

Jarrow Cross CE Primary School Numeracy Assessment – Year 4
(Notes & guidance; non-statutory)

NUMBER & PLACE VALUE	E	D	S
count in multiples of 6, 7, 9, 25 & 1000			
find 1000 more & less than a given number			
count backwards through zero to include negative numbers			
recognise the place value of each digit in a four-digit number (1000s, 100s, 10s, 1s)			
compare and order numbers beyond 1000			
identify, represent & estimate numbers using different representations			
round any number to the nearest 10, 100 & 1000			
solve number and practical problems that involve all the above with increasingly large positive numbers			
read Roman numerals to 100 (I to C)			
connect estimation & rounding to the use of measuring instruments			
ADDITION & SUBTRACTION			
add & subtract numbers with up to 4 digits using the formal written column method			
estimate and use inverse operations to check answers to a calculation			
solve addition & subtraction 2-step problems in contexts			
derive and recall sums and differences of pairs of multiples of 10, 100 & 100			
add near doubles			
derive and recall what must be added to any three-digit number to make the next multiple of 100			
add & subtract a near multiple of 10 or 100 to any two-digit or three-digit number			
find the difference between near multiples of 1000			
MULTIPLICATION & DIVISION			
recall multiplication and division facts for multiplication tables up to 12×12			
multiply mentally including by 0 & 1			
divide mentally including by 0 & 1			
multiply together 3 numbers using commutativity ($4 \times 12 \times 5 = 4 \times 5 \times 12 = 20 \times 12 = 240$)			
multiply two & three-digit numbers by a one-digit number using formal written layout			
solve problems involving multiplying and dividing including scaling & harder correspondence such as n objects are connected to m objects			
derive and recall doubles of all numbers from 1 to 100 and corresponding halves			
derive and recall doubles of all multiples of 10 and 100 and corresponding halves			
double any two-digit number			
double any multiple of 10 or 100 and halve the corresponding multiples			
halve any even number to 200			
recognise and use factor pairs and commutativity in mental calculations			
multiply whole numbers by 100			
recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten			
estimate & use inverse operations to check answers to multiplication & division calculations			
practise mental methods & extend to 3-digit numbers to derive facts ($600 \div 3 = 200$ as $2 \times 3 = 6$)			
become fluent in the formal written methods of short multiplication & division			
write statements about the equality of expressions ($39 \times 7 = 30 \times 7 + 9 \times 7$) ($2 \times 6 \times 5 = 10 \times 6 = 60$)			
solve 2-step problems in context including correspondence questions			
FRACTIONS (including decimals)			
recognise and show, using diagrams, families of common equivalent fractions			
count up and down in hundredths			
recognise that hundredths arise when dividing an object by 100 & dividing tenths by 10			
solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number			
add & subtract fractions with the same denominator			
recognise and write decimal equivalents of any number of tenths or hundredths			
recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$			

Jarrow Cross CE Primary School Numeracy Assessment – Year 4
(Notes & guidance; non-statutory)

find the effect for dividing a 1 or 2-digit number by 100 & 100, identifying the value of the digits in the answer as ones, tenths & hundredths			
round decimals with 1 decimal place to the nearest whole number			
compare numbers with the same number of decimal places up to 2 decimal places			
solve simple measure & money problems involving fractions & decimals to 2 decimal places			
connect hundredths to tenths, place value & decimal measures			
extend the use of the number line to connect fractions, decimals & measures			
understand the relation between non-unit fractions & multiplication & division of quantities, with particular emphasis on tenths & hundredths			
make connections between fractions of a length, of a shape & as a representation of a whole or set of quantities			
use factors & multiples to recognise equivalent fractions & simplify where appropriate			
add & subtract fractions with the same denominator through a variety of increasingly complex problems beyond one whole			
count forwards & backwards using simple fractions & decimals			
be able to represent numbers up to 2 decimal places in several ways, including on a number line			
MEASURES			
convert between different units of measure for length <i>kilometre to metre</i>			
convert between different units of measure for time <i>hour to minute</i>			
measure & calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres			
find the area of rectilinear shapes by counting squares			
estimate, compare & calculate different measures, including money in pounds and pence			
read & write time from analogue			
read & write time from digital 12 and 24-hour clocks			
convert time between analogue and digital 12 and 24-hour clocks			
solve time problems converting from hours to mins; mins to seconds; years to months; weeks to days			
express perimeter formula algebraically $2(a+b)$			
relate area to arrays & multiplication			
express area formula algebraically $l \times w$			
GEOMETRY: PROPERTIES OF SHAPE			
compare and classify geometric shapes including quadrilaterals & triangles			
identify lines of symmetry in 2-D shapes presented in different orientations			
complete a simple symmetric figure with respect to a specific line of symmetry			
identify acute and obtuse angles			
compare and order angles up to two right angles by size			
compare lengths & angles to decide if a polygon is regular or irregular			
draw symmetric patterns using a variety of media to become familiar with different orientations of line symmetry			
GEOMETRY: POSITION & DIRECTION			
describe positions on a 2-D grid as coordinates in the first quadrant			
describe movements between positions as translations of a given unit to the left/right and up/down			
plot specified points and draw sides to complete a given polygon			
STATISTICS			
interpret & present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs			
solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs			