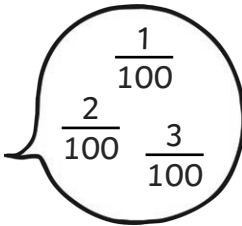


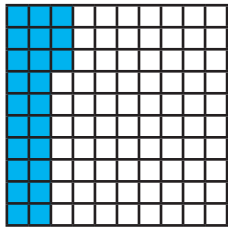
## Recognise, Name and Write Fractions

Count up and down in hundredths

"One hundredth,  
two hundredths,  
three hundredths..."



Recognise that hundredths arise from dividing an object by one hundred



$$\frac{23}{100}$$

## Solve Problems

Solve problems that involve fractions to calculate quantities, and fractions to divide quantities

Use the symbols  $<$ ,  $=$  or  $>$  to compare these equations.

$$\frac{1}{3} \text{ of } 24 > \frac{1}{4} \text{ of } 28$$

Solve simple measure and money problems involving fractions and decimals to two decimal places

A piece of wood is 1m long. It is cut in half. How long will be each piece?

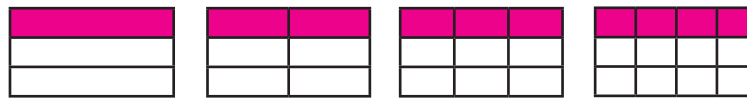
$$0.5\text{m or } \frac{1}{2} \text{ m}$$

# Fractions Mat

## Working towards Year 4

### Equivalence

Recognise and show, using diagrams, families of common equivalent



$$\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$$

Recognise and write decimal equivalents of any number of tenths

$$\frac{2}{10} = 0.2$$

Recognise and write decimal equivalents to

$$\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$$

$$\frac{1}{4} = 0.25, \quad \frac{1}{2} = 0.5, \quad \frac{3}{4} = 0.75,$$

### Calculate

Add and subtract fractions with the same denominator

$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5} \quad \frac{4}{5} - \frac{1}{5} = \frac{3}{5}$$

Find the effect of dividing a one-digit number by 10, identifying the value of the digits in the answer as ones, tens and hundredths

$$2 \div 10 = 0.2$$

↑  
tenth

### Compare and Order

Compare numbers with one decimal place

$$0.6 < 0.9$$

### Rounding

Round decimals with one decimal place to the nearest whole number

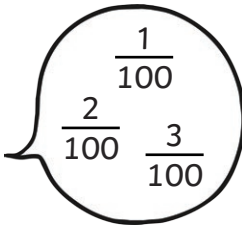
$$1.5 \text{ rounds to } 2$$

$$5.4 \text{ rounds to } 5$$

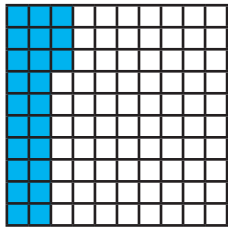
## Recognise, Name and Write Fractions

Count up and down in hundredths

"One hundredth,  
two hundredths,  
three hundredths..."

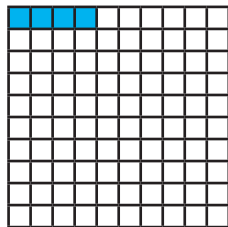
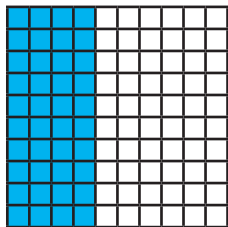


