input type="checkbox"/> Use decimals to find quantities <input type="checkbox"/> Use a multiplier to increase or decrease a quantity (eg. use $\times 1.05$ to increase by 5%, or 0.88 to decrease by 12%)

Percentages	<input type="checkbox"/> Use percentages to calculate and use <ul style="list-style-type: none"> ○ VAT ○ Simple interest ○ Income tax ○ Prices after an increase or decrease ○ Percentage profit and loss ○ Reverse percentages ○ Compound interest
Fractions, decimals and percentages	<input type="checkbox"/> Find one number as a fraction of another number <input type="checkbox"/> Find one number as a percentage of another number <input type="checkbox"/> Multiply using percentages or decimals as operators
Ratio	<input type="checkbox"/> Write a ratio in its simplest form <input type="checkbox"/> Divide a quantity in a given ratio <input type="checkbox"/> Solve problems using ratios <input type="checkbox"/> Relate ratio to linear functions
Proportion	<input type="checkbox"/> Use direct and inverse proportion
Number operations and the relationships between them, including order of operations and inverse operations	<input type="checkbox"/> Understand multiplying and dividing, and that one is the inverse of the other <input type="checkbox"/> Use inverse operations <input type="checkbox"/> Understand the use of brackets in calculations <input type="checkbox"/> Understand the hierarchy of operations (BIDMAS) <input type="checkbox"/> Solve word problems <input type="checkbox"/> Understand and find reciprocals <input type="checkbox"/> Understand and use 1 over a number is the inverse of multiplying by that number
Rounding and approximation	<input type="checkbox"/> Round to the nearest integer (whole number) <input type="checkbox"/> Round numbers to any given power of 10 <input type="checkbox"/> Round to a number of decimal places <input type="checkbox"/> Round to a number of significant figures <input type="checkbox"/> Estimate the answer to a calculation by using rounding

Use a calculator effectively	<ul style="list-style-type: none"><input type="checkbox"/> Simple and complex calculations, including involving time or money<input type="checkbox"/> Use the following functions<ul style="list-style-type: none"><input type="checkbox"/> $+$, $-$, \times, \div<input type="checkbox"/> x^2 and \sqrt{x}<input type="checkbox"/> x^3 and $\sqrt[3]{x}$<input type="checkbox"/> memory functions<input type="checkbox"/> brackets<input type="checkbox"/> Understand that rounding too early can causes inaccuracy
Standard form	<ul style="list-style-type: none"><input type="checkbox"/> Convert numbers to and from standard form

ALGEBRA	
Algebraic notation	<input type="checkbox"/> Understand notation and symbols used in algebra <input type="checkbox"/> Understand the difference between "expression", "formula" and "equation" <input type="checkbox"/> Be able to select an expression, formula or equation from a list <input type="checkbox"/> Be able to write an expression to solve a problem
Manipulate algebraic expressions	<input type="checkbox"/> Simplify by collecting like terms <input type="checkbox"/> Multiply out a single bracket <input type="checkbox"/> Multiply out double brackets <input type="checkbox"/> Factorise a single bracket by taking out a common factor <input type="checkbox"/> Factorise a quadratic expression into double brackets <input type="checkbox"/> Write expressions involving squares or cubes <input type="checkbox"/> Use algebraic expressions to solve problems <input type="checkbox"/> Use index laws to simplify algebraic expressions including negative powers
Solve linear equations	<input type="checkbox"/> Set up simple equations for a problem <input type="checkbox"/> Rearrange simple equations <input type="checkbox"/> Solve simple equations <input type="checkbox"/> Solve equations with the unknown on either side <input type="checkbox"/> Solve equations with the unknown on both sides <input type="checkbox"/> Solve equations that include brackets <input type="checkbox"/> Solve equations with negatives, including negative answers <input type="checkbox"/> Solve equations involving fractions
Solving equations	<input type="checkbox"/> Solve quadratic equations by factorising
Simultaneous equations	<input type="checkbox"/> Solve linear simultaneous equations
Using formulae	<input type="checkbox"/> Derive formulae <input type="checkbox"/> Substitute numbers (positive or negative) into a formula, including formulae with x^2 or x^3 terms <input type="checkbox"/> Change the subject of a simple formula

