General Mathematics

EP Curriculum Map

General Mathematics: Unit 1

Topic 1: Consumer arithmetic

Applications of rates, percentages and use of spreadsheets

Content Descriptor	Lesson Names
review definitions of rates and percentages	• Constant Rates • Reading Constant Rates • Drawing Constant Rates • Variable Rates • Rates of Change • Analysing Rates of Change • Introduction to Percentages • Using Percentages • Percentages and Money • Percentages and Populations
calculate weekly or monthly wages from an annual salary, and wages from an hourly rate, including situations involving overtime and other allowances and earnings based on commission or piecework	• Salaries and Wages • Commission • Piecework • Royalties • Overtime, Special rates and Allowances • Government Benefits and Allowances • Timesheets • Alternative Sources of Income • Applying Government Benefits: The Life of Matilda
calculate payments based on government allowances and pensions, such as youth allowances, unemployment, disability and study	• Overtime, Special rates and Allowances • Government Benefits and Allowances
prepare a personal budget for a given income, taking into account fixed and discretionary spending	• Budgeting • Making a Budget • Review: Budgeting • Extended Investigation: Preparing a Personal Budget
compare prices and values using the unit cost method	• Cost per Item • When a Best Buy isn't the Best Option • Best Buys Using Unit Costs

apply percentage increase or decrease in various contexts, e.g. determining the impact of inflation on costs and wages over time, calculating percentage mark-ups and discounts, calculating GST, calculating profit or loss in absolute and percentage terms, and calculating simple and compound interest	• Profit and Loss • Calculating Profit and Loss • Percentages and Money • Discounts • Calculating Discounts • Goods and Services Tax • Income Tax • Introduction to Interest • Calculating Simple Interest • Rearranging the Simple Interest Formula • Compound Interest Basic Formula • Rearranging the Compound Interest Formula • Compound Interest - Months and Weeks • rearranging Compound Interest - Months and Weeks • Depreciation
use currency exchange rates to determine the cost in Australian dollars of purchasing a given amount of a foreign currency, such as US$1500, or the value of a given amount of foreign currency when converted to Australian dollars, such as the value of €2050 in Australian dollars	• Exchange Rates
calculate the dividend paid on a portfolio of shares, given the percentage dividend or dividend paid per share, for each share; and compare share values by calculating a price-to-earnings ratio	• Shares • Dividends and Yields • Youtube Windfall
use a spreadsheet to display examples of the above computations when multiple or repeated computations are required, e.g. preparing a wage sheet displaying the weekly earnings of workers in a fast-food store where hours of employment and hourly rates of pay may differ, preparing a budget or investigating the potential cost of owning and operating a car over a year.	• Budgeting • Making a Budget • Review: Budgeting • Extended Investigation: Preparing a Personal Budget

Topic 2: Shape and Measurement

Pythagoras' Theorem

Content Descriptor	Lesson Names
review Pythagoras' theorem and use it to solve practical problems in two dimensions and simple applications in three dimensions	• Parts of a Triangle and the Hypotenuse • Pythagoras' Theorem • Pythagoras' Theorem in 3D

Mensuration

Content Descriptor	Lesson Names
solve practical problems requiring the calculation of perimeters and areas of circles, sectors of circles, triangles, rectangles, trapeziums, parallelograms and composites	• Perimeter • Perimeters of Kites, Rhombuses, Trapeziums and Parallelograms • Circumference of Circles • Using the Circumference of Circles
calculate the volumes and capacities of standard three-dimensional objects, including spheres, rectangular prisms, cylinders, cones, pyramids and composites in practical situations, such as the volume of water contained in a swimming pool	• Volume of Right Pyramids • Volume of Right Cones • Volume of Spheres • Volume of Composite Solids
calculate the surface areas of standard three-dimensional objects, e.g. spheres, rectangular prisms, cylinders, cones, pyramids and composites in practical situations, such as the surface area of a cylindrical food container.	• Finding the Height of Right Pyramids • Surface Area of Right Pyramids • Surface Area of Right Cones • Surface Area of Spheres • Surface Area of Composite Solids

