

### Ottershaw C of E Schools

### Maths - Year 4



# **PLACE VALUE**

Pupils should be taught to:

- \* count in multiples of 6, 7, 9, 25 & 1000
- \* find 1 000 more or 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 (thousands, hundreds, tens & ones)
  - \* order & compare numbers beyond 1 000
  - \* identify, represent & estimate numbers using different representations
    - \* round any number to the nearest 10, 100 or 1 000
- \* solve number & practical problems that involve all of the above & with increasingly large positive numbers
- \* read Roman numerals to 100 (I to C) & know that over time, the numeral system changed to include the concept of zero & place value.

place value!				
FLUENCY	REASONING &	TEST %	TEACHER ASSESSMENT	
	PROBLEM SOLVING		BEST FIT	

# ADDITION & SUBTRACTION Pupils should be taught to: \* add & subtract numbers with up to four digits, using the formal written methods of columnar addition & subtraction where appropriate \* estimate & use inverse operations to check answers to a calculation \* solve addition & subtraction two-step problems in contexts, deciding which operations & methods to use & why. FLUENCY REASONING & TEST % TEACHER ASSESSMENT PROBLEM SOLVING BEST FIT

# **MULTIPLICATION & DIVISION**

Pupils should be taught to:

- \* recall multiplication & division facts for multiplication tables up to 12 x 12
- \* use place value, known & derived facts to multiply & divide mentally, including: multiplying by 0 & 1, dividing by 1, multiplying together three numbers
  - \* recognise & use factor pairs & commutativity in mental calculations
  - \* multiply two-digit & three-digit numbers by a one-digit number using formal written layout
- \* solve problems involving multiplying & adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems & harder correspondence problems, such as n objects are connected to m objects.

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# FRACTIONS (INCLUDING DECIMALS)

Pupils should be taught to:

- \* recognise & show, using diagrams, families of common equivalent fractions
  - \* count up & down in hundredths
- \* recognise that hundredths arise when dividing an object by one hundred & dividing tenths by ten
- \* solve problems involving increasingly harder fractions to calculate quantities, & fractions to divide quantities, including nonunit fractions where the answer is a whole number
  - \* add & subtract fractions with the same denominator
    - \* recognise & write decimal equivalents to ¼, ½, ¾
- \* find the effect of dividing a one- or two-digit number by 10 & 100, identifying the value of the digits in the answer as ones, tenths & hundredths
  - \* round decimals with one decimal place to the nearest whole number
  - \* compare numbers with the same number of decimal places up to two decimal places
  - \* solve simple measure & money problems involving fractions & decimals to two decimal places.

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## **MEASUREMENT**

Pupils should be taught to:

- \* convert between different units of measure (e.g. kilometre to metre, hour to minute)
- st measure & calculate the perimeter of a rectilinear figure (including squares) in centimetres & metres
  - \* find the area of rectilinear shapes by counting squares
  - \* estimate, compare & calculate different measures, including money in pounds & pence
    - \* read, write & convert time between analogue & digital 12- & 24-hour clocks
- \* solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

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# **GEOMETRY**

Pupils should be taught to:

- \* compare & classify geometric shapes, including quadrilaterals & triangles, based on their properties & sizes
  - \* identify acute & obtuse angles, & compare & order angles up to two right angles by size
    - \* 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
      - \* 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 & up / down

\* plot specified points & draw sides to complete a given polygon.

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STATISTICS				
Pupils should be taught to:				
* interpret & present discrete data & continuous data using appropriate graphical methods, including bar charts & time graphs				
* solve comparison, sum & difference problems using information presented in bar charts, pictograms, tables & other graphs.				
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