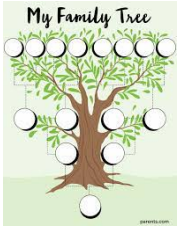


# Home Learning Term 4

Complete one task each week and if you would like to you can upload a picture to Google Classroom.


**Science – Evolution and Inheritance**

- Find out about your family tree – where do your relatives come from? What did they do as a job?
- Who are you more similar or different to in your family? This could be from eye colour to hair colour to being double jointed or not. Present as you wish!
- Make a poster or leaflet about Charles Darwin.



**Art**


- Compare Kandinsky to Salvador Dali or Frida Kahlo or Banksy or Yayoi Kusama. How are the artists different or similar? What media do they use? What is the focus of their artwork?
- You could try and recreate a Kandinsky artwork in the style of one of the other artists we have looked at so far in Year 5.
- Why did Kandinsky paint circles? Could he have used another shape? What inspired Kandinsky to paint circles? How does Kandinsky link to any of our other topics?



**Mindfulness**

How do I fill my bucket?


Think of all the things that fill you up and make you feel happy. This could be family, friends, or a game you love playing. Can you fill a bucket with these?



Perhaps, you could think about how you could fill other people's buckets.

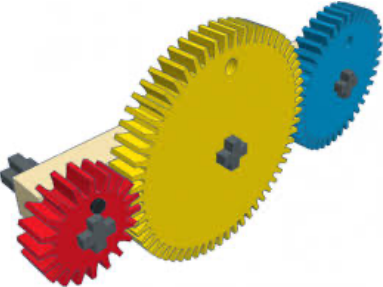
**History**

- During WW1, propaganda posters were for multiple purposes. Design a propaganda poster to either recruit soldiers, raising money or boosting morale.
- What did children do during WW1? How did they help? Did they have jobs – if so, what did they do? What was school life like for them?
- Compare school life during WW1 to today – you can present this as a Venn diagram.



**Science**

- Why are pulleys and gears used? Who created the pulley system? Why? Has the pulley system changed since it was first invented?



**Maths and Spelling**

**(This should be completed each week)**

- Ed Shed - <https://www.edshed.com/en-gb/login/school>  
Have a go at the activities under Autumn 2 – can you work on the topic we are learning in class? Have a go at the silent letter words.
- TTRS - <https://play.ttrockstars.com/author/school/student/31618>  
Can you improve your speed? Can you get to Rock Hero?

**English – Persuasive writing**

Choose a topic below and either write letter or a speech to persuade someone to help or change their ways:

- Save the rainforest!
- Should you learn another language?
- Which animal is best?
- Every child should play a team sport.
- Fast food is better than home-cooked food.
- Or you might have your own idea!

**Geography**

- Create a fact file about Christopher Columbus.
- Write a weather report for the USA or Canada. What weather can people expect in the different states? Use a map of the USA/Canada and the weather symbols





# Decimals and Percentages

## Home Learning



# Decimals to 2 Decimal Places

1) What numbers are between 12.89 and 13.12? List them.

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2) Draw a part-whole model to partition 6.59.

3) If 10.36 is the answer, what could the question be?

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4) 0.37 has 370 hundredths. True or false? Explain your thinking.

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5) Draw a place value chart to partition 0.43.

## Extra Challenge

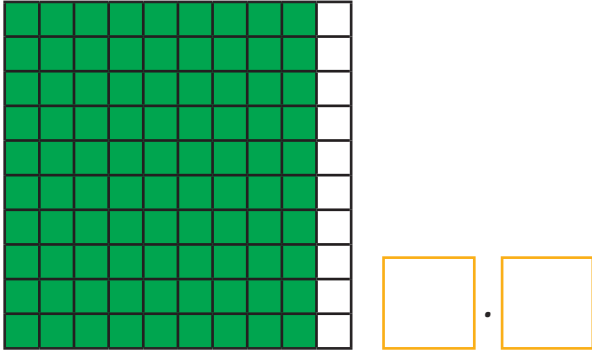
On another piece of paper or on the back of this sheet, create a decimals word problem for a friend to answer. Use the terms below.

- hundredths
- tenths
- partition
- place value chart



# Decimals as Fractions (1)

- 1) What decimal number fraction is represented by the shaded squares?



Can you write this number as a fraction?

- 2) Convert the expanded fractions to decimals.

a.  $4 + \frac{3}{10} + \frac{2}{100}$

b.  $9 + \frac{1}{10} + \frac{8}{100}$

- 3) Hena is converting fractions to decimals. She says 1.89 is equal to  $\frac{189}{100}$ . Is she correct? Why/why not?



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- 4) If 0.25 is the answer, what could the question be?

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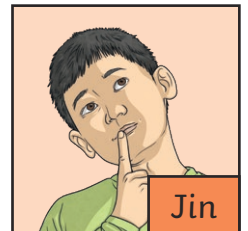
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## Extra Challenge

Create a 'Decimals as Fractions' challenge for your teacher to answer.



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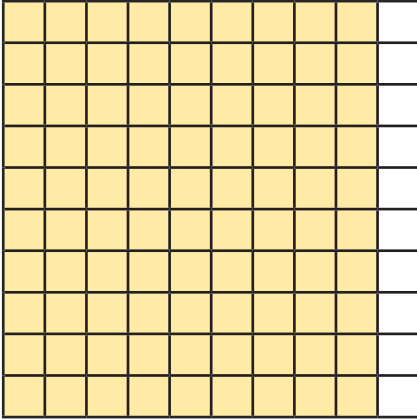
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# Decimals as Fractions (2)

- 1) What fraction is represented by the shaded squares?  
Convert the fraction to a decimal.



$$\frac{\square}{10} = \frac{\square}{100} = \square \cdot \square$$

- 2) Convert the decimals to expanded fractions.

- a) 3.92  
b) 1.05

- 3) Kai is converting decimals to fractions. He says 0.26 is equal to  $\frac{26}{10}$ . Is he correct? Why / why not?

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- 4) If  $\frac{75}{100}$  is the answer, what could the question be?

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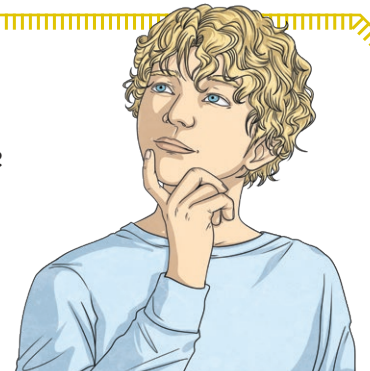
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## Extra Challenge

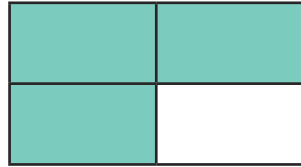
Create a word problem for a friend to answer. It must include the following terms:

- fraction
- equal
- decimal
- convert

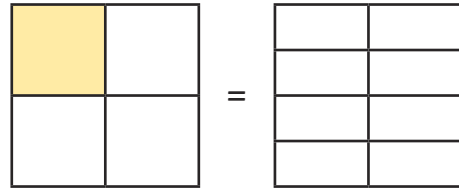


# Equivalent Fractions and Decimals

1) What fraction and decimal is shown in this image?




2) Shade the equivalent fraction:



3) Find the equivalent fractions below:

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

$$\frac{\square}{5} = \frac{6}{10}$$


$$\frac{4}{7} = \frac{\square}{21}$$

4) Convert this improper fraction to a mixed number and decimal.

$$\frac{18}{10}$$


5) Ellie-Mae and Anton are thinking about fractions and decimals.

**Ellie-Mae**  I think  $0.25 = \frac{25}{100}$

I think  $0.25 = \frac{4}{16}$  **Anton** 

Who is correct? Explain how you know.

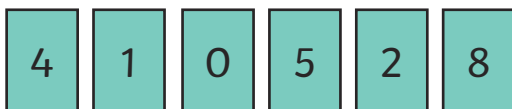
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## Extra Challenge

Using these digit cards, complete the number statement below. You may use the digit cards more than once. **Find at least 3 solutions.**




# Thousandths as Fractions

- 1) What fraction is represented by the place value counters?



- 2) Can you write this decimal number as a fraction?

0.345

- 3) Circle the odd one out.

$$\frac{243}{1000}$$

$$\frac{2}{10} + \frac{4}{100} + \frac{3}{1000}$$

$$\frac{4}{10} + \frac{2}{100} + \frac{3}{1000}$$

- 4) What is Sara's fraction?

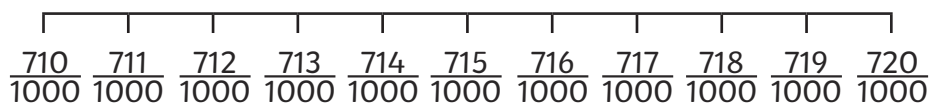
The fraction I am thinking of has a denominator of 1000. As a decimal, it is 0.287.



- 5) Work out the answer to the calculation as a fraction and a decimal.

$$4 + \frac{2}{10} + \frac{3}{100} + \frac{6}{1000} =$$

- 6)  $\frac{712}{1000}$  comes between which 2 fractions on a fractional number line?



## Challenge Question

$\frac{35}{1000}$  is the answer to a word problem related to fractions. What could the question be?

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# Thousandths as Decimals

1) What decimal numbers are represented below?

$$\frac{341}{1000}$$



2) Circle the odd one out:

**0.243**

$$\frac{2}{10} + \frac{4}{100} + \frac{3}{1000}$$

$$0.4 + 0.02 + 0.003$$

4) Work out the answer to the calculation as a fraction and a decimal.

$$9 + \frac{1}{10} + \frac{8}{100} + \frac{7}{1000}$$

3) Sara says, 'The number I am thinking of has 3 tenths, 9 hundredths and 2 thousandths. It is less than one.'

What is her number?

5) 0.621 comes between which 2 numbers on the number line?

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## Extra Challenge

2.752 is the answer.

What could the question be?

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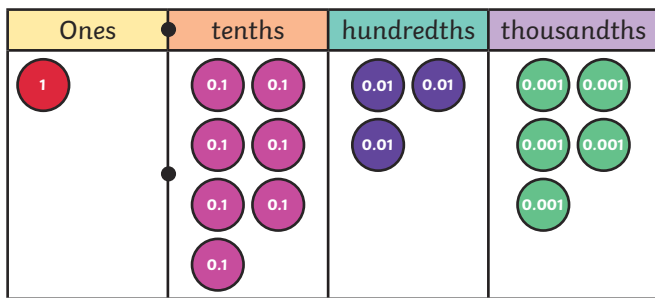
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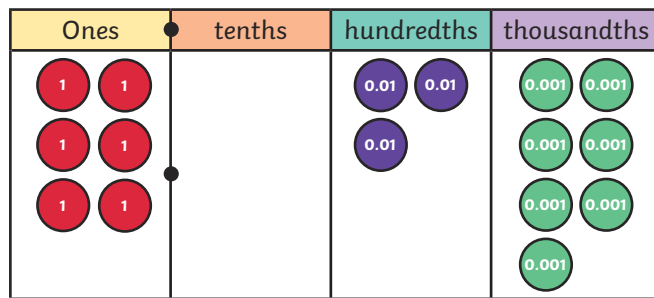


# Thousandths on a Place Value Chart

1) What number is shown on this place value chart?




2) What number is shown on this place value chart?




3) Which number does this statement describe?

**There are 6 ones, 2 tenths, 6 hundredths and 1 thousandth.**

4) How can we partition  $\frac{23}{1000}$ ? Draw your answer on a place value chart.

5)  $\frac{1}{1000}$  is the answer. What could the question be?

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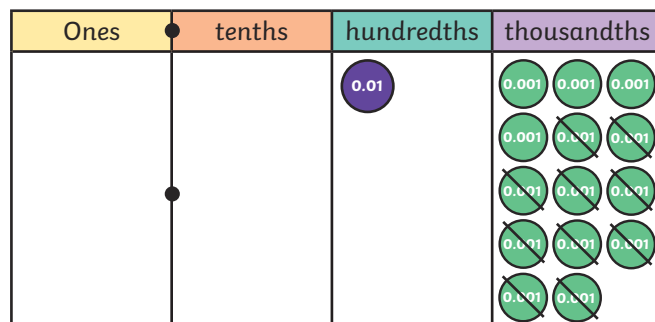
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## Extra Challenge

Write a statement about the number on the place value chart.




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# Compare Decimals

- 1) Can you name a number with 3 decimal places which is greater than 123.321?

- 2) Can you name a number with 3 decimal places which is less than 123.321?

- 3) What decimal number is equal to six ones, five tenths, three hundredths and four thousandths?

- 4) Can you write the missing symbols in the spaces?

Choose from:  $<$ ,  $>$ ,  $=$

2.123  2.321

2.123  2.123

2.321  2.312

2.231  2.132

- 5) Five ones, two tenths, seven hundredths and four thousandths is greater than this decimal number...

- 6) 2.987 is the answer. What could the question be?

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**Create a comparing decimals word problem for a friend to answer.**

**Extra Challenge**

It must contain the following terms:

- greater than
- compare
- decimals

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# Order Decimals with up to 3 Decimal Places

1) Write numerals to compare the decimal numbers and then write the numbers in **ascending** order.

16.001	Tens	Ones	• tenths	hundredths	thousandths
			•		
6.101	Tens	Ones	• tenths	hundredths	thousandths
			•		
16.111	Tens	Ones	• tenths	hundredths	thousandths
			•		
6.111	Tens	Ones	• tenths	hundredths	thousandths
			•		

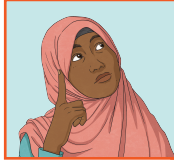
2) Draw Counters to compare the decimal numbers and then write the numbers in **descending** order.

13.282	Tens	Ones	• tenths	hundredths	thousandths
			•		
13.182	Tens	Ones	• tenths	hundredths	thousandths
			•		
12.182	Tens	Ones	• tenths	hundredths	thousandths
			•		
12.085	Tens	Ones	• tenths	hundredths	thousandths
			•		

# Order Decimals with up to 3 Decimal Places

3) Hena has been measuring the lengths of different ribbons.

Ribbon	Length
red	27.101cm
blue	43.012cm
yellow	43.302cm
green	31.511cm



I have written my results in ascending order.  
27.101cm, 43.012cm, 43.302cm, 31.511cm

Hena is incorrect. Explain her error and show how she should have ordered the lengths of ribbon. Write numerals in the place value charts to compare the decimal numbers.

Tens	Ones	tenths	hundredths	thousandths
Tens	Ones	tenths	hundredths	thousandths
Tens	Ones	tenths	hundredths	thousandths
Tens	Ones	tenths	hundredths	thousandths

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Write the numbers in ascending order.

\_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

# Round to the Nearest Whole Number


1) Write the decimal numbers in the correct places in the diagram below.

