



Maths in Year 5

Maths in Year 4



At Hunslet Moor we believe that all children should be given the opportunity to achieve their true potential, taking into account the importance of meeting the needs of each individual child's learning, and their social and emotional needs.

On a daily basis, children, regardless of their ability, in KS1 and KS2 are provided with opportunities to become more fluent in their learning, to reason mathematically and to solve a range of problems.

Maths Working Wall

Maths

Vocabulary ★

fraction

numerator → $\frac{1}{2} = \frac{2}{4}$ equivalent

denominator → $\frac{2}{4}$

unit fraction non-unit fraction

increase addition

sum + more

add plus together

3 Times Table

3 × 1 = 3
3 × 2 = 6
3 × 3 = 9
3 × 4 = 12
3 × 5 = 15
3 × 6 = 18
3 × 7 = 21
3 × 8 = 24
3 × 9 = 27
3 × 10 = 30
3 × 11 = 33
3 × 12 = 36

4 Times Table

4 × 1 = 4
4 × 2 = 8
4 × 3 = 12
4 × 4 = 16
4 × 5 = 20
4 × 6 = 24
4 × 7 = 28
4 × 8 = 32
4 × 9 = 36
4 × 10 = 40
4 × 11 = 44
4 × 12 = 48

Different representations ★

Bar modelling: EQUIVALENCE

$\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$

Adding fractions:

$\frac{5}{6} + \frac{3}{6} = \frac{8}{6} (\frac{2}{6})$ Denominator stays the same!

subtract reduce few

difference between — less

decrease subtract minus

6 Times Table

6 × 1 = 6
6 × 2 = 12
6 × 3 = 18
6 × 4 = 24
6 × 5 = 30
6 × 6 = 36
6 × 7 = 42
6 × 8 = 48
6 × 9 = 54
6 × 10 = 60
6 × 11 = 66
6 × 12 = 72

7 Times Table

7 × 1 = 7
7 × 2 = 14
7 × 3 = 21
7 × 4 = 28
7 × 5 = 35
7 × 6 = 42
7 × 7 = 49
7 × 8 = 56
7 × 9 = 63
7 × 10 = 70
7 × 11 = 77
7 × 12 = 84

8 Times Table

8 × 1 = 8
8 × 2 = 16
8 × 3 = 24
8 × 4 = 32
8 × 5 = 40
8 × 6 = 48
8 × 7 = 56
8 × 8 = 64
8 × 9 = 72
8 × 10 = 80
8 × 11 = 88
8 × 12 = 96

groups of product

lots of X times

times by multiply

9 Times Table

9 × 1 = 9
9 × 2 = 18
9 × 3 = 27
9 × 4 = 36
9 × 5 = 45
9 × 6 = 54
9 × 7 = 63
9 × 8 = 72
9 × 9 = 81
9 × 10 = 90
9 × 11 = 99
9 × 12 = 108

Subtracting fractions

$\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$

11 Times Table

11 × 1 = 11
11 × 2 = 22
11 × 3 = 33
11 × 4 = 44
11 × 5 = 55
11 × 6 = 66
11 × 7 = 77
11 × 8 = 88
11 × 9 = 99
11 × 10 = 110
11 × 11 = 121
11 × 12 = 132

12 Times Table

12 × 1 = 12
12 × 2 = 24
12 × 3 = 36
12 × 4 = 48
12 × 5 = 60
12 × 6 = 72
12 × 7 = 84
12 × 8 = 96
12 × 9 = 108
12 × 10 = 120
12 × 11 = 132
12 × 12 = 144

share equally divided by

divide into ÷ share

divisible group

Year 5



Which challenge:

True or false: Square numbers always have an odd number of factors.

26

25 = 5 x 5

25 | 1

5

81

1 | 81

3 | 17

64

49

1, 7, 49 | 3 factors

81

1, 3, 9, 17, 81 | 5 factors

16

1 | 16

2 | 8

1, 2, 4, 16, 8 | 3 factors

8

• They will always have an odd number because square number multiply some of the number by those like 49 = 7 x 7, 3 factors

22.01.24

L.O. To multiply a 2-digit number by a 1-digit number. (✓)

Last ✓
Partition the calculation.
 $36 \times 4 = 30 + 24 = 144$

Last
 $100 \times 420 = 4200$

Last
Draw an array to show
 $9 \times 6 = 3 \times 6 + 6 \times 6$

Last
 $8 \times 5 \times 2 = 80$

0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0

Memory grids

We use memory grids as a way of revisiting our previous learning. This helps us to embed and retain our mathematical knowledge.

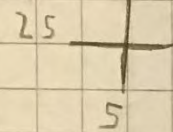
Year 5

Rich challenge:

True or false: Square numbers always have an odd number of factors.

25

$$25 = 5 \times 5$$



49
1, 7, 49 | 3 factors

81
1, 3, 9, 27, 81 | 5 factors

16
1, 2, 4, 16, 8 | 5 factors

81
1, 3, 9, 27, 81

64

9

8

• They will always have an odd number because square numbers multiply some of the number by themselves like $49 = 7 \times 7$, 3 factors



Extended Learning Challenges

We use Extended Learning Challenges to provide reasoning opportunities for pupils to embed their learning further and deepen their understanding.

Year 5



Monday Part B

a) $\frac{1}{4} + \frac{1}{8} = \frac{4}{8} + \frac{1}{8}$

b) $\frac{1}{3} + \frac{5}{9} = \frac{12}{9} + \frac{5}{9}$

c) $\frac{5}{6} + \frac{1}{12} = \frac{10}{12} + \frac{1}{12}$

A $\frac{2}{4} + \frac{4}{20} = \frac{14}{20} = \frac{7}{10}$ B $\frac{4}{18} + \frac{2}{6} = \frac{8}{18} = \frac{4}{9}$

C $\frac{1}{3} + \frac{5}{15} = \frac{10}{15} = \frac{2}{3}$ D $\frac{4}{21} + \frac{1}{7} = \frac{4}{21} + \frac{3}{21} = \frac{7}{21} = \frac{1}{3}$

The image shows a student's handwritten work on grid paper. On the left, there are three fraction addition problems labeled a), b), and c). Below these are two rows of problems labeled A, B, C, and D, each with a boxed answer and a simplified fraction. On the right side of the grid, there are three horizontal bars representing fraction models. The first bar is divided into 8 equal parts, with 4 parts shaded and labeled 4/8. The second bar is divided into 9 equal parts, with 12 parts shaded (representing 12/9) and 5 parts shaded (representing 5/9), with a total of 17 parts shaded and labeled 17/9. The third bar is divided into 12 equal parts, with 10 parts shaded and 1 part shaded, with a total of 11 parts shaded and labeled 11/12. Below the bars are four pairs of calculations. Each pair shows a fraction addition problem with a circled multiplier above it, and the result is shown as a fraction with a circled multiplier below it. For example, the first pair shows 2/4 + 4/20 = 14/20, with a circled '5' above the 4 and a circled '5' below the 20, resulting in 7/10.

A variety of models and images

We use a range of concrete, pictorial and written calculations to apply our understanding of mathematical concepts.