

# Expectations in Maths – Year Two – Mengham Infants

## Number and place value

1. count in steps of 2, 3, and 5 from 0, forward and backward
2. count in tens from any number, forward and backward
3. recognise the place value of each digit in a two-digit number (tens, ones)
4. compare and order numbers from 0 up to 100
5. identify, represent and estimate numbers using different representations, including the number line
6. use  $<$ ,  $>$  and  $=$  signs correctly
7. read and write numbers to at least 100 in numerals
8. read and write numbers to at least 100 in words
9. use place value and number facts to solve problems

☞ Count reliably up to 1000 in 2s, 5s and 10s ☞ Count on and back in multiples of 4, 8, 25 and 0 and 100 from any given number to beyond 1000

## Addition and subtraction

10. solve problems with addition and subtraction:
  - using concrete objects and pictorial representations, including those involving numbers, quantities and measures
  - applying their increasing knowledge of mental and written methods
11. recall and use addition and subtraction facts to 20 fluently
12. derive and use related facts up to 100 eg  $30+70$
13. know 10 more / less
14. add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers
15. show that addition of two numbers can be done in any order (commutative) and subtraction cannot
16. recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems

☞ Apply knowledge of number up to 100 to solve one-step problems involving  $+$  and  $-$  ☞  $+$  and  $-$  two 2-digit and numbers to 100 ☞ Use appropriate strategy to  $+$  and  $-$  across 100

## Multiplication and division

17. recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
18. calculate and write mathematical statements for multiplication and division within the multiplication tables, using multiplication ( $\times$ ), division ( $\div$ ) and equals ( $=$ ) signs
19. show that multiplication of two numbers can be done in any order (commutative) and division cannot
20. recognise and use inverse
21. solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

☞ Apply knowledge of number up to 100 to solve a one-step problem involving simple  $\times$  and  $\div$

## Fractions

22. recognise, find, name and write fractions  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  of a length, shape, set of objects or quantity
23. recognise equivalence of simple fractions eg  $\frac{2}{4}$  is  $\frac{1}{2}$

☞ Add and subtract fractions with a common denominator

## Measurement

24. choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ( $^{\circ}\text{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
25. compare and order lengths, mass, volume/capacity and record the results using  $>$ ,  $<$  and  $=$
26. recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
27. find different combinations of coins that equal the same amounts of money
28. solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
29. compare and sequence intervals of time
30. tell the time to five minutes, including quarter past/to the hour
31. write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
32. know the number of minutes in an hour and the number of hours in a day

☞ Apply knowledge of addition and subtraction to pay for items, up to £10, within a problem solving context ☞ Measure, compare, add and subtract using common metric measure

## Geometry: properties of shapes

33. identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
34. identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
35. identify 2-D shapes on the surface of 3-D shapes, [eg a circle on a cylinder and a triangle on a pyramid]
36. compare and sort common 2-D and 3-D shapes and everyday objects

## Geometry: position and direction

37. order and arrange combinations of mathematics objects in patterns and sequences
38. use mathematical vocabulary to describe position, direction and movement in a straight line
39. distinguish between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anticlockwise)

☞ Know about right angles and where they can be seen in the environment

## Statistics

40. construct simple pictograms, tally charts, block diagrams and simple tables
41. interpret simple pictograms, tally charts, block diagrams and simple tables
42. ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
43. ask and answer questions about totalling and comparing categorical data