4.9   4.4   4.8   4.3   4.1   4.5   4.7   4.2   4.6

Rounds Down to 4      Rounds Up to 5

2) Anton is thinking of a number with 1 decimal place. What could Anton's number be?


**Anton**



When rounded to the nearest whole number, the answer is **9**. The tenths digit is an even number.

3) Mia is thinking of a number with 2 decimal places. What could Mia's number be?


**Mia**



When rounded to the nearest **whole number**, the answer is 17. The tenths digit is an **odd** number. The hundredths digit is an **even** number. When rounded to the nearest **tenth**, the answer is 16.5.

4) Sara is thinking of a number with 3 decimal places. What could Sara's number be?

**Sara**



When rounded to the nearest **whole number**, the answer is 5. The tenths digit is an **even** number  $< 4$ . The hundredths digit is an **odd** number. The thousandths digit is  $> 7$ . When rounded to the nearest **tenth**, the answer is 5.1.

# Round to 1 Decimal Place

1) Round 3.39 to 1 decimal place.

2) Round 2.41 to 1 decimal place.

3) Round 22.38 to 1 decimal place.

4) Round 86.44 to 1 decimal place.

5) Ruby is rounding decimals. She says,

When I round my number to 1 decimal place, the answer is 22.6.

What could her number be?



6) Anton is rounding decimals. He says,

When I round my number to 1 decimal place, the answer is 83.9.

What could his number be?



7) The answer to a rounding question is 88.5. What could the question be?

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## Extra Challenge

Create a rounding challenge for a friend. You must ask them to use a number line to complete the rounding challenge!

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# Understand Percentages

1) Shade the hundred grids or bar model to represent these percentages.  
What percentage is unshaded?

a) <span style="margin-left: 50px;">17%</span>	b) <span style="margin-left: 50px;">63%</span>	c) <span style="margin-left: 50px;">45%</span>
<input style="width: 30px; height: 20px;" type="text"/> % is unshaded.	<input style="width: 30px; height: 20px;" type="text"/> % is unshaded.	<input style="width: 30px; height: 20px;" type="text"/> % is unshaded.

2) Sort the percentages represented below by writing the correct letters into the Venn diagram.

a) 18 parts per 100

c)

b)

d)

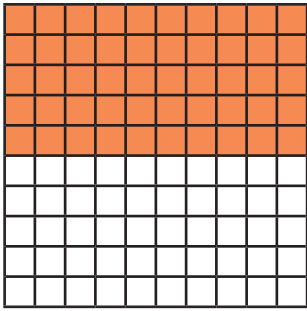
Odd Number
Smaller than 25%

3) Order the percentages represented from smallest to largest.

a)	b)	c)	d)	e) <span style="border: 1px solid black; padding: 5px; display: inline-block;">73 parts per 100</span>
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# Percentages as Fractions

1) Here is a 100 grid. What fraction and percentage is shaded?



2) Ellie-Mae says,



My percentage has a value between  $\frac{5}{10}$  and  $\frac{3}{4}$  when converted to a fraction.

What could her percentage be?

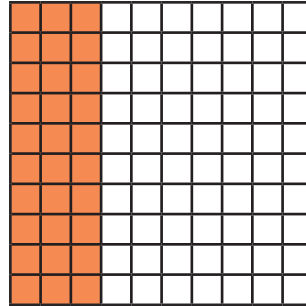
3) Anton says,



My percentage has a value between  $\frac{1}{4}$  and  $\frac{4}{10}$  when converted to a fraction.

What could his percentage be?

4) Have a look at the grid below.



Jin says,



This grid has  $\frac{1}{3}$  shaded.

Is he correct? Explain your thinking.

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## Extra Challenge

Create a challenging word problem for a friend to answer. It must contain the following terms:

- Fraction
- Percentage
- Convert

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5) Sara ran  $\frac{4}{10}$  of the race in 1 hour. What percentage did she have left to run?



# Percentages as Decimals

1) Can you convert the following decimals to percentages?

- a)  $0.2 = \underline{\quad\quad} \%$
- b)  $0.5 = \underline{\quad\quad} \%$
- c)  $0.6 = \underline{\quad\quad} \%$
- d)  $1 = \underline{\quad\quad} \%$

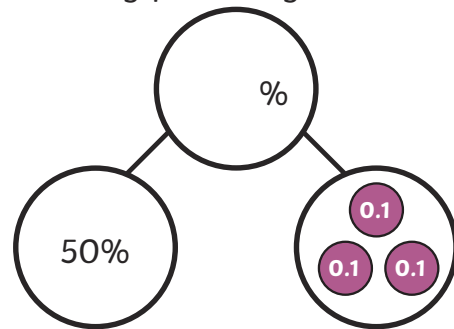
2) Can you convert the following percentages to decimals?

- a)  $1\% = \underline{\quad\quad}$
- b)  $6\% = \underline{\quad\quad}$
- c)  $15\% = \underline{\quad\quad}$
- d)  $25\% = \underline{\quad\quad}$

3) Circle the matching pair of equivalent decimals and percentages in the grid.

0.3	0.01
21%	30%
0.2	0.12

4) Complete the part-whole model with the missing percentage.



5) Compare these decimals and percentages using  $<$ ,  $>$  or  $=$ .

- a)  $30\% \underline{\quad\quad} 0.03$
- b)  $54\% \underline{\quad\quad} 0.68$
- c)  $4\% \underline{\quad\quad} 0.1$
- d)  $0.8 \underline{\quad\quad} 89\%$

6) The answer is 36%. What could the question be?

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## Extra Challenge

Jin says, "When written as a decimal, my percentage has an odd number of hundredths. My percentage is greater than 44%. When written as a decimal, my percentage has a tenths digit between, but not equal to, 2 and 5." What could his number be?

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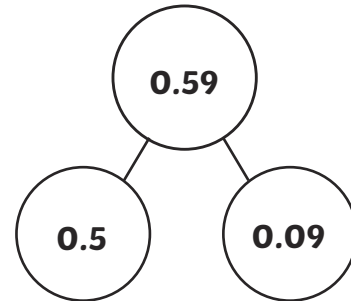
# Decimals to 2 Decimal Places **Answers**

1) What numbers are between 12.89 and 13.12? List them.

**12.90, 12.91, 12.92, 12.93, 12.94, 12.95, 12.96, 12.97, 12.98, 12.99, 13.00, 13.01, 13.02, 13.03, 13.04, 13.05, 13.06, 13.07, 13.08, 13.09, 13.10, 13.11.**

2) Draw a part-whole model to partition 6.59.

**Answers will vary. Accept any correct representation. Here is an example answer:**



3) If 10.36 is the answer, what could the question be?

**Answers will vary.**

4) 0.37 has 370 hundredths. True or false? Explain your thinking.

**False. There are 37 hundredths in 0.37.**

5) Draw a place value chart to partition 0.43.

Tens	Ones	tenths	hundredths
		0.1 0.1	0.01 0.01
		0.1 0.1	0.01

## Extra Challenge

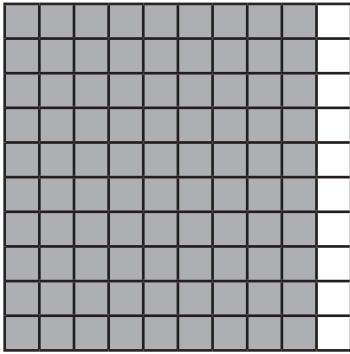
On another piece of paper or on the back of this sheet, create a decimals word problem for a friend to answer. Use the terms below.

- hundredths
- tenths
- partition
- place value chart

**Answers will vary.**

# Decimals as Fractions (1) Answers

- 1) What decimal number fraction is represented by the shaded squares?



0 . 9

Can you write this number as a fraction?

$$\frac{9}{10}$$

- 2) Convert the expanded fractions to decimals.

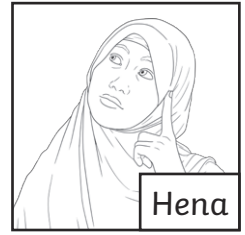
a.  $4 + \frac{3}{10} + \frac{2}{100}$

b.  $9 + \frac{1}{10} + \frac{8}{100}$

a) 4.32

b) 9.18

- 3) Hena is converting fractions to decimals. She says 1.89 is equal to  $\frac{189}{100}$ . Is she correct? Why/why not?



Hena

**She is not correct because**

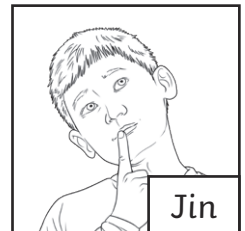
$$1.89 = \frac{189}{100} = 1\frac{89}{100}$$

- 4) If 0.25 is the answer, what could the question be?

**Answers will vary.**

## Extra Challenge

Create a 'Decimals as Fractions' challenge for your teacher to answer.



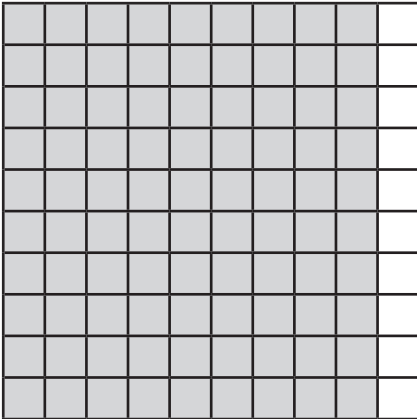
Jin

**Answers will vary.**

## Decimals as Fractions (2) Answers

1) What fraction is represented by the shaded squares?

Convert the fraction to a decimal.



$$\frac{9}{10} = \frac{90}{100} =$$

$$0.9$$

2) Convert the decimals to expanded fractions.

a) 3.92

b) 1.05

a)  $3 + \frac{9}{10} + \frac{2}{100}$

b)  $1 + \frac{5}{100}$

3) Kai is converting decimals to fractions. He says 0.26 is equal to  $\frac{26}{10}$ . Is he correct? Why / why not?

**No. He is not correct.  $0.26 = \frac{26}{100}$ .**

4) If  $\frac{75}{100}$  is the answer, what could the question be?

**Answers will vary. For example, the question could be: What fraction is equivalent to 0.75?**

### Extra Challenge

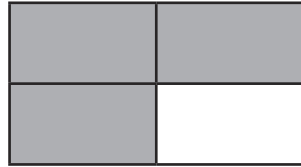
Create a word problem for a friend to answer. It must include the following terms:

- fraction
- equal
- decimal
- convert

**Answers will vary.**

# Equivalent Fractions and Decimals Answers

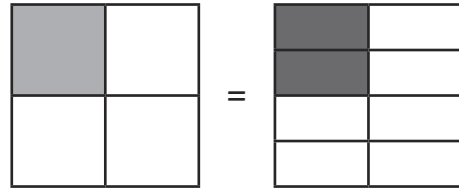
1) What fraction and decimal is shown in this image?



$\frac{3}{4}$

0.75

2) Shade the equivalent fraction:



3) Find the equivalent fractions below:

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

$$\frac{3}{5} = \frac{6}{10}$$

$$\frac{4}{7} = \frac{12}{21}$$

4) Convert this improper fraction to a mixed number and decimal.

$$\frac{18}{10}$$

$$1 \frac{8}{10} = 1.8$$

5) Ellie-Mae and Anton are thinking about fractions and decimals.

Ellie-Mae

I think  
 $0.25 = \frac{25}{100}$

I think

Anton  
 $0.25 = \frac{4}{16}$

Who is correct? Explain how you know.

**Ellie-Mae and Anton are both correct. Both fractions are equivalent to  $\frac{1}{4}$ , which is 0.25 as a decimal.**

## Extra Challenge

Using these digit cards, complete the number statement below. You may use the digit cards more than once. Find at least 3 solutions.

4   1   0   5   2   8

$\frac{\square}{\square} = 0.\square\square$

**Solutions include:**

$$\frac{1}{2} = 0.50$$

$$\frac{1}{5} = 0.20$$

$$\frac{2}{8} = 0.25$$

$$\frac{1}{4} = 0.25$$

$$\frac{2}{5} = 0.40$$

$$\frac{4}{8} = 0.50$$

$$\frac{2}{4} = 0.50$$

$$\frac{4}{5} = 0.80$$



# Thousandths as Fractions **Answers**

1) What fraction is represented by the place value counters?



$$\frac{121}{1000}$$

2) Can you write this decimal number as a fraction?

0.345

$$\frac{345}{1000}$$

3) Circle the odd one out.

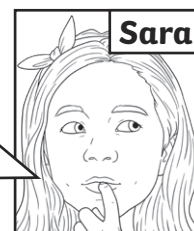
$$\frac{243}{1000}$$

$$\frac{2}{10} + \frac{4}{100} + \frac{3}{1000}$$

$$\frac{4}{10} + \frac{2}{100} + \frac{3}{1000}$$

4) What is Sara's fraction?

The fraction I am thinking of has a denominator of 1000. As a decimal, it is 0.287.



$$\frac{287}{1000}$$

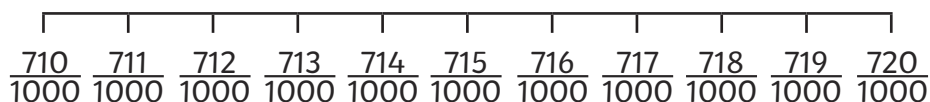
5) Work out the answer to the calculation as a fraction and a decimal.

$$4 + \frac{2}{10} + \frac{3}{100} + \frac{6}{1000} =$$

$$4 \frac{236}{1000}$$

$$4.236$$

6)  $\frac{712}{1000}$  comes between which 2 fractions on a fractional number line?



$$\frac{711}{1000}$$

$$\frac{713}{1000}$$

## Challenge Question

$\frac{35}{1000}$  is the answer to a word problem related to fractions. What could the question be?

**There are many possible answers to this question. Children must create a word problem which would give the answer of  $\frac{35}{1000}$ .**

# Thousandths as Decimals **Answers**

1) What decimal numbers are represented below?

$$\frac{341}{1000}$$

**0.341**

1   0.1   0.01   0.01   0.001

**1.121**

3) Sara says, 'The number I am thinking of has 3 tenths, 9 hundredths and 2 thousandths. It is less than one.'

What is her number?

**0.392**

5) 0.621 comes between which 2 numbers on the number line?