Similar Figures and Scale Factors

Content Descriptor	Lesson Names
review the conditions for similarity of two-dimensional figures, including similar triangles	• Introduction to Similarity • Similarity Tests • Similarity and Angles • Similarity and Multiple Triangles
use the scale factor for two similar figures to solve linear scaling problems	• Introduction to Scaling • Magnitude • Magnitude as a Ratio • Scaling on Cartesian Planes
obtain measurements from scale drawings, such as maps or building plans, to solve problems	Coming Soon We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.
obtain a scale factor and use it to solve scaling problems involving the calculation of the areas of similar figures, including the use of shadow sticks, calculating the height of trees, use of a clinometer	Coming Soon We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.
obtain a scale factor and use it to solve scaling problems involving the calculation of surface areas and volumes of similar solids.	Coming Soon We want to work with you! If you are interested in partnering with EP to develop

	this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

Topic 3: Linear equations and their graphs

Linear equations

Content Descriptor	Lesson Names
identify and solve linear equations, including variables on both sides, fractions, non-integer solutions	• Solving Linear Equations with Fractions • Solving Linear Equations
develop a linear equation from a description in words.	• Solving Linear Equations with Fractions • Solving Linear Equations

Straight-line graphs and their applications

Content Descriptor	Lesson Names
construct straight-line graphs using $y = a + bx$ both with and without the aid of technology	• Graphs From Equations • Drawing the Line from an Equation
determine the slope and intercepts of a straight-line graph from both its equation and its plot	• Slope and Intercept from a Graph • Equations From Graphs
interpret, in context, the slope and intercept of a straight-line graph used to model and analyse a practical situation	• Slope and Intercept from a Graph • Equations From Graphs • How to Model Situations
construct and analyse a straight-line graph to model a given linear relationship, such as modelling the cost of filling a fuel tank of a car against the number of litres of petrol required.	• How to Model Situations • Modelling Situations: Global Warming • Modelling Situations: Gym Membership • Modelling Situations: The Leaky Bike Tyre • Modelling Situations: The Road Trip

Simultaneous linear equations and their applications

Content Descriptor	Lesson Names
solve a pair of simultaneous linear equations in the format $y = mx + c$, using technology when appropriate; they must solve equations algebraically, graphically, by substitution and by the elimination method	• Solving Simultaneous Equations Using Graphs • Solving Simultaneous Equations Using Substitution • Solving Simultaneous Equations Using Elimination • Solving Simultaneous Linear Equations using Technology
solve practical problems that involve finding the point of intersection of two straight-line graphs, such as determining the break-even point where cost and	• Applications of Simultaneous Equations

revenue are represented by linear equations.	

Piece-wise linear graphs and step graphs

Content Descriptor	Lesson Names
sketch piece-wise linear graphs and step graphs, using technology where appropriate	• Step Functions • Piecewise Linear Graphs
interpret piece-wise linear and step graphs used to model practical situations.	• Step Functions • Piecewise Linear Graphs • Finding Piecewise Equations • Non-Linear Piecewise Functions • Australian Tax Rates and Brackets • Luke's Loan

General Mathematics: Unit 2

Topic 1: Applications of Trigonometry

Applications of Trigonometry

Content Descriptor	Lesson Names
review the use of the trigonometric ratios to find the length of an unknown side or the size of an unknown angle in a right-angled triangle	• Introduction to Trigonometry • Finding Side Lengths Using Trigonometry • Finding Angles Using Trigonometry • Trigonometry in 3D • 3D Problems Using Right-Angled Triangles • Review Lesson: Trigonometric Ratios
determine the area of a triangle given two sides and an included angle by using the rule area = 1/2 bc sinA, or given three sides by using Heron's rule A = \sqrt(s(s – a)(a – b)(s – c)) , where s = (a+b+c)/2 , and solve related practical problems	• Area of a Triangle: ½ ab sin C • Heron's Formula
solve two-dimensional problems involving non-right-angled triangles using the sine rule (ambiguous case excluded) and the cosine rule	• The Sine Rule • Finding Angles Using the Sine Rule • The Sine Rule: The Ambiguous Case • The Cosine Rule • Finding Angles Using the Cosine Rule • Review Lesson: Trigonometric Rules
solve two-dimensional practical problems involving the trigonometry of right-angled and non-right-angled triangles, including problems involving angles of elevation and depression and the use of true bearings.	• Bearings with Right-Angled Triangles • Angles of Elevation and Depression

