FUNCTIONAL SKILLS

Level 1 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 1 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

- You will need to understand practical problems in familiar and unfamiliar contexts and situations, some of which are non-routine.
- You will need to identify and obtain necessary information to tackle the problem.
- You will need to select mathematics in an organised way to find solutions.

ANALYSING

- Apply mathematics in an organised way to find solutions to straightforward practical problems for different purposes.
- Use appropriate checking procedures at each stage.

INTERPRETING

 Interpret and communicate solutions to practical problems, drawing simple conclusions and giving explanations.

www.ocr.org.uk/functionalskills

LEVEL 1 COVERAGE AND RANGE SKILLS

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

General review:

Brain Games

(free resource, click 'jump in' or you can register)



Understand and use whole numbers and understand negative numbers in practical contexts:

Number lines

Number symbols

Place values

Negative numbers

Rounding and estimating numbers

Place value

Whole numbers - writing and describing

Whole numbers - ordering

Whole number activity

Whole number test

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

Formulas

Addition

Subtraction

Multiplication

Division

Pen and paper methods

Times Tables

Multiples and factors

Multiplying by 10, 100 and 1000

Dividing by 10, 100 and 1000

Revise multiplication and division

Review numbers

LEVEL 1 COVERAGE AND RANGE SKILLS (CONT)

Add and subtract decimals up to two decimal places:

Decimals

Fractions

Percentages

Comparing fractions, percentages and decimals

Probability

Revise: fractions

Activity video: fractions

Review decimals

Activity video: decimals

Review percentages

Activity video: percentages

Converting fractions



Solve simple problems involving ratio, where one number is a multiple of the other:

Ratio and proportion

Equivalent ratios and simplest forms

Division in a given ratio

Using ratios

Activity video: ratios

Approximation

Activity video: approximation

Use simple formulae expressed in words for one or two step operations:

Solving single stage problems

Problem solving with addition and subtraction

Formulas in words

Terms and expressions

Like terms

Constructing formulas

LEVEL 1 COVERAGE AND RANGE SKILLS (CONT)

Solve problems requiring calculation with common measures, including money, time, length, weight, capacity and temperature:

Imperial measurement
Length and distance

Capacity

Weight
Time and date

Money

<u>Temperature</u>

<u>Calories</u>

<u>Volumes</u>

Using measurement: video clip



Convert units of measure in the same system:

Measures: choosing appropriate units

Activity video: measures
Activity video: volume

<u>Time</u>

Work out areas and perimeters in practical situations:

Areas of shapes

<u>Perimeters</u>

Maps and plans

Revise: perimeters

Activity video: perimeters

Construct geometric diagrams, models and shapes:

2-D shapes

Angles

3-D shapes

Area

Activity video: areas

Shape and space

Review: shape and space

LEVEL 1 COVERAGE AND RANGE SKILLS (CONT)

Select mathematics in an organised way to find solutions:

Solving problems

Order of operation

Powers and roots

Activity video

Extract and interpret information from tables, diagrams, charts and graphs:

Lists and tables

Graphs and charts

Coordinates

Activity video: coordinates

Collect and record discrete data and organise and represent information in different ways:

Collecting data

Collecting and recording data

Representing data



Find mean and range:

<u>Averages</u>

Measures of average

Activity video: measures of average

Review: mean

Review: mean and median

Box and whiskers plots

Cumulative frequency graphs

Use data to assess the likelihood of an outcome:

Probability

Activity video: probability

Relative frequency

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