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.
**LEVEL 1 COVERAGE AND RANGE SKILLS**

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

- 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
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
- Temperature
- Calories
- Volumes
- Using measurement: video

Convert units of measure in the same system:
- Measures: choosing appropriate units
- Activity video: measures
- Activity video: volume
- Time

Work out areas and perimeters in practical situations:
- Areas of shapes
- Perimeters
- 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

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:
- Averages
- 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