Topic 2: Algebra and Matrices

Linear and non-linear relationships

Content Descriptor	Lesson Names
substitute numerical values into linear algebraic and simple non-linear algebraic expressions, and evaluate, e.g. order-two polynomials, proportional, inversely proportional	• Substituting Into and Evaluating Algebraic Expressions
find the value of the subject of the formula, given the values of the other pronumerals in the formula	• Substituting Into and Evaluating Algebraic Expressions
transpose linear equations and simple non-linear algebraic equations, e.g. order two polynomials,	• Rearranging Equations

proportional, inversely proportional	
use a spreadsheet or an equivalent technology to construct a table of values from a formula, including two-by-two tables for formulas with two variable quantities, e.g. a table displaying the body mass index (BMI) of people with different weights and heights.	• Using Formulas

Matrices and matrix arithmetic

Content Descriptor	Lesson Names
use matrices for storing and displaying information that can be presented in rows and columns, e.g. tables, databases, links in social or road networks recognise different types of matrices (row matrix, column matrix (or vector matrix), square matrix, zero matrix, identity matrix) and determine the size of the matrix perform matrix addition, subtraction, and multiplication by a scalar perform matrix multiplication (manually up to a 3 x 3 but not limited to square matrices) determining the power of a matrix using technology with matrix arithmetic capabilities when appropriate use matrices, including matrix products and powers of matrices, to model and solve problems, e.g. costing or pricing problems, squaring a matrix to determine the number of ways pairs of people in a communication network can communicate with each other via a third person.	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

Topic 3: Univariate Data Analysis

Making sense of data relating to a single statistical variable

Content Descriptor	Lesson Names
define univariate data classify statistical variables as categorical or numerical	• Types of Data

classify a categorical variable as ordinal or nominal and use tables and pie, bar and column charts to organise and display the data, e.g. ordinal: income level (high, medium, low); or nominal: place of birth (Australia, overseas) classify a numerical variable as discrete or continuous, e.g. discrete: the number of rooms in a house; or continuous: the temperature in degrees Celsius	
select, construct and justify an appropriate graphical display to describe the distribution of a numerical dataset, including dot plot, stem-and-leaf plot, column chart or histogram	• Dot Plots, Stem and Leaf Plots and Histograms • Column (Bar) Graphs
describe the graphical displays in terms of the number of modes, shape (symmetric versus positively or negatively skewed), measures of centre and spread, and outliers and interpret this information in the context of the data	• Shape and Mode • Symmetry and Skew in Data • Effect of Shape on Mean and Median • Clusters and Outliers • Measures of Centre and Spread
determine the mean, x, and standard deviation (using technology) of a dataset and use statistics as measures of location and spread of a data distribution, being aware of the significance of the size of the standard deviation.	• Measures of Centre and Spread • Introduction to Standard Deviation • Calculating Standard Deviation • Calculating Standard Deviation Using Technology • Investigating the Standard Deviation • Using the Standard Deviation to Compare Data Sets • Comparing the Measures of Spread

Comparing data for a numerical variable across two or more groups

Content Descriptor	**Lesson Names**
construct and use parallel box plots (including the use of the Q1 – 1.5 × IQR ≤ x ≤ Q3 + 1.5 × IQR criteria for identifying possible outliers) to compare datasets in terms of median, spread (IQR and range) and outliers to interpret and communicate the differences observed in the context of the data	• Comparing Data Sets • Comparing Box and Whisker Plots
compare datasets using medians, means, IQRs, ranges or standard deviations for a single numerical variable, interpret the differences observed in the context of the data and report the findings in a systematic and concise manner.	• Comparing Data Sets • Comparing Box and Whisker Plots