**0.62**  
**0.622**



2) Circle the odd one out:

**0.243**

$$\frac{2}{10} + \frac{4}{100} + \frac{3}{1000}$$

**0.4 + 0.02 + 0.003**

4) Work out the answer to the calculation as a fraction and a decimal.

$$9 + \frac{1}{10} + \frac{8}{100} + \frac{7}{1000}$$

**9  $\frac{187}{1000}$  or  $\frac{9187}{1000}$**

**9.187**

## **Extra Challenge**

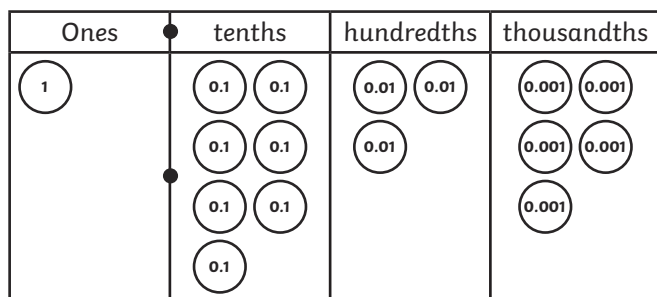
2.752 is the answer.

What could the question be?

**Answers will vary.**

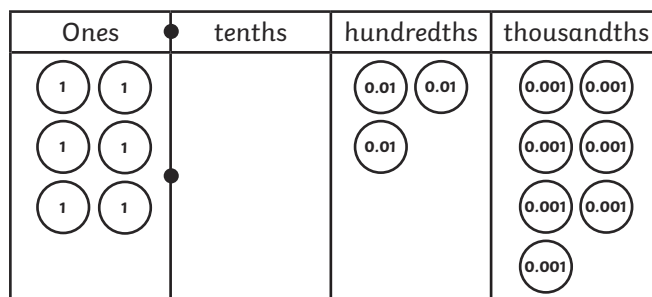
# Thousandths on a Place Value Chart **Answers**

1) What number is shown on this place value chart?



**1.735**

2) What number is shown on this place value chart?



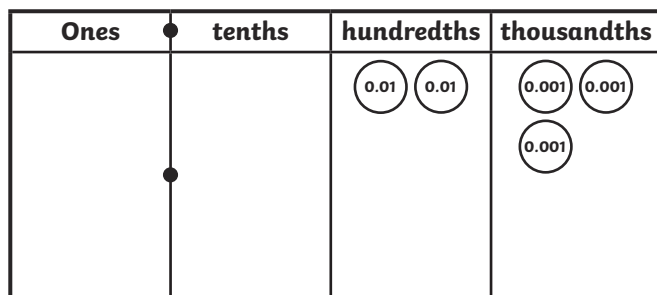
**6.037**

3) Which number does this statement describe?

**There are 6 ones, 2 tenths, 6 hundredths and 1 thousandth.**

**6.261**

4) How can we partition  $\frac{23}{1000}$ ? Draw your answer on a place value chart.

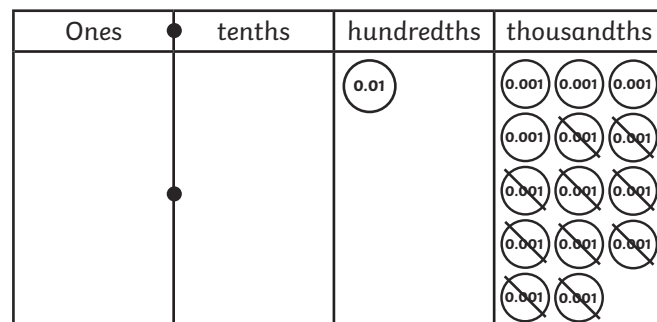


5)  $\frac{1}{1000}$  is the answer. What could the question be?

**Answers will vary.**

## Extra Challenge

Write a statement about the number on the place value chart.



**Answers will vary. Children may include: This place value chart shows the number 0.014. Or, on this place value chart ten thousandths have been regrouped for one hundredth.**

# Compare Decimals **Answers**

- 1) Can you name a number with 3 decimal places which is greater than 123.321?

**Answers will vary.**

**Some possible answers are:**

**123.322, 132.321, 133.312**

- 2) Can you name a number with 3 decimal places which is less than 123.321?

**Answers will vary.**

**Some possible answers are:**

**123.111, 123.222, 123.202**

- 3) What decimal number is equal to six ones, five tenths, three hundredths and four thousandths?

**6.534**

- 4) Can you write the missing symbols in the spaces?

Choose from:  $<$ ,  $>$ ,  $=$

2.123  2.321

2.123  2.123

2.321  2.312

2.231  2.132

- 5) Five ones, two tenths, seven hundredths and four thousandths is greater than this decimal number...

**Answers will vary.**

**A possible answer is:**

**2.123**

- 6) 2.987 is the answer. What could the question be?

**Answers will vary.**

Create a comparing decimals word problem for a friend to answer.

It must contain the following terms:

- greater than
- compare
- decimals

**Answers will vary.**

**Extra Challenge**

# Order Decimals with up to 3 Decimal Places **Answers**

1) Write numerals to compare the decimal numbers and then write the numbers in **ascending** order.

16.001	Tens	Ones	•	tenths	hundredths	thousandths
	1	6	•	0	0	1
6.101	Tens	Ones	•	tenths	hundredths	thousandths
	0	6	•	1	0	1
16.111	Tens	Ones	•	tenths	hundredths	thousandths
	1	6	•	1	1	1
6.111	Tens	Ones	•	tenths	hundredths	thousandths
	0	6	•	1	1	1

**6.101, 6.111, 16.001, 16.111**

2) Draw Counters to compare the decimal numbers and then write the numbers in **descending** order.

13.282	Tens	Ones	•	tenths	hundredths	thousandths
	⑩	① ① ①	•	①.① ①.①	①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①①	①.①①① ①.①①①
13.182	Tens	Ones	•	tenths	hundredths	thousandths
	⑩	① ① ①	•	①.①	①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①①	①.①①① ①.①①①
12.182	Tens	Ones	•	tenths	hundredths	thousandths
	⑩	① ①	•	①.①	①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①①	①.①①① ①.①①①
12.085	Tens	Ones	•	tenths	hundredths	thousandths
	⑩	① ①	•		①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①① ①.①①	①.①①① ①.①①① ①.①①① ①.①①① ①.①①①

**13.282, 13.182, 12.182, 12.085**

# Order Decimals with up to 3 Decimal Places **Answers**

3) Hena has been measuring the lengths of different ribbons.

Ribbon	Length
red	27.101cm
blue	43.012cm
yellow	43.302cm
green	31.511cm



I have written my results in ascending order.  
27.101cm, 43.012cm, 43.302cm, 31.511cm

Hena is incorrect. Explain her error and show how she should have ordered the lengths of ribbon. Write numerals in the place value charts to compare the decimal numbers.

Tens	Ones	tenths	hundredths	thousandths
2	7	1	0	1
Tens	Ones	tenths	hundredths	thousandths
4	3	0	1	2
Tens	Ones	tenths	hundredths	thousandths
4	3	3	0	2
Tens	Ones	tenths	hundredths	thousandths
3	1	5	1	1

**Hena has not ordered the numbers correctly. 31.511cm must follow 27.101cm in the sequence.**

Write the numbers in ascending order.

**27.101cm , 31.511cm , 43.012cm , 43.302cm**



# Round to the Nearest Whole Number **Answers**

1) Write the decimal numbers in the correct places in the diagram below.

4.9	4.4	4.8	4.3	4.1	4.5	4.7	4.2	4.6
-----	-----	-----	-----	-----	-----	-----	-----	-----

Rounds Down to 4

4.1

4.2

4.3

4.4

Rounds Up to 5

4.5

4.6

4.7

4.8

4.9

2) Anton is thinking of a number with 1 decimal place. What could Anton's number be?

<p><b>Anton</b></p>	<p>When rounded to the nearest whole number, the answer is <b>9</b>. The tenths digit is an even number.</p>	<p><b>8.6, 8.8</b></p>
---------------------	--	------------------------

3) Mia is thinking of a number with 2 decimal places. What could Mia's number be?

<p><b>Mia</b></p>	<p>When rounded to the nearest <b>whole number</b>, the answer is 17. The tenths digit is an <b>odd</b> number. The hundredths digit is an <b>even</b> number. When rounded to the nearest <b>tenth</b>, the answer is 16.5.</p>	<p><b>16.52, 16.54</b></p>
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4) Sara is thinking of a number with 3 decimal places. What could Sara's number be?

<p><b>Sara</b></p>	<p>When rounded to the nearest <b>whole number</b>, the answer is 5. The tenths digit is an <b>even</b> number <math>&lt;4</math>. The hundredths digit is an <b>odd</b> number. The thousandths digit is <math>&gt;7</math>. When rounded to the nearest <b>tenth</b>, the answer is 5.1.</p>	<p><b>5.058, 5.078, 5.098</b> <b>5.059, 5.079, 5.099</b></p>
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# Round to 1 Decimal Place **Answers**

1) Round 3.39 to 1 decimal place.

**3.4**

2) Round 2.41 to 1 decimal place.

**2.4**

3) Round 22.38 to 1 decimal place.

**22.4**

4) Round 86.44 to 1 decimal place.

**86.4**

5) Ruby is rounding decimals. She says,

When I round my number to 1 decimal place, the answer is 22.6.

What could her number be?



**Answers will vary. Some possible answers: 22.58, 22.59.**

6) Anton is rounding decimals. He says,

When I round my number to 1 decimal place, the answer is 83.9.

What could his number be?



**Answers will vary. Some possible answers: 83.89, 83.91.**

7) The answer to a rounding question is 88.5. What could the question be?

**Answers will vary.**

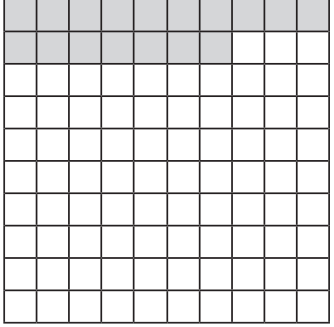
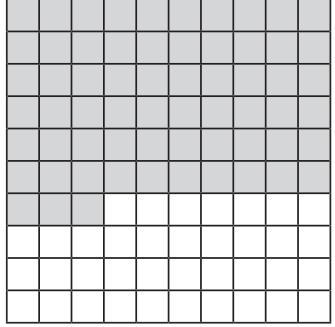

## Extra Challenge

Create a rounding challenge for a friend. You must ask them to use a number line to complete the rounding challenge!

**Answers will vary.**

# Understand Percentages **Answers**


1) Shade the hundred grids or bar model to represent these percentages.  
What percentage is unshaded?

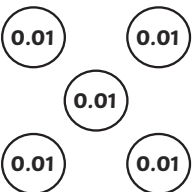
<p>a) <span style="float: right;">17%</span></p> 	<p>b) <span style="float: right;">63%</span></p> 	<p>c) <span style="float: right;">45%</span></p> 
<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>83</b> % is unshaded.</div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>37</b> % is unshaded.</div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>55</b> % is unshaded.</div>

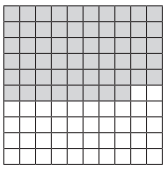
2) Sort the percentages represented below by writing the correct letters into the Venn diagram.

a) 

18 parts per 100

c) 

b) 

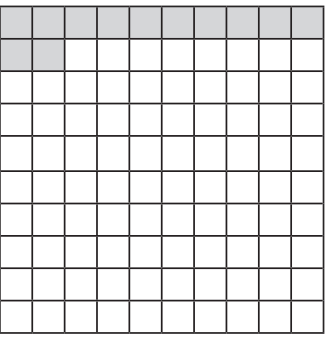
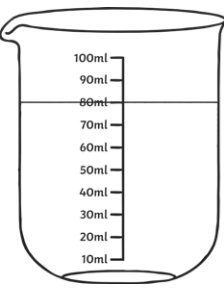

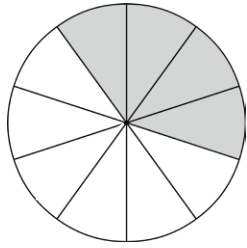
d) 

Odd Number

Smaller than 25%



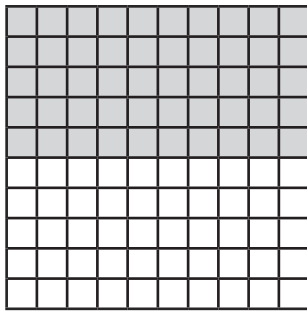
3) Order the percentages represented from smallest to largest.

<p>a)</p> 	<p>b)</p> 	<p>c)</p> 	<p>d)</p> 	<p>e)</p> <div style="border: 1px solid black; padding: 10px; display: inline-block;">73 parts per 100</div>
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**a = 12%, b = 80%, c = 55%, d = 40%, e = 73%. Order is a, d, c, e, b.**

# Percentages as Fractions **Answers**

1) Here is a 100 grid. What fraction and percentage is shaded?



$\frac{1}{2}$

50%

2) Ellie-Mae says,



My percentage has a value between  $\frac{5}{10}$  and  $\frac{3}{4}$  when converted to a fraction.

What could her percentage be?

**Answers will vary.**

**Examples include: 60%, 70%, 71%**

3) Anton says,



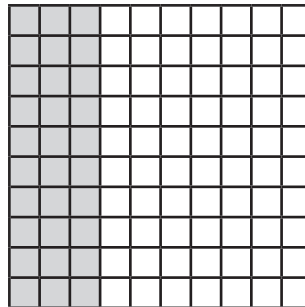
My percentage has a value between  $\frac{1}{4}$  and  $\frac{4}{10}$  when converted to a fraction.

What could his percentage be?

**Answers will vary.**

**Examples include: 30%, 35%, 39%**

4) Have a look at the grid below.



Jin says,



This grid has  $\frac{1}{3}$  shaded.

Is he correct? Explain your thinking.

**No he is not correct.  $\frac{3}{10}$  or 30% is shaded.**

## Extra Challenge

Create a challenging word problem for a friend to answer. It must contain the following terms:

- Fraction
- Percentage
- Convert

**Answers will vary.**

**Possible answer: Can you name 3 percentages which are greater than  $\frac{1}{4}$  and smaller than  $\frac{1}{2}$ ? Convert these percentages to fractions.**

5) Sara ran  $\frac{4}{10}$  of the race in 1 hour. What percentage did she have left to run?

**60%**

# Percentages as Decimals **Answers**

1) Can you convert the following decimals to percentages?

- a)  $0.2 = 20\%$
- b)  $0.5 = 50\%$
- c)  $0.6 = 60\%$
- d)  $1 = 100\%$

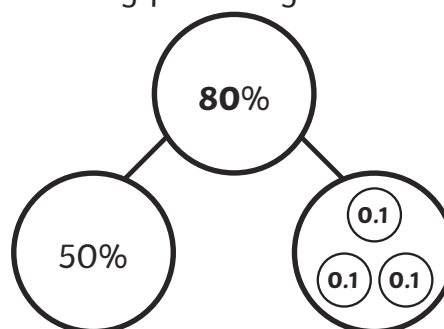
2) Can you convert the following percentages to decimals?