Recognise that hundredths arise from dividing an object by one hundred



$$\frac{23}{100}$$

...and dividing tenths by ten



$$\frac{4}{10} \div 10 = \frac{4}{100}$$

## Compare and Order

Compare numbers with the same number of decimal places

$$0.6 < 0.9$$

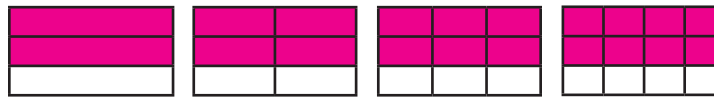
$$0.45 > 0.43$$

# Fractions Mat

## Expected Year 4

### Equivalence

Recognise and show, using diagrams, families of common equivalent



$$\frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12}$$

Recognise and write decimal equivalents of any number of tenths or hundredths

$$\frac{2}{10} = 0.2 \quad \text{and} \quad \frac{23}{100} = 0.23$$

Recognise and write decimal equivalents to

$$\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$$

$$\frac{1}{4} = 0.25, \quad \frac{1}{2} = 0.5, \quad \frac{3}{4} = 0.75$$

### Rounding

Round decimals with one decimal place to the nearest whole number

$$1.5 \text{ rounds to } 2$$

$$5.4 \text{ rounds to } 5$$

### Calculate

Add and subtract fractions with the same denominator

$$\frac{5}{16} + \frac{4}{16} = \frac{9}{16} \quad \frac{11}{16} - \frac{5}{16} = \frac{6}{16}$$

Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tens and hundredths

$$23 \div 100 = 0.23$$

tenth   hundredth

### Solve Problems

Solve problems that involve increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number

Use the symbols  $<$ ,  $=$  or  $>$  to compare these equations.

$$\frac{2}{3} \text{ of } 24 > \frac{3}{4} \text{ of } 28$$

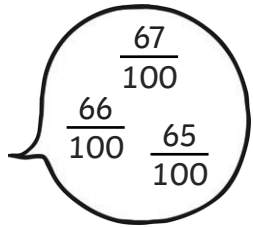
Solve simple measure and money problems involving fractions and decimals to two decimal places

2 litres of juice costs £1.30.  
How much does one litre cost?

**£0.65 or 65p**

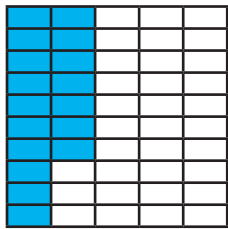
## Recognise, Name and Write Fractions

Count up and down in hundredths



Apply your understanding that hundredths arise from dividing an object by one hundred

How does this diagram show  $\frac{34}{100}$  ?



...and dividing tenths by ten

$$\frac{7}{10} \div 10 = \frac{7}{100}$$

Think how this be demonstrated using a metre ruler



## Rounding

Round decimals with one decimal place to the nearest whole number

Explain why 1.5 rounds to 2

# Fractions Mat

## Greater Depth Year 4

### Equivalence

Recognise families of common equivalent

Write equivalent fractions to  $\frac{3}{5}$

$$\frac{3}{5} = \frac{6}{10} = \frac{9}{15} = \frac{12}{20}$$

Recognise and write decimal equivalents of any number of tenths or hundredths

$$\frac{2}{10} = 0.2 \quad \text{and} \quad \frac{23}{100} = 0.23$$

Recognise and write decimal equivalents to

$$\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$$

using them in real life examples

$$\frac{3}{4} \text{ of } 1\text{kg} = 0.75\text{kg}$$

### Compare and Order

Compare numbers with the same number of decimal places, explaining your answer:

Why is  $0.39 > 0.33$ ?

**It has six hundredths more than 0.33**

### Calculate

Add and subtract fractions with the same denominator, using knowledge of common equivalents to write the answers in a simpler form

$$\frac{5}{16} + \frac{4}{16} + \frac{3}{16} = \frac{12}{16} = \frac{3}{4}$$

$$\frac{11}{16} - \frac{5}{16} = \frac{6}{16} = \frac{3}{8}$$

Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tens and hundredths

Explain what happens to the tens and ones when  $23 \div 100 = 0.23$ .

### Solve Problems

Solve problems that involve increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number

Explain why  $\frac{7}{8}$  of 24 =  $\frac{3}{4}$  of 28

Solve simple measure and money problems involving fractions and decimals to two decimal places

2l of lemonade costs £1.24. How much lemonade is in  $\frac{3}{4}$  of the bottle and how much is it worth?

**1.5l and £0.93**