General Mathematics: Unit 3

Topic 1: Bivariate Data Analysis

Identifying and describing associations between two categorical variables

Content Descriptor	Lesson Names
define bivariate data	• Introduction to Bivariate Data
construct two-way frequency tables and determine the associated row and column sums and percentages use an appropriately percentaged two-way frequency table to identify patterns that suggest the presence of an association understand an association in terms of differences observed in percentages across categories in a systematic and concise manner, and interpret this in the context of the data.	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.
construct a scatterplot to identify patterns in the data suggesting the presence of an association	• Introduction to Bivariate Data • Plotting Using a Calculator • Plotting Using a Spreadsheet • Analysing Trend by Eye
understand an association between two numerical variables in terms of direction (positive/negative), form (linear) and strength (strong/moderate/weak)	• Analysing Trend by Eye
calculate and interpret the correlation coefficient (r) to quantify the strength of a linear association using Pearson's correlation coefficient.	• Correlation Coefficient • Calculating the Correlation Coefficient using a calculator • Calculating the Correlation Coefficient using a Spreadsheet

Fitting a linear model to numerical data

Content Descriptor	Lesson Names
identify the response variable and the explanatory variable	• Bivariate Variables
use a scatterplot to identify the nature of the relationship between variables	• Lines of Best Fit by Eye
model a linear relationship by fitting a least-squares line to the data	• Least Squares Fitting using a Spreadsheet • Least Squares Fitting using a Calculator
use a residual plot to assess the appropriateness of	• Residuals

fitting a linear model to the data	
interpret the intercept and slope of the fitted line	• Lines of Best Fit by Eye • Making Predictions by Eye • Making Predictions Using the Equation
use, not calculate, the coefficient of determination (R^2) to assess the strength of a linear association in terms of the explained variation	• Coefficient of Determination
use the equation of a fitted line to make predictions	• Making Predictions by Eye • Making Predictions Using the Equation
distinguish between interpolation and extrapolation when using the fitted line to make predictions, recognising the potential dangers of extrapolation.	• Making Predictions by Eye • Making Predictions Using the Equation

Association and causation

Content Descriptor	Lesson Names
recognise that an observed association between two variables does not necessarily mean that there is a causal relationship between them identify and communicate possible non-causal explanations for an association, including coincidence and confounding due to a common response to another variable solve practical problems by identifying, analysing and describing associations between two categorical variables or between two numerical variables	• Correlation vs. Causation

Topic 2: Time Series Analysis

Describing and interpreting patterns in time series data

Content Descriptor	Lesson Names
construct time series plots	• Introduction to Time Series • Analysing Time Series
describe time series plots by identifying features such as trend (long-term direction), seasonality (systematic, calendar-related movements) and irregular fluctuations (unsystematic, short-term fluctuations), and recognise when there are outliers, e.g. one-off unanticipated events.	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

Analysing time series data

Content Descriptor	Lesson Names
smooth time series data by using a simple moving average, including the use of spreadsheets to implement this process calculate seasonal indices by using the average percentage method deseasonalise a time series by using a seasonal index, including the use of spreadsheets to implement this process fit a least-squares line to model long-term trends in time series data, using appropriate technology solve practical problems that involve the analysis of time series data.	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

Topic 3: Growth and Decay in Sequences

The arithmetic sequence

Content Descriptor	Lesson Names
use recursion to generate an arithmetic sequence	• Recursive Sequences
display the terms of an arithmetic sequence in both tabular and graphical form and demonstrate that arithmetic sequences can be used to model linear growth and decay in discrete situations	• Graphing Sequences • Introduction to Sequences
use the rule for the nth term using $t\_n = t\_1 + (n - 1)d$, where t_n represents the nth term of the sequence, t_1 = first term, n = term number and d = common difference of a particular arithmetic sequence from the pattern of the terms in an arithmetic sequence, and use this rule to make predictions	• Finding an Arithmetic Term • Finding a Term Number for an Arithmetic sequence
use arithmetic sequences to model and analyse practical situations involving linear growth or decay, such as analysing a simple interest loan or investment, calculating a taxi fare based on the flag fall and the charge per kilometre, or calculating the value of an office photocopier at the end of each year using the straight-line method or the unit cost method of depreciation.	• Finding an Arithmetic Term • Finding a Term Number for an Arithmetic Sequence • Cold Case