- a)  $1\% = 0.01$
- b)  $6\% = 0.06$
- c)  $15\% = 0.15$
- d)  $25\% = 0.25$

3) Circle the matching pair of equivalent decimals and percentages in the grid.

0.3	0.01
21%	30%
0.2	0.12

4) Complete the part-whole model with the missing percentage.



5) Compare these decimals and percentages using  $<$ ,  $>$  or  $=$ .

- a)  $30\% = 0.03$
- b)  $54\% < 0.68$
- c)  $4\% < 0.1$
- d)  $0.8 < 89\%$

6) The answer is 36%. What could the question be?

**Answers will vary.**

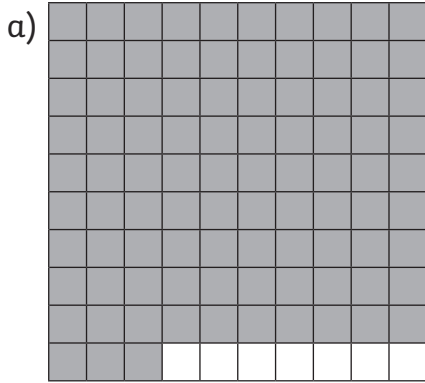
## Extra Challenge

Jin says, "When written as a decimal, my percentage has an odd number of hundredths. My percentage is greater than 44%. When written as a decimal, my percentage has a tenths digit between, but not equal to, 2 and 5." What could his number be?

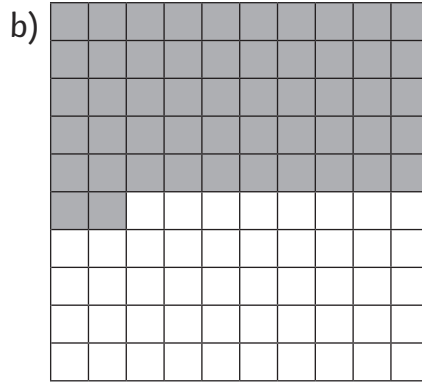
**45%, 47% and 49%**

# Equivalent Fractions, Decimals and Percentages **Answers**

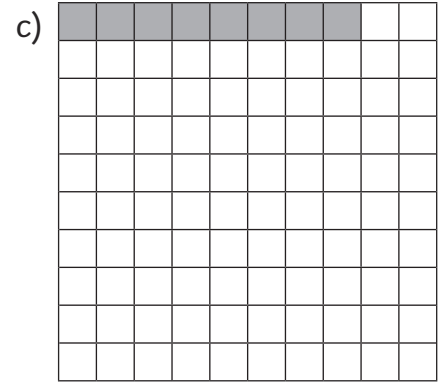
1) Look at the hundred grids. What do they represent as a fraction, decimal and percentage?



$$\frac{93}{100}, 0.93, 93\%$$



$$\frac{52}{100}, 0.52, 52\%$$



$$\frac{8}{100}, 0.08, 8\%$$

2) Kai says, "I think that both  $\frac{75}{100}$  and  $\frac{2}{4}$  are equal to 75%." Is he correct? Explain your answer.

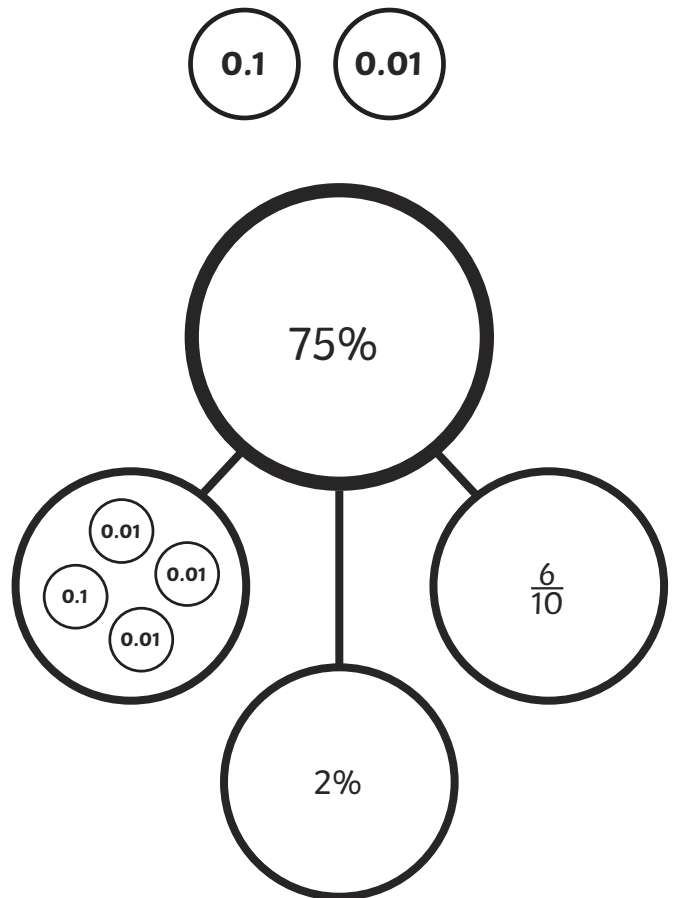


**Kai is not correct.**

**He should say:**

**$\frac{75}{100}$  and  $\frac{3}{4}$  are equal to 75%.**

3) Using the following place value counters, complete the part-whole model.



# Parent Guide



@twinklparents

We're excited to share this activity with you. If you are interested in finding more exciting, fun and interesting activities for you and your children, then check out these links to different areas of the [Twinkl Parents](#) website.

games



crafts



puzzles



experiments



word searches



## What is this resource and how do I use it?

Focus on fractions, decimals and percentages with this themed maths booklet, aimed at children in year 5 (aged 9 - 10). It's filled with tasks that cover national curriculum objectives for fractions, decimals and percentages, perfect for practising key skills. Pick and choose which activities to try or gradually work through the whole booklet.

## What skills does this practise?

Reading and Writing

Mathematical Skills

Mathematical Fluency

Perseverance

## Further Activity Ideas and Suggestions

If you'd like to try some more fractions activities, you could try these [Equivalent Fractions Challenge Cards](#). How did your child get on with these maths challenges? Were there any areas they struggled with? We have lots of resources to support their learning over in the [maths category](#).

Parents Blog



Twinkl Kids' TV



Homework Help



twinkl

Parents Hub

Year 5

# Fractions, Decimals and Percentages

Maths Activity  
Booklet



# Contents

Answers can be found at the end of the booklet.

- 1 Comparing Fractions
- 2 Ordering Fractions
- 3 Shading Equivalent Fractions
- 5 Writing Equivalent Fractions
- 6 Tenths, Hundredths and Thousandths
- 7 Improper Fractions and Mixed Numbers
- 9 Adding Fractions
- 11 Subtracting Fractions
- 12 Multiplying Proper Fractions with Diagrams
- 14 Writing Decimal Numbers as Fractions
- 15 Rounding Decimal Numbers
- 16 Identifying the Value of Decimal Digits
- 17 Numbers up to Three Decimal Places
- 19 Ordering Numbers with up to Three Decimal Places
- 21 Visual Representations of Fractions, Decimals and Percentages
- 23 Equivalent Fractions, Decimals and Percentages

We hope you find the information on our website and resources useful. As far as possible, the contents of this resource are reflective of current professional research. However, please be aware that every child is different and information can quickly become out of date. The information given here is intended for general guidance purposes only and may not apply to your specific situation.

# Comparing fractions

Use < > or = to compare these fractions.



a  $\frac{11}{12}$    $\frac{5}{6}$

g  $\frac{3}{10}$    $\frac{11}{20}$

b  $\frac{2}{3}$    $\frac{8}{12}$

h  $\frac{3}{4}$    $\frac{13}{20}$

c  $\frac{4}{5}$    $\frac{17}{20}$

i  $\frac{14}{20}$    $\frac{9}{10}$

d  $\frac{4}{10}$    $\frac{9}{20}$

j  $\frac{2}{3}$    $\frac{7}{9}$

e  $\frac{3}{4}$    $\frac{7}{12}$

k  $\frac{11}{15}$    $\frac{3}{5}$

f  $\frac{10}{12}$    $\frac{1}{4}$

l  $\frac{19}{20}$    $\frac{9}{10}$

# Ordering Fractions

Order these fractions from smallest to largest. It's a good idea to write all the fractions with a common denominator to help you order them.

a

$$\frac{3}{10} \quad \frac{44}{100} \quad \frac{9}{10} \quad \frac{71}{100} \quad \frac{21}{100}$$

$\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$

Five empty rounded rectangular boxes for writing the ordered fractions.

b

$$\frac{6}{10} \quad \frac{68}{100} \quad \frac{7}{10} \quad \frac{73}{100} \quad \frac{72}{100}$$

$\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$

Five empty rounded rectangular boxes for writing the ordered fractions.

c

$$\frac{3}{10} \quad \frac{31}{100} \quad \frac{4}{10} \quad \frac{34}{100} \quad \frac{4}{100}$$

$\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$

Five empty rounded rectangular boxes for writing the ordered fractions.

d

$$\frac{49}{100} \quad \frac{4}{10} \quad \frac{5}{10} \quad \frac{54}{100} \quad \frac{45}{100}$$

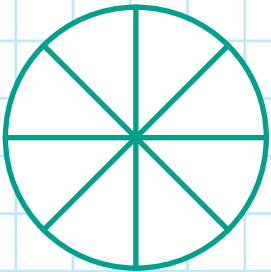
$\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$   $\frac{\quad}{100}$

Five empty rounded rectangular boxes for writing the ordered fractions.

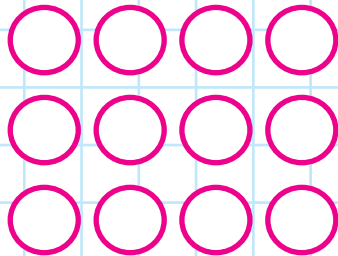
# Shading Equivalent Fractions

1 Shade  $\frac{1}{4}$  of each diagram. Look at how many equal parts are shaded (numerator) and the total number of equal parts (denominator) and write the equivalent fraction underneath.

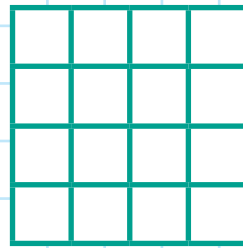
a



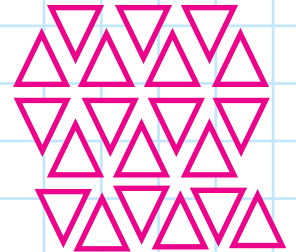
b



c



d



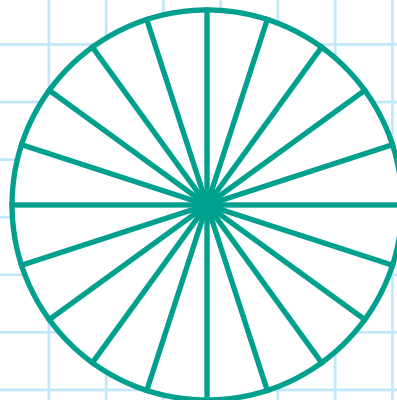
e The unshaded parts show  $\frac{3}{4}$ . Write the equivalent fractions:



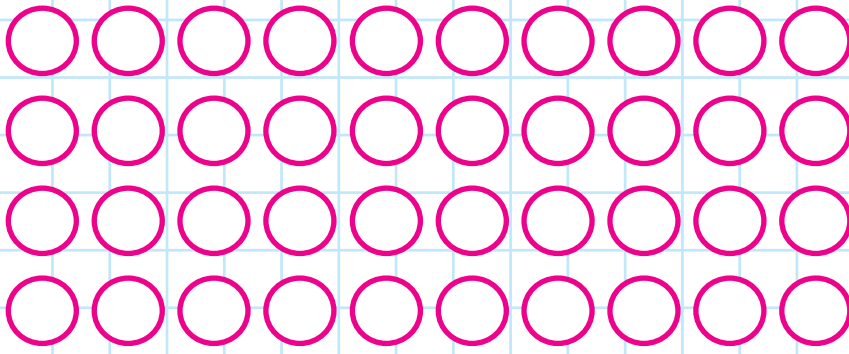
2

Shade  $\frac{1}{10}$  of each diagram. Look at how many equal parts are shaded (numerator) and the total number of equal parts (denominator) and write the equivalent fraction underneath.

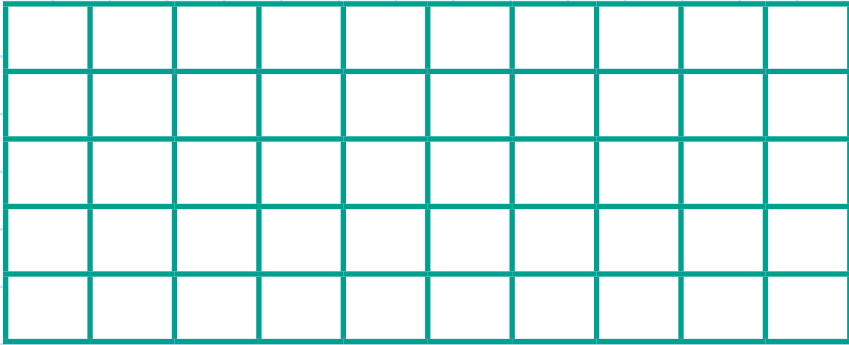
a



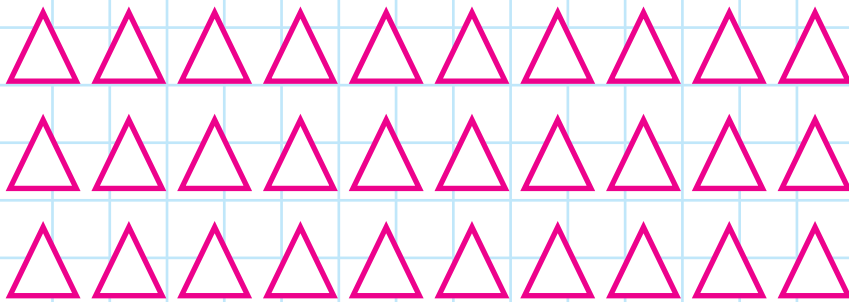
b



c



d



e

The unshaded parts show  $\frac{9}{10}$ . Write the equivalent fractions:



# Writing Equivalent Fractions

Complete the following fractions to make them equivalent.

a  $\frac{2}{\square} = \frac{8}{20}$

g  $\frac{8}{40} = \frac{\square}{20}$

b  $\frac{15}{20} = \frac{\square}{4}$

h  $\frac{4}{5} = \frac{16}{\square}$

c  $\frac{2}{\square} = \frac{8}{40}$

i  $\frac{\square}{8} = \frac{3}{4}$

d  $\frac{3}{\square} = \frac{1}{3}$

j  $\frac{3}{12} = \frac{1}{\square}$

e  $\frac{4}{24} = \frac{\square}{12}$

k  $\frac{\square}{3} = \frac{14}{21}$

f  $\frac{7}{\square} = \frac{14}{20}$

l  $\frac{10}{12} = \frac{5}{\square}$

# Tenths, Hundredths and Thousandths

1

Complete the table to show which digit is in the tenths, hundredths and thousandths column.