Solve linear inequalities	<input type="checkbox"/> Use inequality signs correctly ($<$, $>$, \leq , \geq) <input type="checkbox"/> Solve a simple linear inequality with one variable <input type="checkbox"/> Show the solution to a linear inequality on a number line
Error intervals	<input type="checkbox"/> Use inequality notation to identify error intervals
Sequences	<input type="checkbox"/> Understand odd and even numbers <input type="checkbox"/> Generate number sequences from diagrams <input type="checkbox"/> Describe the rule for a number sequence (eg. subtract 3) <input type="checkbox"/> Find a particular term in a sequence, or explain why a particular number is not in a sequence <input type="checkbox"/> Recognise Fibonacci, geometric and quadratic sequences and be able to continue them
Nth term of a sequence	<input type="checkbox"/> Find the nth term expression for a sequence <input type="checkbox"/> Use the nth term expression to find a particular number in the sequence (eg. the 20th term)
Coordinates	<input type="checkbox"/> Use axes and coordinates, both positive and negative <input type="checkbox"/> Understand and plot points in four quadrants <input type="checkbox"/> Find the coordinates of a point <input type="checkbox"/> Plot a point given the coordinates <input type="checkbox"/> Find the coordinates of the mid-point of a line <input type="checkbox"/> Calculate the length of a line using coordinates
Graphs	<input type="checkbox"/> Draw, label and add a scale to axes <input type="checkbox"/> Understand that an equation of the form $y = mx + c$ corresponds to a straight line graph <input type="checkbox"/> Plot straight line graphs from their equations <input type="checkbox"/> Plot and draw a graph of an equation in the form $y = mx + c$ <input type="checkbox"/> Find the gradient of a straight line graph
Graphs from quadratic and other functions	<input type="checkbox"/> Generate points for quadratic functions <input type="checkbox"/> Plot graphs of quadratic functions <input type="checkbox"/> Generate points for cubic and reciprocal functions <input type="checkbox"/> Plot graphs of cubic and reciprocal functions <input type="checkbox"/> Identify roots, turning points and lines of symmetry of quadratic graphs

Real life graphs	<ul style="list-style-type: none"><input type="checkbox"/> Plot a linear graph<input type="checkbox"/> Use real life graphs, for example, for fuel bills, telephone tariffs, currency conversion<input type="checkbox"/> Use distance-time graphs<input type="checkbox"/> Interpret information on linear (straight line) and non-linear (curved) graphs<input type="checkbox"/> Identify the gradient of a linear graph and interpret it in terms of rate of change
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GEOMETRY	
Angles on intersecting lines, in triangles and quadrilaterals, and on parallel lines	<ul style="list-style-type: none"><input type="checkbox"/> Understand acute, obtuse, reflex and right angles<input type="checkbox"/> Angles round a point add up to 360°<input type="checkbox"/> Angles on a straight line add up to 180°<input type="checkbox"/> Know the properties of scalene, isosceles, equilateral and right-angled triangles<input type="checkbox"/> Angles in a triangle add up to 180°<input type="checkbox"/> Vertically opposite angles are equal<input type="checkbox"/> Be able to mark parallel lines on a diagram<input type="checkbox"/> Be able to identify perpendicular lines on a diagram<input type="checkbox"/> Be able to use letters to name lines, eg. XY or AB<input type="checkbox"/> Be able to use letters to name angles, eg. angle ACD<input type="checkbox"/> Corresponding angles (in parallel lines)<input type="checkbox"/> Alternate angles (in parallel lines)<input type="checkbox"/> Calculate angles and give reasons<input type="checkbox"/> Use the angles a quadrilateral add up to 360° to find missing angles<input type="checkbox"/> Use the angles in a triangle add up to 180° to find missing angles<input type="checkbox"/> Understand that the exterior angle of a triangle of a triangle is equal to the sum of the interior angles at the other two vertices

Interior and exterior angles of polygons	<ul style="list-style-type: none"> <input type="checkbox"/> Calculate the sum of interior angles in a polygon <input type="checkbox"/> Understand the polygon names; pentagon, hexagon, heptagon, octagon and decagon <input type="checkbox"/> Use the angle sum of an irregular polygon in a problem <input type="checkbox"/> Calculate and use the sum of the interior angles of a regular polygon <input type="checkbox"/> Understand and use fact that the exterior angles of a polygon add up to 360° <input type="checkbox"/> Understand and use the fact that an interior and exterior angle at one vertex of a polygon add up to 180° <input type="checkbox"/> Be able to calculate the exterior angle of a regular polygon <input type="checkbox"/> Be able to calculate the interior angle of a regular polygon <input type="checkbox"/> Be able to deduce the number of sides of a regular polygon, given one of its angles <input type="checkbox"/> Understand tessellations of regular and irregular polygons
Properties of quadrilaterals	<p>Remember the definitions and properties (including equal sides, equal angles, parallel sides, lines of symmetry, etc.) of special quadrilaterals, ie.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Square <input type="checkbox"/> Rectangle <input type="checkbox"/> Parallelogram <input type="checkbox"/> Trapezium <input type="checkbox"/> Rhombus <input type="checkbox"/> Kite <ul style="list-style-type: none"> <input type="checkbox"/> Be able to sketch each type of quadrilateral <input type="checkbox"/> List or classify quadrilaterals by their properties
Reflection and rotation symmetry in 2D shapes	<ul style="list-style-type: none"> <input type="checkbox"/> Recognise reflection symmetry and be able to draw lines of symmetry on a shape <input type="checkbox"/> Recognise rotation symmetry of 2D shapes <input type="checkbox"/> Find the order of rotational symmetry of a shape <input type="checkbox"/> Complete a diagram given the line or lines of symmetry <input type="checkbox"/> State a line of symmetry on a grid as a simple algebraic equation, eg. $x = 2$ or $y = x$ <input type="checkbox"/> Complete diagrams with a given order of rotational symmetry