The geometric sequence

Content Descriptor	Lesson Names
use recursion to generate a geometric sequence	• Recursive Sequences
display the terms of a geometric sequence in both tabular and graphical form and demonstrate that geometric sequences can be used to model exponential growth and decay in discrete situations	• Graphing Sequences • Introduction to Sequences
use the rule for the nth term using $t\_n = t\_1 r\hat{}(n-1)$ where t_n represents the nth term of the sequence, t_1 = first term, n = term number and r = common ratio of a particular geometric sequence from the pattern of the terms in the sequence, and use this rule to make predictions	• Geometric Sequences
use geometric sequences to model and analyse (numerically or graphically only) practical problems involving geometric growth and decay (logarithmic solutions not required), such as analysing a compound interest loan or investment, the growth of a bacterial population that doubles in size each hour or the decreasing height of the bounce of a ball at each bounce; or calculating the value of office furniture at the end of each year using the declining (reducing) balance method to depreciate.	• Geometric Sequences • Cold Case • Extended Investigation: Fibonacci Sequence

Topic 4: Earth Geometry and Time Zones

Locations on the Earth

Content Descriptor	Lesson Names
define the meaning of great circles define the meaning of angles of latitude and longitude in relation to the equator and the prime meridian locate positions on Earth's surface given latitude and longitude, e.g. using a globe, an atlas, GPS and other digital technologies state latitude and longitude for positions on Earth's surface and world maps (in degrees only) use a local area map to state the position of a given place in degrees and minutes, e.g. investigating the map of Australia and locating boundary positions for	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

Aboriginal language groups, such as the Three Sisters in the Blue Mountains or the local area's Aboriginal land and the positions of boundaries calculate angular distance (in degrees and minutes) and distance (in kilometres) between two places on Earth on the same meridian using D = 111.2 × angular distance calculate angular distance (in degrees and minutes) and distance (in kilometres) between two places on Earth on the same parallel of latitude using D = 111.2 cos θ × angular distance calculate distances between two places on Earth, using appropriate technology.	

Time zones

Content Descriptor	Lesson Names
define Greenwich Mean Time (GMT), International Date Line and Coordinated Universal Time (UTC) understand the link between longitude and time determine the number of degrees of longitude for a time difference of one hour solve problems involving time zones in Australia and in neighbouring nations, making any necessary allowances for daylight saving, including seasonal time systems used by Aboriginal peoples and Torres Strait Islander peoples solve problems involving GMT, International Date Line and UTC calculate time differences between two places on Earth solve problems associated with time zones, such as online purchasing, making phone calls overseas and broadcasting international events solve problems relating to travelling east and west incorporating time zone changes, such as preparing an itinerary for an overseas holiday with corresponding times.	Time Zones *Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

General Mathematics: Unit 4

Topic 1: Loans, Investments and Annuities

Compound interest loans and investments

Content Descriptor	Lesson Names
use a recurrence relation A_(n+1) = rA_n to model a compound interest loan or investment, and investigate (numerically and graphically) the effect of the interest rate and the number of compounding periods on the future value of the loan or investment, e.g. payday loan calculate the effective annual rate of interest and use the results to compare investment returns and cost of loans when interest is paid or charged daily, monthly, quarterly or six-monthly	*Coming Soon - Jan 2021* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.
solve problems involving compound interest loans or investments, e.g. determining the future value of a loan, the number of compounding periods for an investment to exceed a given value, the interest rate needed for an investment to exceed a given value.	• Included in Unit 1 Topic 1