Decimal	Tenths	Hundredths	Thousandths
12.452			
87.34			
40.091			
501.2			
2.448			

2

Write the following fractions as decimals.

$$\frac{289}{1000} =$$

=

$$\frac{76}{1000} =$$

=

$$\frac{8}{10} =$$

=

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

=

$$\frac{92}{100} =$$

=

$$\frac{6}{100} =$$

=

# Improper fractions and Mixed Numbers



1 Circle the mixed numbers that are equivalent to the improper fraction.

$\frac{14}{3}$      $3\frac{1}{3}$      $4\frac{1}{3}$      $3\frac{2}{3}$      $2\frac{2}{3}$      $4\frac{2}{3}$

$\frac{13}{4}$      $4\frac{1}{4}$      $3\frac{3}{4}$      $3\frac{1}{4}$      $3\frac{2}{4}$      $3\frac{1}{2}$

$\frac{15}{10}$      $1\frac{1}{5}$      $1\frac{7}{10}$      $1\frac{4}{10}$      $1\frac{3}{10}$      $1\frac{5}{10}$

$\frac{21}{6}$      $3\frac{1}{3}$      $3\frac{3}{6}$      $3\frac{4}{6}$      $3\frac{2}{6}$      $1\frac{5}{6}$

$\frac{18}{5}$      $4\frac{1}{5}$      $3\frac{4}{5}$      $3\frac{2}{5}$      $3\frac{3}{5}$      $4\frac{2}{5}$



2

Write these improper fractions as mixed numbers.

a

$$\frac{23}{3} =$$



b

$$\frac{36}{10} =$$



c

$$\frac{29}{4} =$$



d

$$\frac{18}{7} =$$



e

$$\frac{25}{9} =$$



3

Write the improper fractions and mixed numbers shown by the diagrams.

Improper Fraction	Diagram	Mixed Number

# Adding Fractions

Solve these calculations. You'll need to make sure each fraction has the same denominator before adding them together.

a  $\frac{11}{12} + \frac{1}{3} = \frac{\quad}{12} + \frac{\quad}{12} = \quad$

d  $\frac{3}{4} + \frac{1}{8} = \frac{\quad}{\quad} + \frac{\quad}{\quad} = \quad$

b  $\frac{5}{8} + \frac{1}{4} = \frac{\quad}{8} + \frac{\quad}{8} = \quad$

e  $\frac{5}{6} + \frac{5}{12} = \frac{\quad}{\quad} + \frac{\quad}{\quad} = \quad$

c  $\frac{3}{5} + \frac{2}{10} = \frac{\quad}{10} + \frac{\quad}{10} = \quad$

f  $\frac{9}{16} + \frac{3}{8} = \frac{\quad}{\quad} + \frac{\quad}{\quad} = \quad$

g  $\frac{1}{4} + \frac{1}{2} + \frac{1}{8} = \frac{\quad}{8} + \frac{\quad}{8} + \frac{\quad}{8} = \quad$

h  $\frac{1}{6} + \frac{1}{3} + \frac{2}{12} = \frac{\quad}{12} + \frac{\quad}{12} + \frac{\quad}{12} = \quad$

i  $\frac{3}{4} + \frac{3}{8} + \frac{3}{16} = \frac{\quad}{16} + \frac{\quad}{16} + \frac{\quad}{16} = \quad$

j

$$\frac{4}{5} + \frac{9}{20} + \frac{7}{10} = \frac{\quad}{\quad} + \frac{\quad}{\quad} + \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

k

$$\frac{17}{24} + \frac{7}{12} + \frac{1}{3} = \frac{\quad}{\quad} + \frac{\quad}{\quad} + \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

l

$$\frac{2}{5} + \frac{19}{30} + \frac{7}{10} = \frac{\quad}{\quad} + \frac{\quad}{\quad} + \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

# Subtracting Fractions

Solve these calculations. You'll need to make sure each fraction has the same denominator before subtracting them.

a  $\frac{9}{10} - \frac{4}{5} = \frac{\quad}{10} - \frac{\quad}{10} = \quad$

g  $1\frac{3}{4} - \frac{7}{8} = \frac{\quad}{8} - \frac{\quad}{8} = \quad$

b  $\frac{1}{2} - \frac{2}{10} = \frac{\quad}{10} - \frac{\quad}{10} = \quad$

h  $1\frac{1}{6} - \frac{2}{3} = \frac{\quad}{6} - \frac{\quad}{6} = \quad$

c  $\frac{5}{6} - \frac{15}{24} = \frac{\quad}{24} - \frac{\quad}{24} = \quad$

i  $1\frac{3}{10} - \frac{4}{5} = \frac{\quad}{10} - \frac{\quad}{10} = \quad$

d  $\frac{17}{18} - \frac{1}{3} = \frac{\quad}{\quad} - \frac{\quad}{\quad} = \quad$

j  $1\frac{1}{2} - \frac{7}{8} = \frac{\quad}{\quad} - \frac{\quad}{\quad} = \quad$

e  $\frac{7}{9} - \frac{2}{18} = \frac{\quad}{\quad} - \frac{\quad}{\quad} = \quad$

k  $1\frac{3}{5} - \frac{9}{10} = \frac{\quad}{\quad} - \frac{\quad}{\quad} = \quad$

f  $\frac{11}{16} - \frac{1}{4} = \frac{\quad}{\quad} - \frac{\quad}{\quad} = \quad$

l  $2\frac{3}{4} - 1\frac{5}{8} = \frac{\quad}{\quad} - \frac{\quad}{\quad} = \quad$

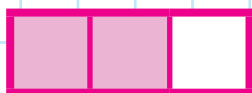
# Multiplying Proper Fractions with Diagrams



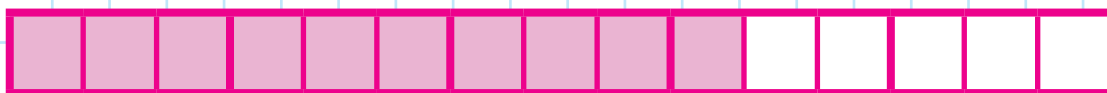
Use the diagrams to help you solve these multiplication calculations.

**Example:**

This is  $\frac{2}{3}$ .



Use this to calculate  $\frac{2}{3} \times 5$ .



$$\frac{2}{3} \times 5 = \frac{10}{3} = 3 \frac{1}{3}$$

**a**

This is  $\frac{1}{2}$ .



Use this to calculate  $\frac{1}{2} \times 9$ .



**b**

This is  $\frac{5}{6}$ .



Use this to calculate  $\frac{5}{6} \times 3$ .



c

This is  $\frac{3}{8}$ .

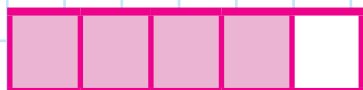


Use this to calculate  $\frac{3}{8} \times 5$ .



d

This is  $\frac{4}{5}$ .



Use this to calculate  $\frac{4}{5} \times 4$ .



e

This is  $\frac{2}{7}$ .



Use this to calculate  $\frac{2}{7} \times 9$ .



f

This is  $\frac{7}{12}$ .



Use this to calculate  $\frac{7}{12} \times 3$ .



# Writing Decimal Numbers as Fractions

Write these decimal numbers as fractions.

a 0.77

g 0.85

m 0.79

b 0.92

h 0.9

n 0.04

c 0.22

i 0.37

o 0.8

d 0.51

j 0.7

p 0.11

e 0.02

k 0.28

q 0.32

f 0.4

l 0.08

r 0.14

# Rounding Decimal Numbers

Round the following decimal numbers to the **nearest whole number**.

a  $6.1 =$

b  $3.9 =$

c  $2.8 =$

d  $7.5 =$

e  $4.1 =$

f  $1.2 =$

g  $0.46 =$

h  $0.61 =$

i  $7.42 =$

j  $7.47 =$

k  $3.75 =$

l  $8.54 =$

Round the following decimal numbers to **one decimal place**.

a  $0.58 =$

b  $0.46 =$

c  $0.18 =$

d  $0.64 =$

e  $0.97 =$

f  $0.35 =$

g  $0.05 =$

h  $0.79 =$

i  $0.26 =$

j  $0.43 =$

k  $0.24 =$

l  $0.74 =$



# Identifying the Value of Decimal Digits

Write all these decimal numbers into the correct place on the Venn diagram. Cross them off as you go.

0.529	0.651	0.8	0.646	0.099	0.062	0.549	0.898
0.983	0.32	0.019	0.305	0.804	0.101	0.377	0.388
0.663	0.207	0.797	0.532	0.24	0.596	0.332	0.376
0.018	0.848	0.08	0.486	0.104	0.754	0.117	0.142
0.405	0.27	0.788	0.527	0.818	0.447	0.027	0.141
0.669	0.428	0.833	0.763	0.874	0.374	0.49	0.132

8 in the  
tenths place

0 in the  
hundredths place

4 in the thousandths place

# Numbers up to Three Decimal Places

1 Write the number that is halfway between each pair of numbers.

a 0.24 and 0.56

b 6.2 and 9.3

c 3.67 and 4.09

d 0.364 and 0.402

e 0.583 and 0.907

2 Write the missing number to make the calculation correct.

a  $0.008 + \square = 1$

b  $\square + 0.615 = 1$

c  $0.041 + \square = 1$

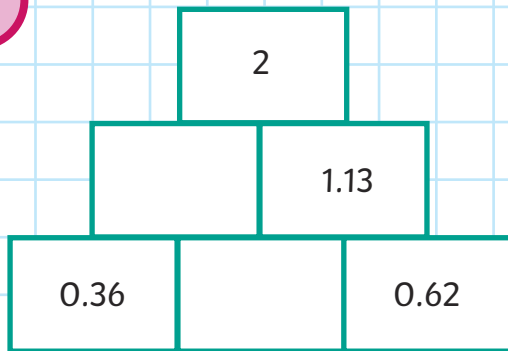
d  $\square + 0.529 = 1$

e  $0.108 + \square = 1$

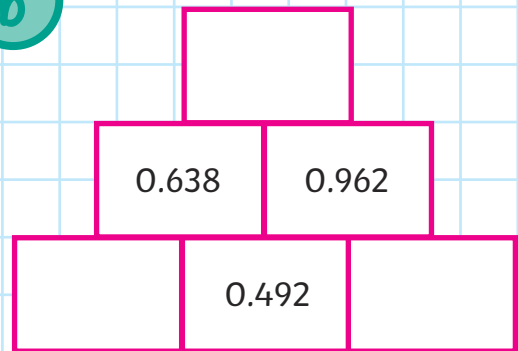
3

These are number pyramids. The number in a box is the sum of the two numbers below it. Fill in the missing numbers.

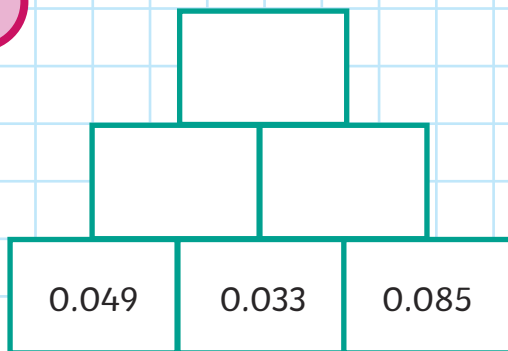
a



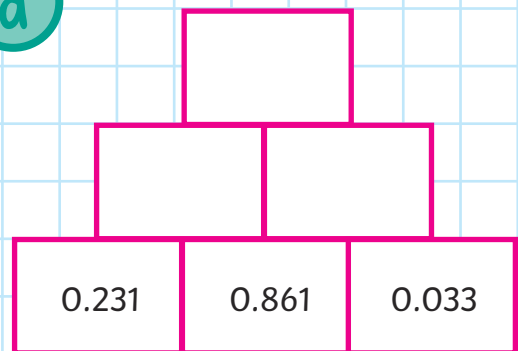
b



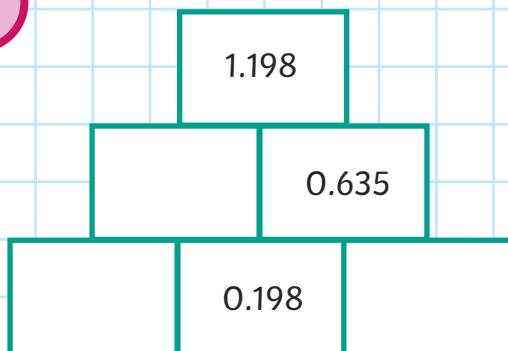
c



d



e



# Ordering Numbers with up to Three Decimal Places

Order these groups of decimal numbers from smallest to largest.

a

0.23    0.2    0.97    0.51    0.98

--	--	--	--	--

b

0.27    0.96    0.22    0.06    0.46

--	--	--	--	--

c

0.64    0.7    0.25    0.05    0.76

--	--	--	--	--

d

0.81    0.2    0.87    0.02    0.85

--	--	--	--	--

e

0.3    0.33    0.03    0.13    0.31

--	--	--	--	--

f

0.71

0.17

0.7

0.77

0.87

g

0.006

0.004

0.001

0.007

h

0.009

0.004

0.002

0.005

i

0.012

0.056

0.076

0.091

j

0.01

0.011

0.019

0.013

k

0.106

0.198

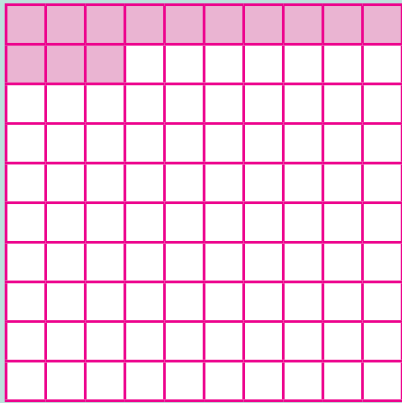
0.123

0.187

# Visual Representations of Fractions, Decimals and Percentages

Write the percentage, fraction and decimal represented by each diagram. Look at the shaded area.

