Year 3 Maths Objectives

Place Value

COUNTING	count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
COMPARING NUMBERS	compare and order numbers up to 1000
ESTIMATING NUMBERS	identify, represent and estimate numbers using different representations
READING & WRITING NUMBERS	read and write numbers up to 1000 in numerals and in words *tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks*
UNDERSTANDING PLACE VALUE	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
PROBLEM SOLVING	solve number problems and practical problems involving these ideas.

Addition & Subtraction

MENTAL CALCULATION	add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds
WRITTEN METHODS	add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
CHECKING ANSWERS	estimate the answer to a calculation and use inverse operations to check answers
PROBLEM SOLVING	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

Multiplication & Division

MULTIPLICATION & DIVISION FACTS	*count from 0 in multiples of 4, 8, 50 and 100* recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
MENTAL CALCULATION	write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Written Methods)
WRITTEN CALCULATION	write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Mental Methods)
PROBLEM SOLVING	solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects
CHECKING	*estimate the answer to a calculation and use inverse operations to check*

ANSWERS	*answers* (copied from Addition and Subtraction)

Algebra

EQUATIONS	solve problems, *including* ***missing number*** *problems, using number facts, place value, and more complex addition and subtraction.* *solve problems, including* ***missing number*** *problems, involving multiplication and division, including integer scaling*

Fractions (including decimals & percentages)

COUNTING IN FRACTIONAL STEPS	count up and down in tenths
RECOGNISING FRACTIONS	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10. recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
COMPARING FRACTIONS	compare and order unit fractions, and fractions with the same denominators
EQUIVALENCE	recognise and show, using diagrams, equivalent fractions with small denominators
ADDITION & SUBTRACTION OF FRACTIONS	add and subtract fractions with the same denominator within one whole (e.g. $^5/_7 + ^1/_7 = ^6/_7$)
PROBLEM SOLVING	solve problems that involve all of the above

Geometry: Properties of shape

DRAWING & CONSTRUCTING	draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
COMPARING & CLASSIFYING	compare and sort common 2-D and 3-D shapes and everyday objects.
ANGLES	recognise angles as a property of shape or a description of a turn identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle identify horizontal and vertical lines and pairs of perpendicular and parallel lines

Measurement

COMPARING & ESTIMATING	compare durations of events, for example to calculate the time taken by particular events or tasks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight

	(appears also in Telling the Time)
MEASURING & CALCULATING	measure, compare, add and subtract: **lengths** (m/cm/mm); **mass** (kg/g); **volume/capacity** (l/ml) measure the **perimeter** of simple 2-D shapes add and subtract amounts of **money** to give change, using both £ and p in practical contexts
TELLING THE TIME	tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight
CONVERTING	know the number of seconds in a minute and the number of days in each month, year and leap year

Statistics

INTERPRETING DATS	interpret and present data using bar charts, pictograms and tables
SOLVING PROBLEMS	solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.