Congruence and similarity	<input type="checkbox"/> Understand what congruent means <input type="checkbox"/> Identify shapes that are congruent <input type="checkbox"/> Understand what similar means <input type="checkbox"/> Understand that two shapes that are similar have the same angles
Pythagoras' theorem	<input type="checkbox"/> Understand and use Pythagoras' theorem in triangles
Trigonometry	<input type="checkbox"/> Use the trigonometric ratios to find missing sides and angles in right angled triangles <input type="checkbox"/> Know the exact values of Sin and Cos 30, 45, 60 and 90 and Tan 30, 45, 60
Parts of a circle	<input type="checkbox"/> Draw a circle with compasses, given either the diameter or radius Understand and remember parts of a circle: <ul style="list-style-type: none"> <input type="checkbox"/> Centre <input type="checkbox"/> Radius <input type="checkbox"/> Diameter <input type="checkbox"/> Chord <input type="checkbox"/> Circumference <input type="checkbox"/> Tangent <input type="checkbox"/> Arc <input type="checkbox"/> Sector <input type="checkbox"/> Segment

Using 2D diagrams to represent 3D shapes

Understand the words face, edge and vertex

Identify or name these solid shapes:

Cube

Cuboid

Cylinder

Prism

Pyramid

Sphere

Cone

Draw nets and show how they fold to make a 3D solid shape

Understand and draw front and side elevations and plans of simple solids

Draw a sketch of a 3D solid shape given the front and side elevations and plan of the solid

Transformations

Rotations

- Rotate a 2D shape around the origin or other point
- Understand that a rotation is defined by an angle, direction and a centre of rotation
- Find the centre of rotation
- Understand that a rotation produces a shape congruent to the original

Reflections

- Understand and describe reflections
- Identify the mirror line for a reflection, and find its equation
- Understand that a reflection produces a shape congruent to the original

Translations

- Understand and use translations
- Understand that translations are defined by a distance and a direction using a vector
- Translate a shape by a given vector
- Understand that a translation produces a shape congruent to the original

Enlargements

- Understand that an enlargement is defined by a centre of enlargement and a scale factor
- Understand that angles remain the same in an enlargement
- Enlarge a shape by a scale factor, using $(0, 0)$ or any other point as the centre
- Enlarge a shape by a fractional scale factor given a centre
- Find the centre of a given enlargement
- Identify the scale factor of a given enlargement

General transformations

- Describe a transformation

Straight edge and compass constructions	<ul style="list-style-type: none"> <input type="checkbox"/> Construct a given triangle <input type="checkbox"/> Construct an equilateral triangle <input type="checkbox"/> Understand that SSS, SAS, ASA and RHS triangles are unique but ASS ones are not <input type="checkbox"/> Construct a perpendicular bisector of a line <input type="checkbox"/> Construct a perpendicular from a point to a line <input type="checkbox"/> Construct a perpendicular from a point on a line <input type="checkbox"/> Bisect an angle <input type="checkbox"/> Construct angles of 60°, 90°, 30° and 45° <input type="checkbox"/> Construct parallel lines <input type="checkbox"/> Draw circles and arcs of a given radius <input type="checkbox"/> Construct a regular hexagon inside a circle <input type="checkbox"/> Construct diagrams involving any of the above <input type="checkbox"/> Construct diagrams from given information
Loci	<ul style="list-style-type: none"> <input type="checkbox"/> Construct a region bounded by a circle and an intersecting line <input type="checkbox"/> Construct a loci of a given distance from a point and a given distance from a line <input type="checkbox"/> Construct a loci of equal distances from two points <input type="checkbox"/> Construct a loci of equal distances from two lines <input type="checkbox"/> Identify regions defined by "nearer to" or "greater than" <input type="checkbox"/> Find or describe regions satisfying a combination of loci
Perimeter and area	<ul style="list-style-type: none"> <input type="checkbox"/> Measure shapes to find perimeter or area <input type="checkbox"/> Find the perimeter of a rectangle or triangle <input type="checkbox"/> Use a formula to find the area of a rectangle <input type="checkbox"/> Use a formula to find the area of a triangle <input type="checkbox"/> Use a formula to find the area of a parallelogram <input type="checkbox"/> Use a formula to find the area of a trapezium <input type="checkbox"/> Calculate the perimeter and area of compound shapes made from triangles, rectangles and other shapes <input type="checkbox"/> Find the surface area of shapes such as prisms or pyramids by using the formulae for triangles, rectangles and other shapes