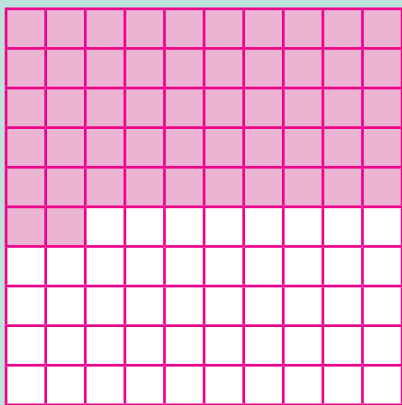
a



%

—

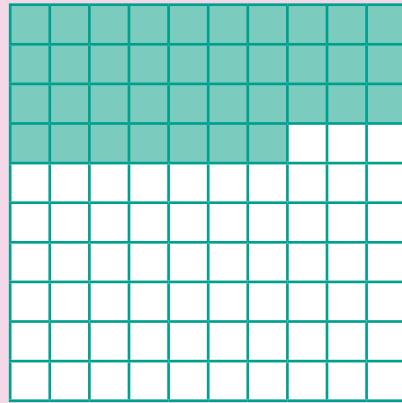
c



%

—

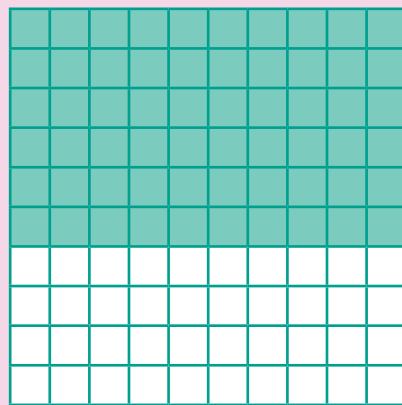
b



%

—

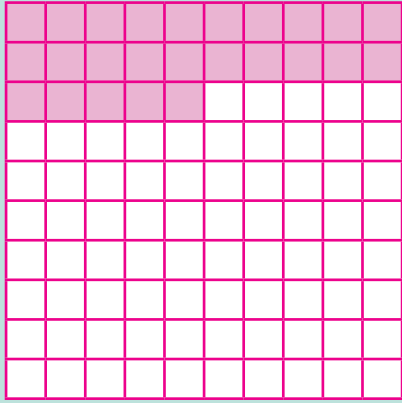
d



%

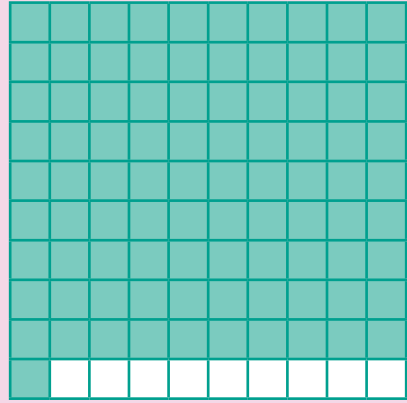
—

e



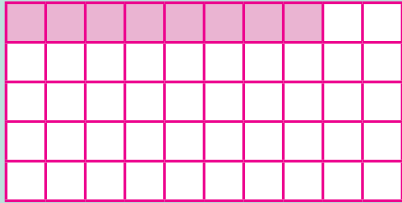
%    —   

f



%    —   

g



%    —   

h



%    —   

i



%    —   

j



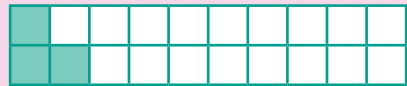
%    —   

k



%    —   

l



%    —

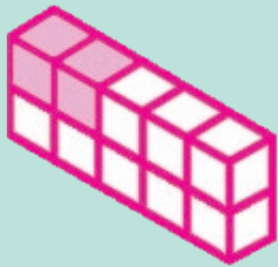
# Equivalent Fractions, Decimals and Percentages

=

=

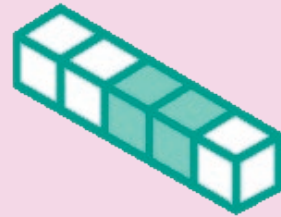
1 For each model, write the fraction and percentage of the cubes that are shaded.

a



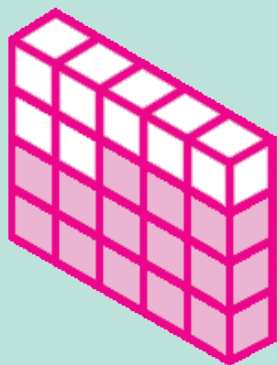
%

b



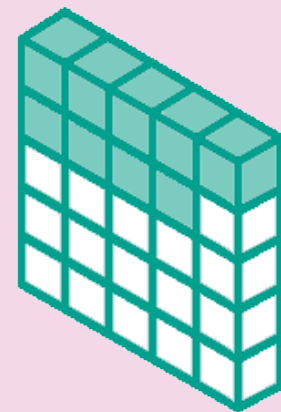
%

c



%

d



%



2

Calculate the values of the following, then order them from smallest to largest.

a

$\frac{4}{5}$  of 45

75% of 32

$\frac{1}{2}$  of 52

smallest

largest

b

$\frac{1}{25}$  of 75

$\frac{2}{5}$  of 15

40% of 10

smallest

largest

c

50% of 48

$\frac{1}{5}$  of 125

30% of 70

smallest

largest

d

36% of 125

$\frac{2}{5}$  of 105

$\frac{3}{4}$  of 64

smallest

largest

3

Complete the table to match the fractions, decimals and percentages.

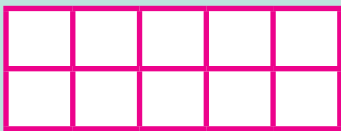
Fraction	Decimal	Percentage
		80%
	0.3	
$\frac{1}{5}$		
	0.75	
$\frac{7}{25}$		

4

Shade the following shapes so that the given fraction, decimal fraction or percentage is shaded.

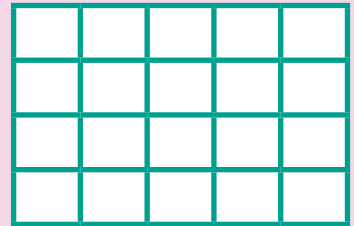
a

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



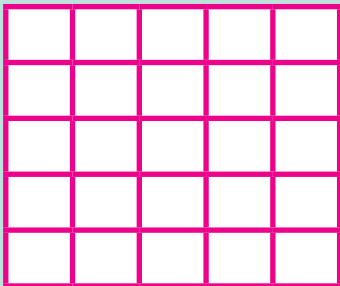
b

$$0.15 =$$



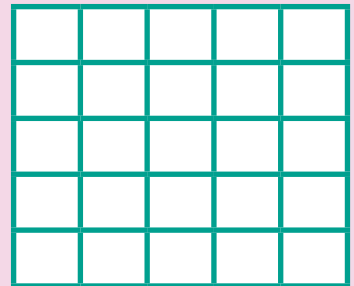
c

$$92\% =$$



d

$$12\% =$$



# Comparing fractions - Answers

Use < > or = to compare these fractions.

a  $\frac{11}{12}$  >  $\frac{5}{6}$

g  $\frac{3}{10}$  <  $\frac{11}{20}$

b  $\frac{2}{3}$  =  $\frac{8}{12}$

h  $\frac{3}{4}$  >  $\frac{13}{20}$

c  $\frac{4}{5}$  <  $\frac{17}{20}$

i  $\frac{14}{20}$  <  $\frac{9}{10}$

d  $\frac{4}{10}$  <  $\frac{9}{20}$

j  $\frac{2}{3}$  <  $\frac{7}{9}$

e  $\frac{3}{4}$  >  $\frac{7}{12}$

k  $\frac{11}{15}$  >  $\frac{3}{5}$

f  $\frac{10}{12}$  >  $\frac{1}{4}$

l  $\frac{19}{20}$  >  $\frac{9}{10}$

# Ordering fractions - Answers

a  $\frac{3}{10}$   $\frac{44}{100}$   $\frac{9}{10}$   $\frac{71}{100}$   $\frac{21}{100}$

$\frac{30}{100}$   $\frac{44}{100}$   $\frac{90}{100}$   $\frac{71}{100}$   $\frac{21}{100}$

$\frac{21}{100}$

$\frac{3}{10}$

$\frac{44}{100}$

$\frac{71}{100}$

$\frac{9}{10}$

b  $\frac{6}{10}$   $\frac{68}{100}$   $\frac{7}{10}$   $\frac{73}{100}$   $\frac{72}{100}$

$\frac{60}{100}$   $\frac{68}{100}$   $\frac{70}{100}$   $\frac{73}{100}$   $\frac{72}{100}$

$\frac{6}{10}$

$\frac{68}{100}$

$\frac{7}{10}$

$\frac{72}{100}$

$\frac{73}{100}$

c  $\frac{3}{10}$   $\frac{31}{100}$   $\frac{4}{10}$   $\frac{34}{100}$   $\frac{4}{100}$

$\frac{30}{100}$   $\frac{31}{100}$   $\frac{40}{100}$   $\frac{34}{100}$   $\frac{4}{100}$

$\frac{4}{100}$

$\frac{3}{10}$

$\frac{31}{100}$

$\frac{34}{100}$

$\frac{40}{100}$

d  $\frac{49}{100}$   $\frac{4}{10}$   $\frac{5}{10}$   $\frac{54}{100}$   $\frac{45}{100}$

$\frac{49}{100}$   $\frac{40}{100}$   $\frac{50}{100}$   $\frac{54}{100}$   $\frac{45}{100}$

$\frac{4}{10}$

$\frac{45}{100}$

$\frac{49}{100}$

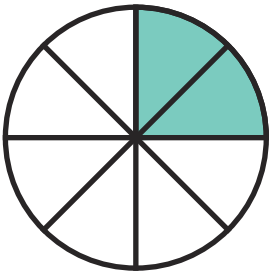
$\frac{5}{10}$

$\frac{54}{100}$

# Shading Equivalent Fractions - Answers

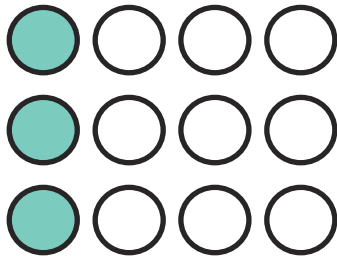
1 Shade  $\frac{1}{4}$  of each diagram. Look at how many equal parts are shaded (numerator) and the total number of equal parts (denominator) and write the equivalent fraction underneath.

a



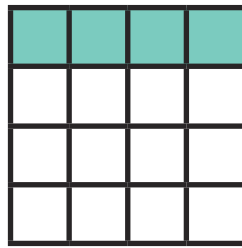
$\frac{2}{8}$

b



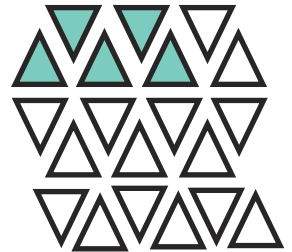
$\frac{3}{12}$

c



$\frac{4}{16}$

d



$\frac{5}{20}$

e The unshaded parts show  $\frac{3}{4}$ . Write the equivalent fractions:

$\frac{6}{8}$

$\frac{9}{12}$

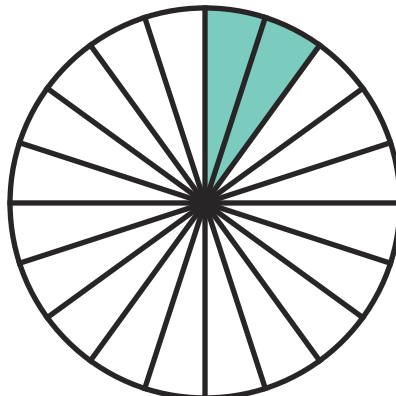
$\frac{12}{16}$

$\frac{15}{20}$

2

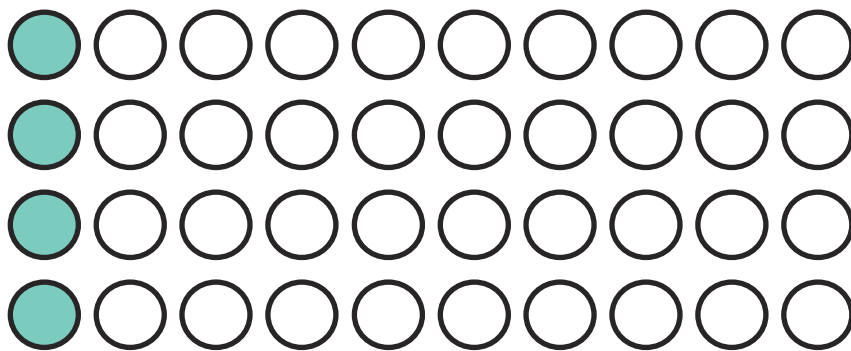
Shade  $\frac{1}{10}$  of each diagram. Look at how many equal parts are shaded (numerator) and the total number of equal parts (denominator) and write the equivalent fraction underneath.

a



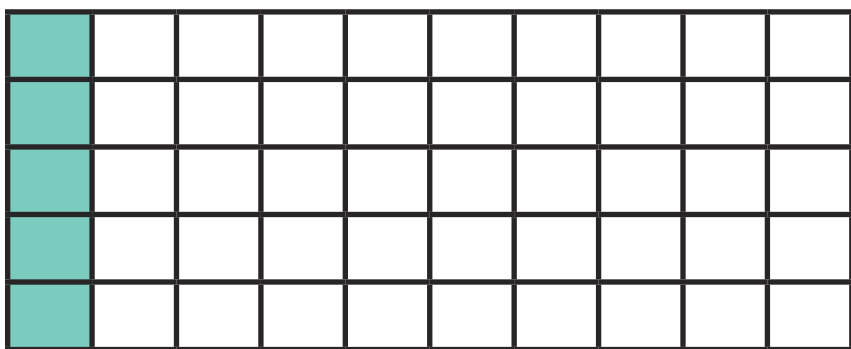
$\frac{2}{20}$

b



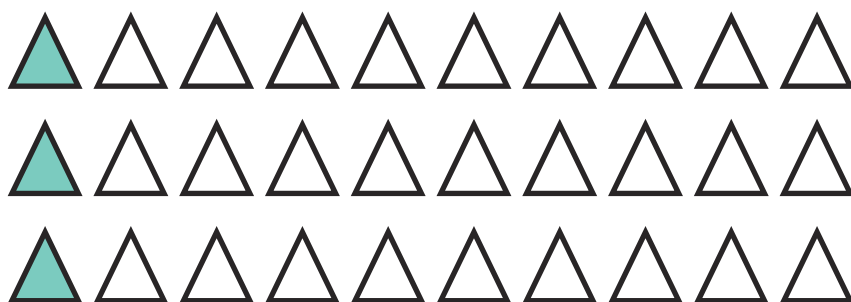
$$\frac{4}{40}$$

c



$$\frac{5}{50}$$

d



$$\frac{3}{30}$$

e

The unshaded parts show  $\frac{9}{10}$ . Write the equivalent fractions:

$$\frac{18}{20}$$

$$\frac{36}{40}$$

$$\frac{45}{50}$$

$$\frac{27}{30}$$

# Writing Equivalent Fractions - Answers

a  $\frac{2}{5} = \frac{8}{20}$

g  $\frac{8}{40} = \frac{4}{20}$

b  $\frac{15}{20} = \frac{3}{4}$

h  $\frac{4}{5} = \frac{16}{20}$

c  $\frac{2}{10} = \frac{8}{40}$

i  $\frac{6}{8} = \frac{3}{4}$

d  $\frac{3}{9} = \frac{1}{3}$

j  $\frac{3}{12} = \frac{1}{4}$

e  $\frac{4}{24} = \frac{2}{12}$

k  $\frac{2}{3} = \frac{14}{21}$

f  $\frac{7}{10} = \frac{14}{20}$

l  $\frac{10}{12} = \frac{5}{6}$

# Tenths, Hundredths and Thousandths - Answers

1

Complete the table to show which digit is in the tenths, hundredths and thousandths column.

