

End of Year 3 Maths Expectations



1. Number and place value

- a. Can read and write numbers to at least 100 and extend to 1000 in numerals and words
- b. Can find 10 more or 10 less than a given number up to 100 and extend to 1000
- c. Can find 100 more or 100 less than a given number up to 1000
- d. Can understand the place value of each digit in a two-digit and three-digit number
- e. Can represent two-digit and three-digit numbers using different representations including the number line, base 10 apparatus etc
- f. Can compare and order numbers up to 100 and extend to 1000 sometimes using the $<$, $>$ and $=$ signs correctly
- g. Can solve problems using place value and number facts

2. Number - addition, subtraction (mental and written)

- a. Can fluently recall all addition and subtraction facts within 20
- b. Can add three single digit numbers mentally
- c. Can add a two-digit and extend to three-digit number and ones mentally
- d. Can add a two digit and extend to three-digit number and tens mentally
- e. Can subtract three single digit numbers mentally
- f. Can subtract a two digit and extend to three-digit number and ones mentally
- g. Can subtract a two digit and extend to three-digit number and tens mentally
- h. Can add two-digit and extend to three-digit numbers using the expanded column method (not bridging ten)
- i. Can add two-digit and extend to three-digit numbers using the expanded column method (bridging ten)
- j. Can subtract two-digit numbers using the expanded column method (not bridging ten)
- k. Can subtract two-digit numbers using the expanded column method (bridging ten)
- l. Can use knowledge of inverse operations to check answers to addition and subtraction calculations.
- m. Can solve problems including missing number problems involving addition
- n. Can solve problems including missing number problems involving subtraction

3. Number - multiplication and division (mental and written)

- a. Can recall and use multiplication and division facts for the 2, 5 and 10 times tables
- b. Can recall and use multiplication and division facts for the 3 times table
- c. Can write mathematical statements for known multiplication and division facts using \times , \div and $=$
- d. Can multiply two-digit by one-digit numbers using informal methods such as arrays, base 10 apparatus etc
- e. Can multiply two digit by one digit numbers using partitioning and known facts (e.g. $24 \times 3 = 3 \times 4 = 12$ and $3 \times 20 = 60$. $60 + 12 = 72$)
- f. Can divide two-digit by one-digit numbers using informal methods such as known facts, arrays and number lines (repeated subtraction)
- g. Can solve missing number problems involving multiplication and division
- h. Can solve problems involving multiplication and division

4. Number - fractions (including decimals and percentages)

- a. Can understand the relationship between fractions, division and multiplication facts
- b. Can understand that the denominator denotes the number of equal parts the whole is divided into
- c. Can understand that the numerator denotes the number of equal parts represented
- d. Can place $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ etc on a number line
- e. Can find $\frac{1}{2}$, $\frac{1}{4}$ or $\frac{3}{4}$ of a shape or set of objects
- f. Can place $\frac{1}{3}$, $1\frac{1}{3}$, $1\frac{2}{3}$, 2, $2\frac{1}{3}$ etc on a number line
- g. Can understand $\frac{1}{3}$ represents one of three equal parts of one whole
- h. Can find $\frac{1}{3}$ of a shape and set of objects
- i. Can recognise that tenths arise from dividing an object into ten equal parts
- j. Can find one tenth of a shape or set of objects by dividing by 10
- k. Can recognise and show using diagrams, counters or paper folding equivalent fractions with small denominators e.g $\frac{1}{3}$ and $\frac{2}{6}$
- l. Can solve problems involving fractions

5. Measures

- a. Can understand the relationship between mm, cm, m and g, kg and ml, l.
- b. Can compare and order lengths using mm, cm and m
- c. Can measure lengths using appropriate measuring equipment and record using the correct unit
- d. Can compare and order mass using g and kg
- e. Can measure mass using appropriate measuring equipment and record using the correct unit
- f. Can compare and order capacity using ml and l
- g. Can measure capacities using appropriate measuring equipment and record using the correct unit
- h. Can calculate the value of the increment on a simple scale given some information e.g 0 to 100 in four increments equals 25
- i. Can add amounts of money within £1 and extend beyond £1
- j. Can subtract an amount of money within £1 and extend to beyond £1
- k. Can combine amounts and calculate change
- l. Can tell the time to the nearest minute
- m. Can tell the time on a 24 hour digital clock
- n. Can calculate how long an event takes given the start and finish time e.g bus journey
- o. Can calculate start/finish time given start/finish time e.g time a film finishes given start time

6. Geometry - properties of shape
a. Can recognise and describe the properties of 2D and 3D shapes using appropriate vocabulary (including in different orientations)
b. Can compare and sort 2D and 3D shapes according to their geometric properties
c. Can identify horizontal lines of symmetry in 2D shapes
d. Can identify right angles
e. Can identify whether angles are greater or less than a right angle
f. Can recognise angles as a property of a shape e.g right angles in a square
g. Can solve problems and reason about shape
7. Geometry - position and direction
8. Statistics
a. Can interpret pictograms where one symbol represents more than one
b. Can interpret bar charts where the scale goes up in twos or fives or tens
c. Can understand how to present data in a simple pictogram, bar chart or table in an appropriate context
d. Can respond to questions such as 'How many more?' and 'How many fewer?'
e. Can solve one step problems such as adding amounts e.g what is the total sum of money collected across a week?
f. Can solve two step problems e.g how much more do the class need to collect to reach their total?