Circumference and area of a circle	<input type="checkbox"/> Find circumference of a circle using $C = \pi d$ or $C = 2\pi r$ <input type="checkbox"/> Find the area of a circle using $A = \pi r^2$ <input type="checkbox"/> Use $\pi = 3.142$ or the π button on a calculator <input type="checkbox"/> Find the perimeter and area of semicircles and quarter circles <input type="checkbox"/> Find the surface area of a cylinder <input type="checkbox"/> Find the length of an arc <input type="checkbox"/> Find the area and perimeter of a sector
Volumes of prisms	<input type="checkbox"/> Use the formula to calculate the volume of a cuboid <input type="checkbox"/> Calculate the volume of a shape made from cuboids <input type="checkbox"/> Calculate volume of a prism, such as a triangular prism <input type="checkbox"/> Find the volume of a cylinder
Vectors	<input type="checkbox"/> Add, subtract, multiply and divide vectors <input type="checkbox"/> Find the resultant of a vector

MEASURES	
Maps and scale drawings	<input type="checkbox"/> Use, interpret and construct maps and scale drawings <input type="checkbox"/> Draw lines and shapes to scale <input type="checkbox"/> Estimate lengths using a scale diagram
Enlargement of shapes, including solids	<input type="checkbox"/> Understand the effect of enlargement on perimeter, area and volume <input type="checkbox"/> Understand and use the fact that area and volume are affected differently by an enlargement <input type="checkbox"/> Understand simple enlargements when a 2D or solid shape is an enlargement of another 2D or solid shape
Interpretation and accuracy	<input type="checkbox"/> Read and interpret scales on measuring equipment <input type="checkbox"/> Know the relationships between seconds, minutes, hours, days, weeks, months and years <input type="checkbox"/> Use 12 and 24 hour clock times correctly <input type="checkbox"/> Work out the difference between two times <input type="checkbox"/> Understand that choice of unit affects accuracy <input type="checkbox"/> Understand that measurements given to a whole unit may be up to half a unit inaccurate in either direction
Converting measurements	<input type="checkbox"/> Know conversion factors between different metric units <input type="checkbox"/> Convert between metric units <input type="checkbox"/> Convert between metric measurements of area <input type="checkbox"/> Convert between metric measurements of volume <input type="checkbox"/> Convert between different metric units of speed, eg. metres per second and km per hour <input type="checkbox"/> Convert between metric units of volume and metric units of capacity, eg. $1 \text{ cm}^3 = 1 \text{ ml}$
Estimation of measures	<input type="checkbox"/> Make estimates of measurements <input type="checkbox"/> Choose appropriate units for estimates of measurements
Bearings	<input type="checkbox"/> Use 3 figure bearings to describe a direction <input type="checkbox"/> Mark a point on a diagram, given a bearing and distance from another point <input type="checkbox"/> Measure a bearing on a map or scale plan <input type="checkbox"/> Given a bearing of one point from another, find the bearing of the first point from the second

Compound measures	<input type="checkbox"/> Understand and use compound measures, including speed and density
Measure and draw lines and angles	<input type="checkbox"/> Measure and draw straight lines to the nearest mm <input type="checkbox"/> Measure and draw angles to the nearest degree
Drawing using a ruler and protractor	<input type="checkbox"/> Make accurate drawings of triangles and other 2D shapes using ruler and protractor <input type="checkbox"/> Make an accurate scale drawing from a diagram <input type="checkbox"/> Use accurate drawing to solve bearings problems

