# Draft criteria for a maths INGOT

### My First Maths INGOT (Bronze 1)

I can count to ten without any pauses

I can add together all the numbers from 1 to 5

I can subtract all the numbers less than 5 from all the numbers up to 10 bigger than 5

I can compare sizes of objects using their lengths, widths and heights

I can compare objects using their weights saying which is heaviest and which is lightest

I can tell someone where to find an object using distances and directions

I can choose the right coins and notes to pay for something if I am told the price

I can name shapes such as triangles, rectangles, circles, squares, spheres, cones and cubes

I can sort shapes into groups based on the number of sides, the size of the shape or the colour of the shape

I know that some events are more likely to happen than others

#### Bronze 2 (Mathematics INGOT)

I can count, reliably, the number of items in groups of up to 20

I can understand and use whole numbers up to 100

I can add and subtract whole numbers where all the numbers involved are less than 100

I can count in twos, fives and tens and recite the 2, 5 and ten times tables

I can identify even and odd numbers and put missing numbers into a simple sequence

I can divide groups and objects into halves and quarters and put halves and quarters together to make whole objects

I can read simple scales on everyday measuring instruments such as rulers, thermometers, scales and clocks to the nearest labelled division

I can fit simple shapes together to build objects such as a house from bricks or a pattern from different shaped tiles

I can identify items on a list giving their positions in the list and communicate these positions to other people

I record my results on paper or on a computer and check my answers to see if they are sensible

I can use the knowledge and skills above to tackle practical problems in my every day life including telling the time and dealing with money

#### Bronze 3 (Mathematics INGOT)

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I can understand and use whole numbers up to 1000

I can add and subtract whole numbers where all the numbers involved are less than 1000

I can calculate the results adding, subtracting and multiplying numbers where all the numbers are less than 100, using paper and pencil

I can recite the 2, 3, 4, 5 and ten times tables

I round numbers to the nearest 10 or 100

I can divide groups and objects into a range of simple fractions and understand dividing things into fair shares and how to combine these shares to make new fractions

I can understand and use decimals to two decimal places in practical situations

I can recognise and describe simple number patterns filling in missing numbers in the pattern

I show I understand length, area, volume/capacity, weight and temperature by making estimates, measuring and comparing the sizes of measurements and estimates

I can do simple calculations about money and measures in my head

I can name and draw triangles, squares, rectangles, circles, cubes, cones, cuboids and spheres

I can use feet, inches, yards, miles, millimetres, centimetres, metres, kilometres, pints, gallons, litres, millilitres, pounds, kilogrammes, seconds, minutes, hours, days, weeks, months, years, centigrade/Celsius

I can find information that I need in lists, tables, simple charts and graphs, make comparisons of information and present my findings so other people can understand them

I record my results on paper or on a computer and check my answers to see if they are sensible

I can use the knowledge and skills above to tackle practical problems in my every day life checking that my results are sensible and that other people can understand them

## Silver (Mathematics INGOT)

I can understand and use whole numbers and recognise negative numbers in every day situations.

I can do simple sums in my head using adding, subtracting, multiplying and dividing, for example, multiplying and dividing whole numbers by 10 and 100.

I can change fractions to decimals and decimals to fractions for halves, thirds, quarters, fifths, tenths and hundredths.

I can add and subtract decimals up to two decimal places in practical situations.

I understand the word ratio and I can solve simple problems involving ratio, where one of the two numbers being compared is a whole multiple of the other.

I know that a formula is a way of describing a mathematical relationship and I can use simple formulae expressed in words for one or two-step mathematical operations

I can calculate the answers to simple problems about money, temperature, weight, time, length, perimeter, area and capacity (volume) and explain my working.

I can convert units of measure in the same system eg kilometres to metres, stones to pounds and

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#### gallons to pints

I can construct models and draw shapes, measuring and drawing angles and identifying lines of symmetry

I can extract and interpret information from tables, diagrams, charts and graphs

I can collect and record discrete data and organise and represent information in different ways

I can find the mean and range for a set of data

I can use probability to show that some events are more likely to occur than others

I check my results to be sure they are sensible as I go along and I can explain what my results mean.

I can identify problems that can be solved using the mathematical skills and knowledge above, finding the information I need and explaining my methods.

#### Gold (Mathematics INGOT)

I understand and can use numbers of any size including positive and negative numbers in everyday calculations.

I understand how to use ratios to make calculations in problems of scale and proportion.

I can convert between fractions, decimals and percentages in every day calculations.

I can do calculations that require adding and subtracting fractions and adding, subtracting, multiplying and dividing decimals to a given number of decimal places

I understand and can use simple equations formulae involving one or two-step operations in everyday situations.

I can recognise and use 2D drawings of 3D objects

I can find the area, perimeter and volume of common shapes

I can work with metric and imperial measures in practical situations that require use and conversion between units.

I can collect data, both discrete and continuous measures, represent the data in tables, charts, diagrams and graphs and interpret data presented in these ways.

I can use and interpret statistical measures such as mean, mode and median for discrete and continuous data and use statistical methods to investigate situations.

I can use a numerical scale from 0 to 1 to express and compare probabilities.

I can use ICT appropriately in all my work in mathematics.

I can use the skills and knowledge above to identify and develop solutions to problems, in familiar and unfamiliar situations, checking and explaining my methods and communicating my solutions and conclusions.

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