SKILLS FUNC SKILLS FUNC FUNCTIONAL SKILLS

Level 2 Maths Online Resources





FUNCTIONAL MATHS ONLINE RESOURCES

It's all about real life problem solving. These e-resources are to be used to develop your underpinning Maths Skills. You will need these skills to complete your Level 2 Functional Maths Tasks.

The web has many excellent resources that can support your skills development. OCR has developed this document to help you quickly find this support using the hyperlinks enclosed.

> To access the hyperlinks, place your cursor over the underlined hyperlinked words and left click.

YOUR INDIVIDUAL LEARNING PLAN

On your individual learning plan, have you identified the skills you need to improve? If not, you need to do this, and then tick them off as you achieve these skills.

FUNCTIONAL PROCESS SKILLS

These are the wider and critical thinking skills you need to use for problem solving.

REPRESENTING

- Understand routine and non-routine problems in familiar and unfamiliar contexts and situations.
- Identify the situation or problems and identify the mathematical methods needed to solve them.
- Choose from a range of mathematics to find solutions

ANALYSING

- Apply a range of mathematics to find solutions.
- Use appropriate checking procedures and evaluate their effectiveness at each stage.

INTERPRETING

- Interpret and communicate solutions to multi-stage practical problems in familiar and unfamiliar contexts and situations.
- Draw conclusions and provide mathematical justifications.



LEVEL 2 COVERAGE AND RANGE SKILLS

THESE ARE THE UNDERPINNING SKILLS YOU NEED TO BE ABLE TO PERFORM THE **PROCESS SKILLS:**

Understand and use positive and negative numbers of any size in practical contexts: Negative numbers Activity video: negative numbers Long multiplication and division Activity video: multiplication and division Order of operation Activity video: order of operation **Rounding and estimating** Activity video: estimating



Recognise and use 2-D representations of 3D objects: Polygons Activity video: polygons 3-D shapes Activity video: 3-D shapes

Add, subtract, multiply and divide whole numbers using a range of strategies: **Fractions review**

Fractions: adding, subtracting, multiplying and dividing

Place value and ordering decimals

Percentages

Activity video: percentages

Converting fractions, decimals and percentages

Activity video: decimals

Understand, use and calculate ration and proportion, including problems involving scale: **Ratios**

Activity video: ratios

LEVEL 2 COVERAGE AND RANGE SKILLS (CONT)

Find area, perimeter and volume of common shapes: Area and perimeter Activity video: perimeter **Pythagoras** Activity video: pythagoras Angles Activity video: angles



Use, convert and calculate using metric and, where appropriate, imperial measures: **Converting measurements** Activity video: measures Compound measures

Discrete and continuous measurements

Questionnaires Sampling

Use statistical methods to investigate situations: Statistics and probability



Understand and use equivalences between fractions, decimals and percentages: Converting fractions, decimals and percentages

Activity video: decimals



Collect and represent discrete and continuous data, using ICT where appropriate Tallying, collecting and grouping data Activity video: collecting data



LEVEL 2 COVERAGE AND RANGE SKILLS (CONT)



Use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using ICT where appropriate: <u>Coordinates</u>

Straight line graphs

Graph plotting Find the gradient of straight lines Curved graphs Graphs modelling real situations Activity video: graphs Pie charts Line graphs, frequency polygons, stem and leaf diagrams Scatter diagrams

> Understand and use simple formulae and equations involving one or two step operations: Using formulae Activity video: formulae

Re-arranging symbols

Solving equations

Activity video: equations

Index notions

Trial and improvement

Activity video: trial and improvement

Use probability to assess the likelihood of an outcome: Statistics and probability Mean, mode and median review

Probability

OCR Customer contact centre

CONTACT US

VOCATIONAL QUALIFICATIONS Telephone 024 76 851509 Facsimile 024 76 851633 Email vocational.qualifications@ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored. © OCR 2012 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office 1 Hills Road, Cambridge CB1 2EU. Registered company number 3484466. OCR is an exempt charity.

General review: Brain Games (free resource, click 'jump in' or you can register)

Maths bingo

RU Revising maths?