STATISTICS	
Data handling	<input type="checkbox"/> Decide on what data and analysis may be required for a problem <input type="checkbox"/> Data collection <input type="checkbox"/> Presenting data <input type="checkbox"/> Discuss data
Bias	<input type="checkbox"/> Understand how sources of data might be biased
Designing a survey	<input type="checkbox"/> Identify what data is needed <input type="checkbox"/> Consider fairness of a survey <input type="checkbox"/> Understand sample and population
Design data collection methods	<input type="checkbox"/> Design and use a data collection sheet, including one for continuous data <input type="checkbox"/> Sort and classify data, and put data into a table <input type="checkbox"/> Group data into class intervals with equal width
Tables and lists	<input type="checkbox"/> Take data from tables and lists
Two-way tables	<input type="checkbox"/> Design two-way tables <input type="checkbox"/> Use information to complete a two-way table
Charts and diagrams	Draw the following charts or diagrams <input type="checkbox"/> Pictogram <input type="checkbox"/> Bar chart or dual bar chart <input type="checkbox"/> Pie chart <input type="checkbox"/> Histogram (with equal class intervals) <input type="checkbox"/> Frequency diagram for grouped data <input type="checkbox"/> Frequency polygon <input type="checkbox"/> Line graph <input type="checkbox"/> Scatter graph <input type="checkbox"/> Frequency polygon for grouped data <input type="checkbox"/> Stem and leaf diagram

Types of average and range	Calculate the following <ul style="list-style-type: none"> <input type="checkbox"/> Mean <input type="checkbox"/> Mode <input type="checkbox"/> Median <input type="checkbox"/> Range <input type="checkbox"/> Modal class <input type="checkbox"/> Interval containing the median <input type="checkbox"/> Estimate the mean of grouped data in a frequency table using mid-points <input type="checkbox"/> Find the median for grouped data <input type="checkbox"/> Estimate the mean for grouped data
Interpreting graphs and diagrams	Understand and find information from <ul style="list-style-type: none"> <input type="checkbox"/> bar charts and dual bar charts <input type="checkbox"/> pie charts <input type="checkbox"/> stem and leaf diagrams <input type="checkbox"/> scatter graphs <input type="checkbox"/> frequency polygons <input type="checkbox"/> Find information from pictograms, bar charts, line graphs, frequency polygons, frequency diagrams and histograms (with equal intervals) <input type="checkbox"/> Find information from pie charts <input type="checkbox"/> Find median, mode, and range from stem and leaf diagrams
Patterns in data	<ul style="list-style-type: none"> <input type="checkbox"/> Find patterns in data <input type="checkbox"/> Find exceptions in data
Lines of best fit	<ul style="list-style-type: none"> <input type="checkbox"/> Draw a line of best fit <input type="checkbox"/> Understand positive, negative and no correlation <input type="checkbox"/> Understand what correlation means for the data shown <input type="checkbox"/> Understand that correlation doesn't necessarily mean one variable is the cause of the other one <input type="checkbox"/> Predict values using a line of best fit <input type="checkbox"/> Understand that "no correlation" does not necessarily mean no relationship between the values, just no linear relationship

Comparing data	<ul style="list-style-type: none"><input type="checkbox"/> Compare two sets of data using mean and range<input type="checkbox"/> Compare two pie charts, and understand that the sizes represented in each depend on the total represented by each<input type="checkbox"/> Compare data from dual bar charts<input type="checkbox"/> Understand the advantages and disadvantages of different types of average
Using calculators	<ul style="list-style-type: none"><input type="checkbox"/> Calculate mean using the correct key on a scientific calculator

PROBABILITY	
Probability language and the probability scale	<input type="checkbox"/> Impossible, unlikely, even chance, likely and certain events <input type="checkbox"/> Mark events or probabilities on a 0 to 1 probability scale <input type="checkbox"/> Write probabilities as fractions, decimals or percentages
Estimates of probability and relative frequency	<input type="checkbox"/> Find probabilities of events using dice, spinners, coins <input type="checkbox"/> Understand and use relative frequency as estimates of probability <input type="checkbox"/> Calculate an estimate of how many times an event will occur, given its probability and the number of trials
Listing events	<input type="checkbox"/> List the outcomes for one or two events <input type="checkbox"/> Use and draw diagrams to show all possibilities
Mutually exclusive outcomes	<input type="checkbox"/> Add simple probabilities <input type="checkbox"/> Understand that the sum of all the mutually exclusive outcomes is 1 <input type="checkbox"/> Know that if P is a probability of an outcome occurring, then $1 - P$ is the probability of the same outcome not occurring <input type="checkbox"/> Fill in a missing probability in a table
Experimental data and theoretical probability	<input type="checkbox"/> Compare experimental data with theoretical probability <input type="checkbox"/> Understand that the same experiment repeated can have different results, and that increasing sample size increases accuracy <input type="checkbox"/> Compare results from different sample sizes
Tree diagrams	<input type="checkbox"/> Draw a tree diagram to represent 2 events <input type="checkbox"/> Calculate the probability of 2 events