

Year 4 Objectives: Number 1

NUMBER AND PLACE VALUE	
Objective 1: Count in multiples of 6, 7, 8, 9, 10, 25, 50, 100 and 1000 from any given number.	
Count on and back in 1000s from 0 to 10,000	*1
Count on and back in 10s from any given number between 0 and 10,000	
Count on and back in 100s from 0 to 10,000	
Count on and back in 50s from 0 to 1000 starting at any given number	*2
Count on and back in 25s from 0 to 1000 starting at any given number	
Count on and back in 9s from 0 to 1000 starting at any given number	*3
Count on in 8s from 0 to 1000 starting at any given number	
Count on in 7s from 0 to 1000 starting at any given number	*4
Count on in 6s from 0 to 1000 starting at any given number	

NUMBER AND PLACE VALUE	
Objective 2: Read and write numbers to at least 10,000	
Revise reading and writing numbers to: 100 and then to 1000;	*1
Read and write numbers to 5000	*2
Read and write numbers to 10,000	*3
Objective 3: Find a 1000 more or less than a given number	
Find 100 more or less than any 3-digit number	*1
Find 100 more or less than any 4-digit number	
Find 1000 more or less than any 4-digit number	*2
Find 1000 more than any 2 or 3-digit number	

Year 4 Objectives: Number 2

NUMBER AND PLACE VALUE	
Objective 4: Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones)	
Know and use terms: units, ones, tens, hundreds and thousands correctly	*1
Partition any number up to 9,999 showing the value of each digit	*2
Objective 5: Order and compare numbers beyond 1000	
Know which of two 4-digit numbers is the greater and smaller	*1
Order a set of 4-digit numbers from smallest to largest	*2
Order a set of 4-digit numbers from largest to smallest	

NUMBER AND PLACE VALUE	
Objective 6: Identify, represent and estimate numbers using different representations	
Know that 5 hundred, 6 tens and 3 ones is 563	*1
Know that 6 thousands, 3 hundreds, 2 tens and 5 ones is 6325	
Know that an object of 74.8m is longer than one of 476cm	*2
Know that 8562cm is 85.62m	*3
Know that 9042ml is 9.042l	
Objective 7: Round any number to the nearest 10, 100 or 1000	
Round any number up to 100 to the nearest 10	*1
Round any number up to 1000 to the nearest 10	
Round any number up to 1000 to the nearest 100	*2
Round any number up to 10,000 to the nearest 1000	*3

Year 4 Objectives : Number 3

NUMBER AND PLACE VALUE

Objective 8: Count backwards through zero to include negative numbers

Know that the value of any negative number is less than 0	*1
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Know which of 2 negative numbers is the greater, eg. -2 is greater than -5	
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Know which of 2 negative numbers is the smaller, eg. -7 is smaller than -4	
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Count accurately forwards from any negative number to any positive number, moving across the 0	*2
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Count accurately backwards from any positive number to any negative number, moving across the 0	
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Order a set of negative and positive numbers showing largest or smallest first	
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Objective 9: Solve word problems involving all of the above and increasingly large positive numbers

Solve problems which require movement between negative and positive numbers	
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NUMBER AND PLACE VALUE

Objective 10: Read Roman numerals to 100 (1 to C) and know that, over time, the numeral system changed to include the concept of zero and place value

Know the Roman numerals from 1 to 10	*1
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Know the Roman numerals for 50	*2
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Know the Roman numerals for 100	
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Year 4 Objectives : Number 4

ADDITION AND SUBTRACTION

Objective 11: Add and subtract numbers with up to 4-digits using the formal written methods of columnar addition and subtraction where appropriate

Add 2 numbers with 4-digits together using columnar addition without exchange between units and tens

***1**

Add 2 numbers with 4-digits together using columnar addition, where the units, tens or hundreds when added make more than 10.

***2**

Add 3 numbers with 4-digits using columnar addition where the units, tens or hundreds make more than 10

Subtract a 4-digit number from another using columnar subtraction which requires no exchange between the units, tens, hundreds or thousands

***3**

Subtract a 4-digit number from another using columnar subtraction which requires exchange between the units, tens, hundreds or thousands (or any two of these)

***4**

Objective 12: Add and subtract numbers mentally including two 2-digit numbers (with increasingly larger numbers) *(Non- statutory)*

Add together mentally any single-digit and any 2-digit number

Subtract any single-digit number from a 2-digit number

Add together mentally any single-digit and any 3-digit number

Subtract any single-digit number from a 3-digit number

Add together mentally any two 2-digit numbers

Subtract mentally any two 2-digit numbers

Add together mentally any 1000s number and any 4-digit number

Subtract any 1000s number from a 4-digit number

Year 4 Objectives : Number 5

ADDITION AND SUBTRACTION

Objective 13: Estimate and use inverse operations to check answers to a calculation

Estimate the answer to any given addition involving two 2-digit numbers to the nearest 10	*1
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Estimate the answer to any given addition involving two 3-digit numbers to the nearest 100	*2
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Estimate the answer to any given addition involving two 3-digit numbers to the nearest 10	
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Estimate the answer to any given subtraction involving two 2-digit numbers to the nearest 10	
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Estimate the answer to any given subtraction involving two 3-digit numbers to the nearest 100	
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Estimate the answer to any given subtraction involving two 3-digit numbers to the nearest 10	
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Know the meaning of the term 'inverse'	*3
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Check the answer to any given addition involving 2 numbers by using the inverse method	
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Check the answer to any given subtraction by using the inverse method	
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ADDITION AND SUBTRACTION

