# Fractions Mat

## Working towards Year 5

### Recognise, Name and Write Fractions

Recognise mixed numbers and improper fractions <2 and convert from one form to the other

$$\frac{5}{4} = 1\frac{1}{4}$$

Read and write decimal numbers as fractions

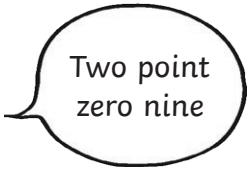
$$1.1 = 1\frac{1}{10}$$

Recognise and use hundredth and relate them decimal equivalents

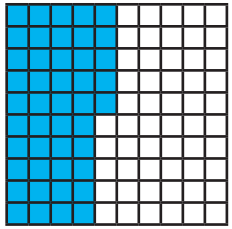
$$0.13 = \frac{13}{100}$$

Read and write numbers with up to three decimal places

Read out loud 2.09



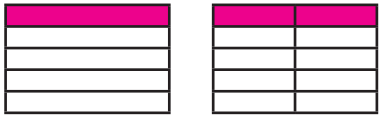

Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'



This shows 45%

### Equivalence

Identify, name and write equivalent fractions of given simple fractions, represented visually



$$\frac{1}{5} = \frac{2}{10}$$

### Solve Problems

Solve problems involving number up to two decimal places

| | | |
|---|---|---|
| | 1.48 | |
| 0.91 | | 0.57 |
| 0.52 | 0.39 | 0.18 |

Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 and 25

A coat costs £80 at full price, but is being offered at 50% of the full price in a sale.
How much does the coat cost now?

**£40**

### Calculate

Add and subtract fractions with the same denominator and denominators that are multiples of the same number

$$\frac{1}{8} + \frac{1}{4} = \frac{3}{8} \quad \text{and} \quad \frac{1}{2} - \frac{1}{8} = \frac{3}{8}$$

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

$$\frac{1}{3} \times 2 = \frac{2}{3}$$

### Compare and Order

Compare and order simple fractions whose denominators are all multiples of the same number

$$\frac{3}{8} > \frac{1}{4}$$

Order and compare numbers with up to two decimal places

| | | |
|---|---|---|
| 0.31 | 0.4 | 0.42 |
| smallest | | greatest |

### Rounding

Round decimals with two decimal places to the nearest whole number

1.25 rounds to 1

# Fractions Mat

## Expected Year 5

### Recognise, Name and Write Fractions

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number

$$\frac{5}{4} = 1\frac{1}{4}$$

Read and write decimal numbers as fractions

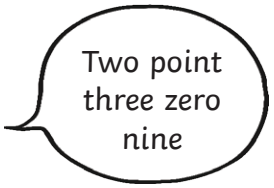
$$1.25 = 1\frac{1}{4}$$

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents

$$0.131 = \frac{131}{1000}$$

Read and write numbers with up to three decimal places

Read out loud 2.309




Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal

$$45\% = 0.45 = \frac{45}{100}$$

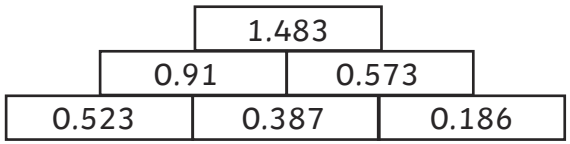
### Equivalence

Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths

$$\frac{2}{5} = \frac{4}{10} = \frac{6}{15} = \frac{8}{20}$$

### Solve Problems

Solve problems involving number up to three decimal places




Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 and 25

A coat costs £80 at full price, but is being offered at 25% of the full price in a sale. How much does the coat cost now?

**£20**

### Calculate

Add and subtract fractions with the same denominator and denominators that are multiples of the same number

$$\frac{5}{8} + \frac{1}{4} = \frac{7}{8} \text{ and } \frac{9}{10} - \frac{1}{2} = \frac{4}{10}$$

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

$$\frac{2}{3} \times 4 = 2\frac{2}{3}$$

### Compare and Order

Compare and order fractions whose denominators are all multiples of the same number

$$\frac{3}{8} > \frac{1}{4}$$

Order and compare numbers with up to three decimal places

| 0.309 | 0.31 | 0.316 |
|---|---|---|

smallest greatest

### Rounding

Round decimals with two decimal places to the nearest whole number and to one decimal place

1.25 rounds to 1 and 1.3

# Fractions Mat

## Greater Depth Year 5

### Recognise, Name and Write Fractions

Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number

$$\frac{3}{5} \times 4 = 2\frac{2}{5}$$

Read and write decimal numbers as fractions

$$1.375 = 1\frac{3}{8}$$

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents

Read and write numbers with up to three decimal places

Read out loud $2\frac{309}{1000}$ as a decimal

Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal

Use simpler equivalent fractions for percentages and decimal:

$$45\% = 0.45 = \frac{9}{20}$$

### Equivalence

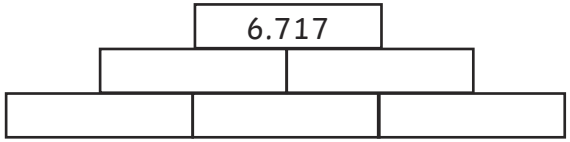
Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths

$$\frac{12}{32} = \frac{6}{16} = \frac{3}{8}$$

### Solve Problems

Solve problems involving number up to three decimal places

Complete this using numbers with three decimal places:




Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 and 25

A coat costs £80 at full price, but is being offered at a 20% discount in a sale?
How much does the coat cost now?

**£64**

### Calculate

Add and subtract fractions with the same denominator and denominators that are multiples of the same number

$\frac{5}{8} + \frac{1}{24} = \_\_$ and $\frac{7}{10} - \frac{3}{5} = \_\_$

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

$\frac{7}{8} \times 5 = \_\_$

### Compare and Order

Compare and order fractions whose denominators are all multiples of the same number

Complete this using numbers with three decimal places:

$\frac{3}{10}$ - $\frac{5}{20}$

Order and compare numbers with up to three decimal places

Order the following numbers:

| | | | | |
|---|---|---|---|---|
| 0.307 | 0.287 | 0.3 | 0.316 | 0.31 |

### Rounding

Round decimals with two decimal places to the nearest whole number and to one decimal place

Can explain why 1.25 rounds to 1 and 1.3