Decimal	Tenths	Hundredths	Thousandths
12.452	4	5	2
87.34	3	4	0
40.091	0	9	1
501.2	2	0	0
2.448	4	4	8

2

Write the following fractions as decimals.

$$\frac{289}{1000} = 0.289$$

$$\frac{76}{1000} = 0.076$$

$$\frac{8}{10} = 0.8$$

$$\frac{4}{10} = 0.4$$

$$\frac{92}{100} = 0.92$$

$$\frac{6}{100} = 0.06$$



# Improper Fractions and Mixed Numbers - Answers

1

Circle the mixed numbers that are equivalent to the improper fraction.

$\frac{14}{3}$     $3\frac{1}{3}$     $4\frac{1}{3}$     $3\frac{2}{3}$     $2\frac{2}{3}$     $4\frac{2}{3}$

$\frac{13}{4}$     $4\frac{1}{4}$     $3\frac{3}{4}$     $3\frac{1}{4}$     $3\frac{2}{4}$     $3\frac{1}{2}$

$\frac{15}{10}$     $1\frac{1}{5}$     $1\frac{7}{10}$     $1\frac{4}{10}$     $1\frac{3}{10}$     $1\frac{5}{10}$

$\frac{21}{6}$     $3\frac{1}{3}$     $3\frac{3}{6}$     $3\frac{4}{6}$     $3\frac{2}{6}$     $1\frac{5}{6}$

$\frac{18}{5}$     $4\frac{1}{5}$     $3\frac{4}{5}$     $3\frac{2}{5}$     $3\frac{3}{5}$     $4\frac{2}{5}$

2 Write these improper fractions as mixed numbers.

a  $\frac{23}{3} = 7\frac{2}{3}$

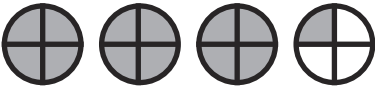


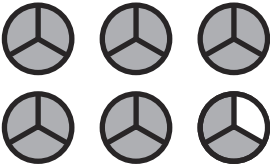

b  $\frac{36}{10} = 3\frac{6}{10}$

c  $\frac{29}{4} = 7\frac{1}{4}$

d  $\frac{18}{7} = 2\frac{4}{7}$

e  $\frac{25}{9} = 2\frac{7}{9}$

3 Write the improper fractions and mixed numbers shown by the diagrams.

Improper Fraction	Diagram	Mixed Number
$\frac{13}{4}$		$3\frac{1}{4}$
$\frac{12}{5}$		$2\frac{2}{5}$
$\frac{22}{9}$		$2\frac{4}{9}$
$\frac{17}{3}$		$5\frac{2}{3}$
$\frac{23}{6}$		$3\frac{5}{6}$

# Adding fractions - Answers

$$a \quad \frac{11}{12} + \frac{1}{3} = \frac{11}{12} + \frac{4}{12} = \frac{15}{12} \text{ or } 1\frac{3}{12}$$

$$d \quad \frac{3}{4} + \frac{1}{8} = \frac{6}{8} + \frac{1}{8} = \frac{7}{8}$$

$$b \quad \frac{5}{8} + \frac{1}{4} = \frac{5}{8} + \frac{2}{8} = \frac{7}{8}$$

$$e \quad \frac{5}{6} + \frac{5}{12} = \frac{10}{12} + \frac{5}{12} = \frac{15}{12} \text{ or } 1\frac{3}{12}$$

$$c \quad \frac{3}{5} + \frac{2}{10} = \frac{6}{10} + \frac{2}{10} = \frac{8}{10} \text{ or } \frac{4}{5}$$

$$f \quad \frac{9}{16} + \frac{3}{8} = \frac{9}{16} + \frac{6}{16} = \frac{15}{16}$$

$$g \quad \frac{1}{4} + \frac{1}{2} + \frac{1}{8} = \frac{2}{8} + \frac{4}{8} + \frac{1}{8} = \frac{7}{8}$$

$$h \quad \frac{1}{6} + \frac{1}{3} + \frac{2}{12} = \frac{2}{12} + \frac{4}{12} + \frac{2}{12} = \frac{8}{12} \text{ or } \frac{2}{3}$$

$$i \quad \frac{3}{4} + \frac{3}{8} + \frac{3}{16} = \frac{12}{16} + \frac{6}{16} + \frac{3}{16} = \frac{21}{16} \text{ or } 1\frac{5}{16}$$

**j**  $\frac{4}{5} + \frac{9}{20} + \frac{7}{10} = \frac{16}{20} + \frac{9}{20} + \frac{14}{20} = \frac{39}{20}$  or  $1\frac{19}{20}$

**k**  $\frac{17}{24} + \frac{7}{12} + \frac{1}{3} = \frac{17}{24} + \frac{14}{24} + \frac{8}{24} = \frac{39}{24}$  or  $1\frac{15}{24}$  or  $1\frac{5}{8}$

**l**  $\frac{2}{5} + \frac{19}{30} + \frac{7}{10} = \frac{12}{30} + \frac{19}{30} + \frac{21}{30} = \frac{52}{30}$  or  $1\frac{22}{30}$  or  $1\frac{11}{15}$

# Subtracting fractions - Answers

$$\text{a} \quad \frac{9}{10} - \frac{4}{5} = \frac{9}{10} - \frac{8}{10} = \frac{1}{10}$$

$$\text{g} \quad 1\frac{3}{4} - \frac{7}{8} = \frac{14}{8} - \frac{7}{8} = \frac{7}{8}$$

$$\text{b} \quad \frac{1}{2} - \frac{2}{10} = \frac{5}{10} - \frac{2}{10} = \frac{3}{10}$$

$$\text{h} \quad 1\frac{1}{6} - \frac{2}{3} = \frac{7}{6} - \frac{4}{6} = \frac{3}{6} \text{ or } \frac{1}{2}$$

$$\text{c} \quad \frac{5}{6} - \frac{15}{24} = \frac{20}{24} - \frac{15}{24} = \frac{5}{24}$$

$$\text{i} \quad 1\frac{3}{10} - \frac{4}{5} = \frac{13}{10} - \frac{8}{10} = \frac{5}{10} \text{ or } \frac{1}{2}$$

$$\text{d} \quad \frac{17}{18} - \frac{1}{3} = \frac{17}{18} - \frac{6}{18} = \frac{11}{18}$$

$$\text{j} \quad 1\frac{1}{2} - \frac{7}{8} = \frac{12}{8} - \frac{7}{8} = \frac{5}{8}$$

$$\text{e} \quad \frac{7}{9} - \frac{2}{18} = \frac{14}{18} - \frac{2}{18} = \frac{12}{18} \text{ or } \frac{2}{3}$$

$$\text{k} \quad 1\frac{3}{5} - \frac{9}{10} = \frac{16}{10} - \frac{9}{10} = \frac{7}{10}$$

$$\text{f} \quad \frac{11}{16} - \frac{1}{4} = \frac{11}{16} - \frac{4}{16} = \frac{7}{16}$$

$$\text{l} \quad 2\frac{3}{4} - 1\frac{5}{8} = \frac{22}{8} - \frac{13}{8} = \frac{9}{8} \text{ or } 1\frac{1}{8}$$

# Multiplying Proper Fractions with Diagrams - Answers

Use the diagrams to help you solve these multiplication calculations.

**Example:**

This is  $\frac{2}{3}$ .



Use this to calculate  $\frac{2}{3} \times 5$ .



$$\frac{2}{3} \times 5 = \frac{10}{3} = 3 \frac{1}{3}$$

**a**

This is  $\frac{1}{2}$ .



Use this to calculate  $\frac{1}{2} \times 9$ .



$$\frac{1}{2} \times 9 = \frac{9}{2} = 4 \frac{1}{2}$$

**b**

This is  $\frac{5}{6}$ .



Use this to calculate  $\frac{5}{6} \times 3$ .



$$\frac{5}{6} \times 3 = \frac{15}{6} = 2 \frac{3}{6} \text{ or } 2 \frac{1}{2}$$

c

This is  $\frac{3}{8}$ .



Use this to calculate  $\frac{3}{8} \times 5$ .



$$\frac{3}{8} \times 5 = \frac{15}{8} = 1 \frac{7}{8}$$

d

This is  $\frac{4}{5}$ .



Use this to calculate  $\frac{4}{5} \times 4$ .



$$\frac{4}{5} \times 4 = \frac{16}{5} = 3 \frac{1}{5}$$

e

This is  $\frac{2}{7}$ .



Use this to calculate  $\frac{2}{7} \times 9$ .



$$\frac{2}{7} \times 9 = \frac{18}{7} = 2 \frac{4}{7}$$

f

This is  $\frac{7}{12}$ .



Use this to calculate  $\frac{7}{12} \times 3$ .



$$\frac{7}{12} \times 3 = \frac{21}{12} = 1 \frac{9}{12} \text{ or } 1 \frac{3}{4}$$

# Writing Decimal Numbers as Fractions - Answers

a 0.77  $\frac{77}{100}$

g 0.85  $\frac{85}{100}$

m 0.79  $\frac{79}{100}$

b 0.92  $\frac{92}{100}$

h 0.9  $\frac{90}{100}$  or  $\frac{9}{10}$

n 0.04  $\frac{4}{100}$

c 0.22  $\frac{22}{100}$

i 0.37  $\frac{37}{100}$

o 0.8  $\frac{80}{100}$  or  $\frac{8}{10}$

d 0.51  $\frac{51}{100}$

j 0.7  $\frac{70}{100}$  or  $\frac{7}{10}$

p 0.11  $\frac{11}{100}$

e 0.02  $\frac{2}{100}$

k 0.28  $\frac{28}{100}$

q 0.32  $\frac{32}{100}$

f 0.4  $\frac{40}{100}$  or  $\frac{4}{10}$

l 0.08  $\frac{8}{100}$

r 0.14  $\frac{14}{100}$



# Rounding Decimal Numbers - Answers

Round the following decimal numbers to the **nearest whole number**.

a  $6.1 = 6$

b  $3.9 = 4$

c  $2.8 = 3$

d  $7.5 = 8$

e  $4.1 = 4$

f  $1.2 = 1$

g  $0.46 = 0$

h  $0.61 = 1$

i  $7.42 = 7$

j  $7.47 = 7$

k  $3.75 = 4$

l  $8.54 = 9$

Round the following decimal numbers to **one decimal place**.

a  $0.58 = 0.6$

b  $0.46 = 0.5$

c  $0.18 = 0.2$

d  $0.64 = 0.6$

e  $0.97 = 1.0$

f  $0.35 = 0.4$

g  $0.05 = 0.1$

h  $0.79 = 0.8$

i  $0.26 = 0.3$

j  $0.43 = 0.4$

k  $0.24 = 0.2$

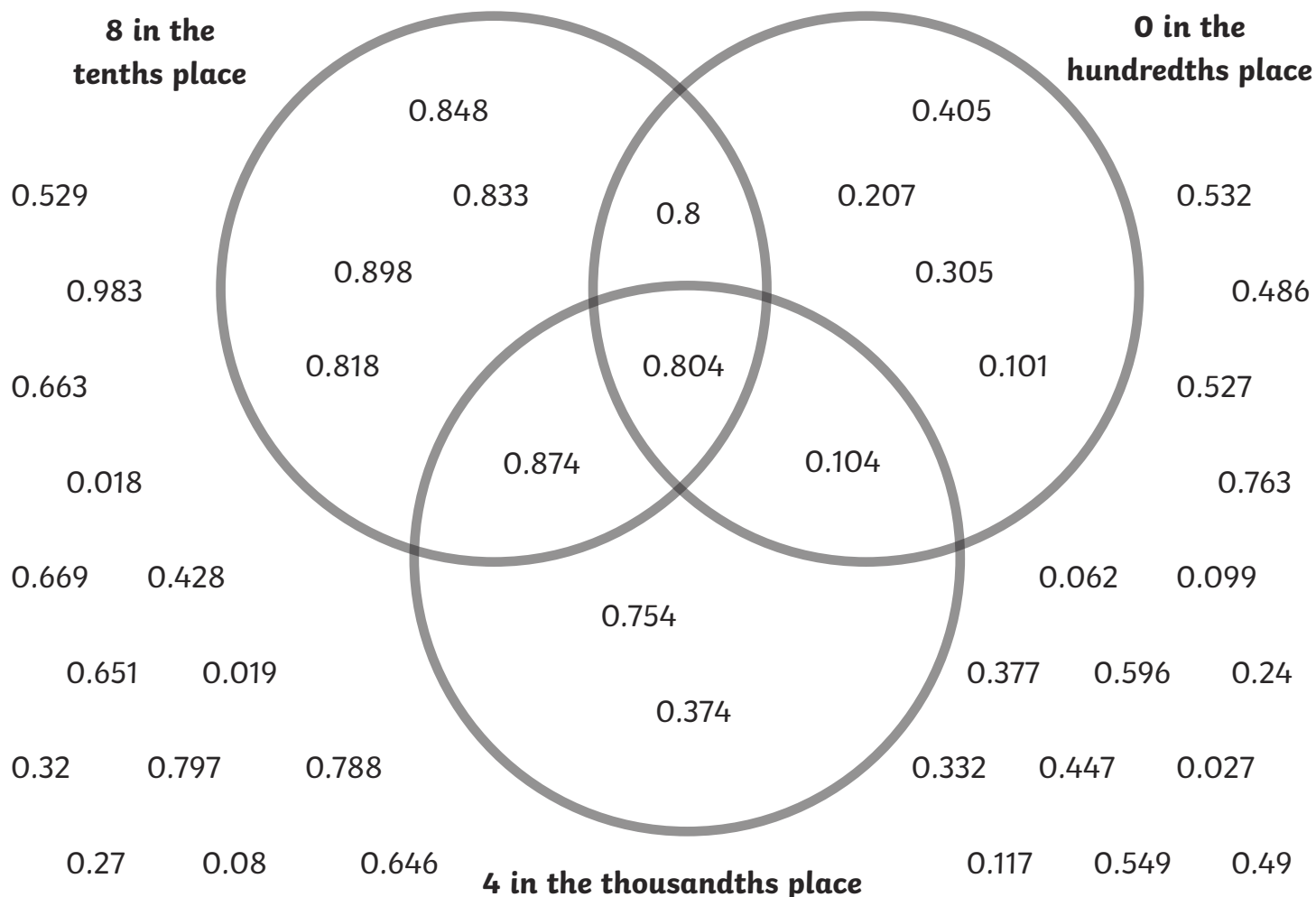
l  $0.74 = 0.7$

# Identifying the Value of Decimal Digits - Answers

Write all these decimal numbers into the correct place on the Venn diagram. Cross them off as you go.