Objective 14: Solve addition and subtraction two-step problems in contexts, deciding which operations to use and why

Solve two-step word problems involving addition with numbers up to 1000	
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Solve two-step word problems involving subtraction with numbers up to 1000	
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Solve two-step word problems involving addition and subtraction with numbers up to 1000	
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Year 4 Objectives : Number 6

Objective 15: Recall multiplication and division facts for tables up to 12 x 12

Recite all multiplication facts for the x6 table	*1
Recite all multiplication facts for the x9 table	
Recite all multiplication facts for the x11 table	
Recite all multiplication facts for the x7 table	
Recite all multiplication facts for the x12 table	
Recall all number facts for the 6, 7, 9, 11 and 12x table out of sequence	
Know the inverse of all table facts involving 6, 7, 9, 11 and 12x table, eg. how many 7s in 63?	*2

Objective 16: Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; dividing by 1; multiplying together three numbers

Use all table facts up to 12x in calculations involving multiplication and division	
Know what happens when multiplying by 0 or 1	
Know what happens when dividing by 1	
Know what happens when 3 numbers are multiplied together	

MULTIPLICATION AND DIVISION

Objective 17: Multiply and divide 2-digit and 3-digit numbers by 1-digit number using formal written layout

Multiply a 100s number by a single-digit number mentally, using 2, 3, 4, 5, 6, 7, 8, and 9x	*1
Multiply a 2-digit number by a single-digit number using 2, 3, 4, 5, 6, 7, 8, and 9x	*2
Multiply a 3-digit number by a single-digit number using 2, 3, 4, 5, 6, 7, 8, and 9x	
Divide 2, 3, 4, 5, 6, 7, 8, 9 and 10 into any 10s number (no remainder)	*3
Divide 2, 3, 4, 5, 6, 7, 8, 9 and 10 into any 2-digit number (no remainder)	*4
Divide 2, 3, 4, 5, 6, 7, 8, 9 and 10 into any 3-digit number (no remainder)	

Objective 18: Recognise and use factor pairs and commutativity in mental calculations

Know the term 'prime factor' and what it means	
Know all the factors within all numbers to 10	
Work out all the factors within any number up to 144	
Know the term 'square number' and know all the square numbers associated with numbers 1 to 144	

Year 4 Objectives : Number 7

MULTIPLICATION AND DIVISION

Objective 19: Solve problems involving multiplying and dividing including using the distributive law to multiply two digits by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

Solve word problems involving multiplication with numbers up to 1000

Solve word problems involving division with numbers up to 1000

Use the distributive law to solve problems, eg. $39 \times 7 = 30 \times 7 + 9 \times 7$

Use the associative law to solve problems, eg. $(2 \times 3) \times 4 = 2 \times (3 \times 4)$

Solve mental and written calculations, eg. $2 \times 6 \times 5 = 10 \times 6 = 60$

Solve a range of two-step problems, choosing the appropriate operation

Year 4 Objectives : Number 8

FRACTIONS	
Objective 20: Recognise and show, using diagrams, families of common equivalent fractions with denominators up to and including 12	
Know all the equivalent fractions of $\frac{1}{2}$ up to and including the denominator 12	*1
Know all the equivalent fractions of $\frac{1}{4}$ up to and including the denominator 12	
Know all the equivalent fractions of $\frac{3}{4}$ up to and including the denominator 12	*2
Know all the equivalent fractions of $\frac{1}{3}$ up to and including the denominator 12	*3
Know all the equivalent fractions of $\frac{2}{3}$ up to and including the denominator 12	*4
Objective 21: Write equivalent fraction of a fraction given the denominator or numerator	
Write the equivalent fraction when given the denominator	
Write the equivalent fraction when given the numerator	

FRACTIONS	
Objective 22: Move up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	
Count from $\frac{1}{100}$ to $\frac{99}{100}$	
Objective 23: 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	
Objective 24: Recognise fractions in their simplest form	
Reduce any fraction with a denominator of up to 12 to its simplest form	
Objective 25: Add and subtract 2 fractions with the same denominator	
Add two fractions with a denominator of 4, 5, 6, 10 where the answer is less than 1 whole	*1
Subtract any two fractions with a denominator of 4, 5, 6, 10	*2

Year 4 Objectives : Number 9

DECIMALS

Objective 26: Recognise and write decimal equivalents of any number of tenths and hundredths

Know that $\frac{1}{10}$ is 0.1 *1

Know that $\frac{6}{10}$ is 0.6

Know that 0.01 is $\frac{1}{100}$ *2

Know that $\frac{3}{100}$ is 0.03

Objective 27: Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$

Know that $\frac{1}{2}$ is 0.5

Know that $\frac{1}{4}$ is 0.25

Know that $\frac{3}{4}$ is 0.75

Objective 28: Find the effect of dividing a 1 or 2-digit number by 10 and 100; identify the value of the digits in the answer as ones, tenths and hundredths

Divide any 2-digit number by 10 and express answer in terms of tenths *1

Divide any 2-digit number by 100 and express answer in terms of tenths and hundredths *2

DECIMALS

Objective 29: Estimate, compare and calculate different measures, including money in pounds and pence

Carry out simple problems involving money, length, weight, and time

Objective 30: Compare numbers with the same number of decimal places up to 2 decimal places

Given 3 numbers with one decimal place, eg. 34.2; 45.7; 12.8; work out the smallest and largest number and put them in order *1

Given 3 numbers with two decimal places, eg. 15.67; 19.56; 12.78; work out the smallest and largest number and put them in order *2

Given a set of numbers with either 1 or 2 decimal places put them in order of either largest first or smallest first *3