Reducing balance loans

Content Descriptor	Lesson Names
use a recurrence relation, A_(n+1) = rA_n − R (where R = monthly repayment) to model a reducing balance loan and investigate (numerically or graphically) the effect of the interest rate and repayment amount on the time taken to repay the loan with the aid of appropriate technology, solve problems involving reducing balance loans, e.g. determining the monthly repayments required to pay off a housing loan	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

Annuities and perpetuities

Content Descriptor	Lesson Names
use a recurrence relation A_(n+1) = rA_n + d to model an annuity and investigate (numerically or graphically) the effect of the amount invested, the interest rate, and the payment amount on the duration of the annuity	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact

solve problems involving annuities, including perpetuities as a special case, e.g. determining the amount to be invested in an annuity to provide a regular monthly income of a certain amount.	ben.hilliam@educationperfect.com with an expression of interest.

Topic 2: Graphs and Networks

Graphs, associated terminology and the adjacency matrix

Content Descriptor	Lesson Names
understand the meanings of the terms graph, edge, vertex, loop, degree of a vertex, subgraph, simple graph, complete graph, bipartite graph, directed graph (digraph), arc, weighted graph and network	• Network Basics • Equivalent Networks • Traversable Networks • Hamiltonian Networks
identify practical situations that can be represented by a network and construct such networks, e.g. trails connecting camp sites in a national park, a social network, a transport network with one-way streets, a food web, the results of a round-robin sporting competition	• Equivalent Networks • Traversable Networks • Hamiltonian Networks
construct an adjacency matrix from a given graph or digraph.	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

Planar graphs, paths and cycles

Content Descriptor	Lesson Names
understand the meaning of the terms planar graph and face apply Euler's formula, $v + f - e = 2$, to solve problems relating to planar graphs understand the meaning of the terms walk, trail, path, closed walk, closed trail, cycle, connected graph and bridge investigate and solve practical problems to determine the shortest path between two vertices in a weighted graph (by trial-and-error methods only)	• Traversable Networks • Hamiltonian Networks *Further Development Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

understand the meaning of the terms Eulerian graph, Eulerian trail, semi-Eulerian graph, semi-Eulerian trail and the conditions for their existence, and use these concepts to investigate and solve practical problems, e.g. the Königsberg bridge problem, planning a garbage bin collection route understand the meaning of the terms Hamiltonian graph and semi-Hamiltonian graph and use these concepts to investigate and solve practical problems (by trial-and-error methods only), e.g. planning a sightseeing tourist route around a city, the travelling-salesman problem.	

Topic 3: Networks and Decision Mathematics

Trees and minimum connector problems

Content Descriptor	Lesson Names
understand the meaning of the terms tree and spanning tree identify practical examples identify a minimum spanning tree in a weighted connected graph, e.g. using Prim's algorithm use minimal spanning trees to solve minimal connector problems, e.g. minimising the length of cable needed to provide power from a single power station to substations in several towns.	• The Shortest Path • Minimum Spanning Trees

Project planning and scheduling using critical path analysis (CPA)

Content Descriptor	Lesson Names
construct a network diagram to represent the durations and interdependencies of activities that must be completed during the project, e.g. preparing a meal use forward and backward scanning to determine the earliest starting time (EST) and latest starting times (LST) for each activity in the project use ESTs and LSTs to locate the critical path/s for the	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.

project use the critical path to determine the minimum time for a project to be completed calculate float times for non-critical activities.	

Flow networks

Content Descriptor	Lesson Names
solve small-scale network flow problems including the use of the 'maximum-flow minimum-cut' theorem, e.g. determining the maximum volume of oil that can flow through a network of pipes from an oil storage tank to a terminal. use a bipartite graph and its tabular or matrix form to represent an assignment/allocation problem, e.g. assigning four swimmers to the four places in a medley relay team to maximise the team's chances of winning determine the optimum assignment/s for small-scale problems by inspection, or by use of the Hungarian algorithm (3 × 3) for larger problems.	*Coming Soon* We want to work with you! If you are interested in partnering with EP to develop this topic, please contact ben.hilliam@educationperfect.com with an expression of interest.