0.529	0.651	0.8	0.646	0.099	0.062	0.549	0.898
0.983	0.32	0.019	0.305	0.804	0.101	0.377	0.388
0.663	0.207	0.797	0.532	0.24	0.596	0.332	0.376
0.018	0.848	0.08	0.486	0.104	0.754	0.117	0.142
0.405	0.27	0.788	0.527	0.818	0.447	0.027	0.141
0.669	0.428	0.833	0.763	0.874	0.374	0.49	0.132

0.388    0.376    0.142    0.141    0.132



# Numbers up to Three Decimal Places – Answers

1 Write the number that is halfway between each pair of numbers.

a 0.24 and 0.56

0.4

b 6.2 and 9.3

7.75

c 3.67 and 4.09

3.88

d 0.364 and 0.402

0.383

e 0.583 and 0.907

0.745

2 Write the missing number to make the calculation correct.

a  $0.008 + 0.992 = 1$

b  $0.385 + 0.615 = 1$

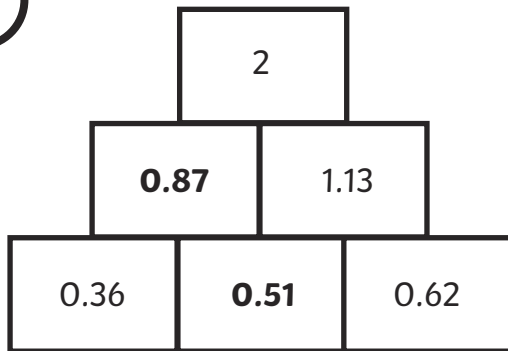
c  $0.041 + 0.959 = 1$

d  $0.471 + 0.529 = 1$

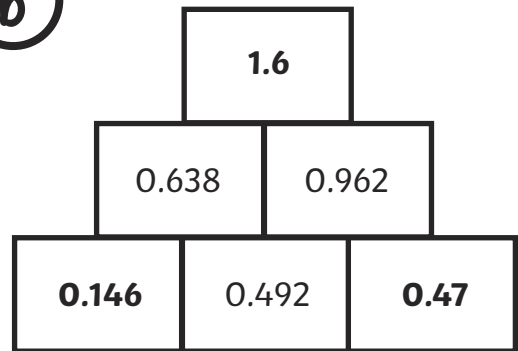
e  $0.108 + 0.892 = 1$

3 These are number pyramids. The number in a box is the sum of the two numbers below it. Fill in the missing numbers.

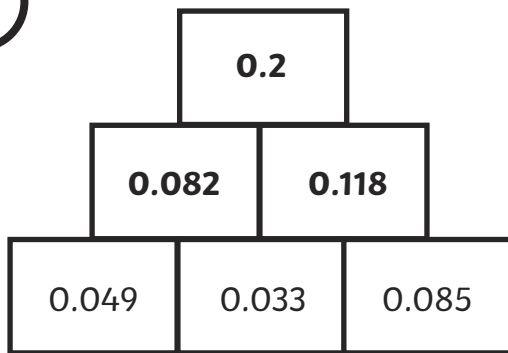
a



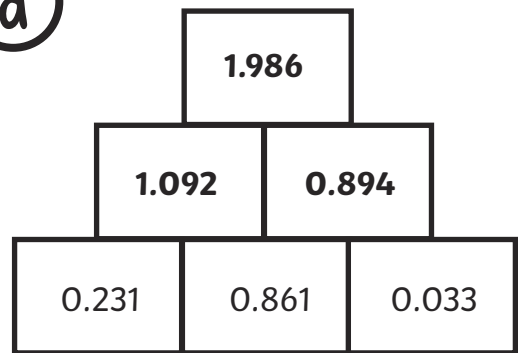
b



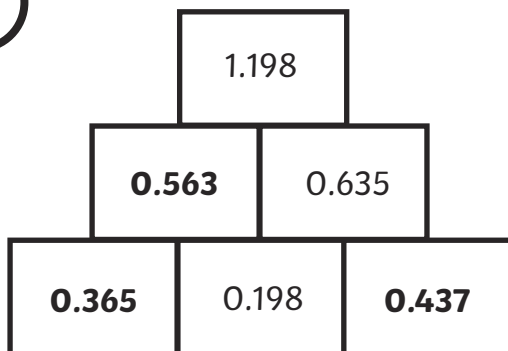
c



d



e



# Ordering Numbers with up to Three Decimal Places - Answers

Order these groups of decimal numbers from smallest to largest.

**a**

0.23    0.2    0.97    0.51    0.98

0.2    0.23    0.51    0.97    0.98

**b**

0.27    0.96    0.22    0.06    0.46

0.06    0.22    0.27    0.46    0.96

**c**

0.64    0.7    0.25    0.05    0.76

0.05    0.25    0.64    0.7    0.76

**d**

0.81    0.2    0.87    0.02    0.85

0.02    0.2    0.81    0.85    0.87

**e**

0.3    0.33    0.03    0.13    0.31

0.03    0.13    0.3    0.31    0.33

f

0.71 0.17 0.7 0.77 0.87

0.17

0.7

0.71

0.77

0.87

g

0.006 0.004 0.001 0.007

0.001

0.004

0.006

0.007

h

0.009 0.004 0.002 0.005

0.002

0.004

0.005

0.009

i

0.012 0.056 0.076 0.091

0.012

0.056

0.076

0.091

j

0.01 0.011 0.019 0.013

0.01

0.011

0.013

0.019

k

0.106 0.198 0.123 0.187

0.106

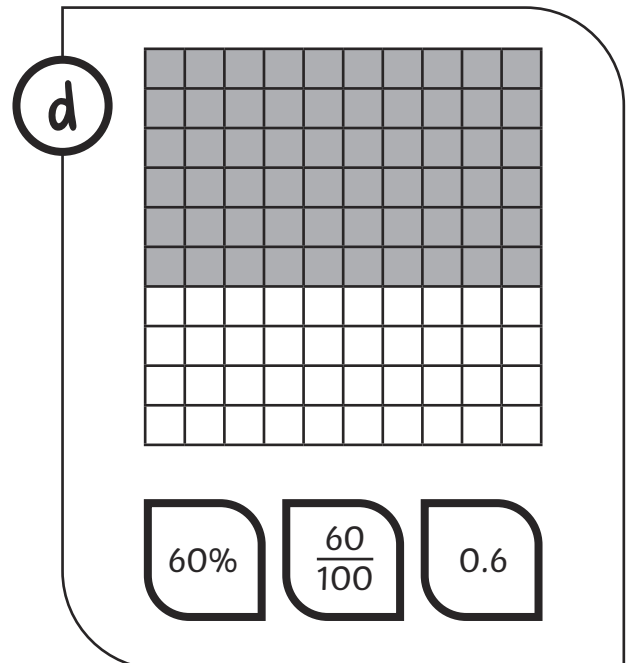
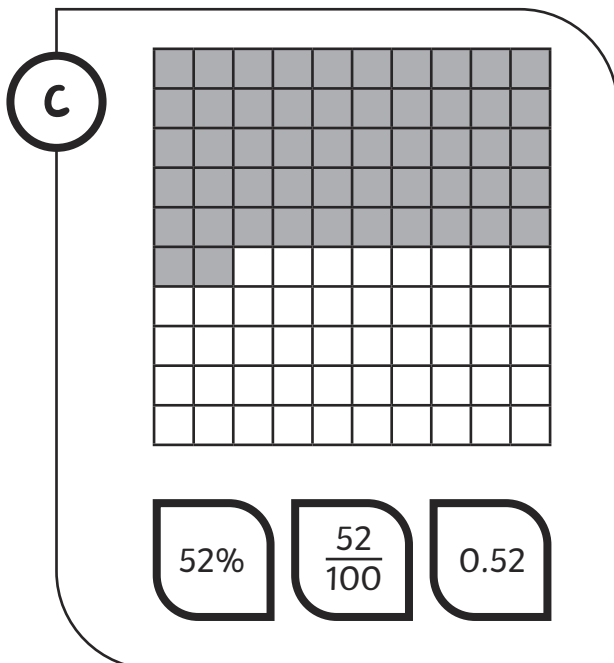
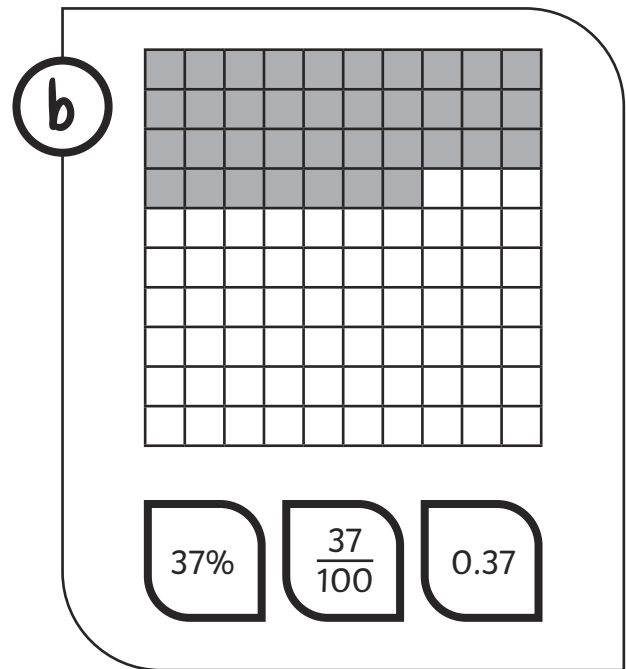
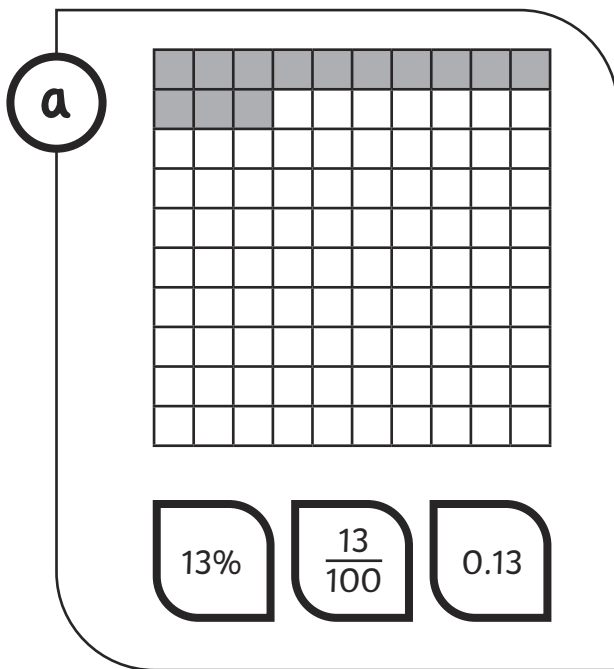
0.123

0.187

0.198

# Visual Representations of Fractions, Decimals and Percentages - Answers

Write the percentage, fraction and decimal represented by each diagram. Look at the shaded area.



e

25%     $\frac{25}{100}$     0.25

f

91%     $\frac{91}{100}$     0.91

g

16%     $\frac{8}{50}$     0.16

h

25%     $\frac{1}{4}$     0.25

i

70%     $\frac{7}{10}$     0.7

j

80%     $\frac{4}{5}$     0.8

k

50%     $\frac{1}{2}$     0.5

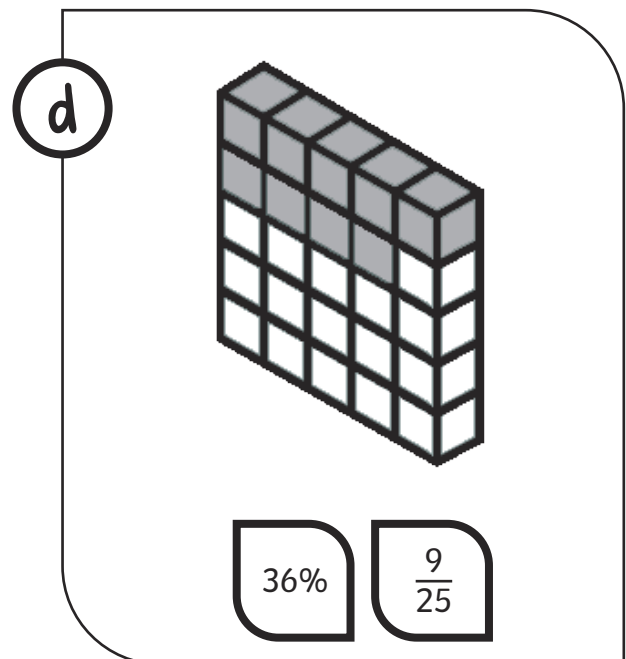
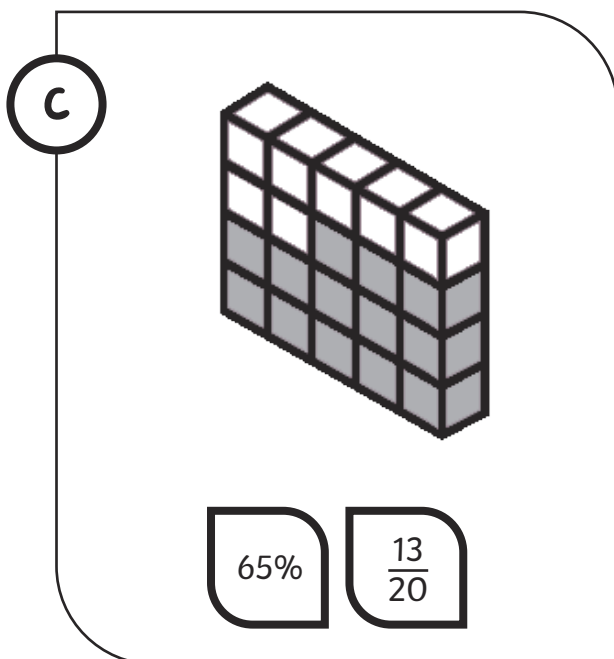
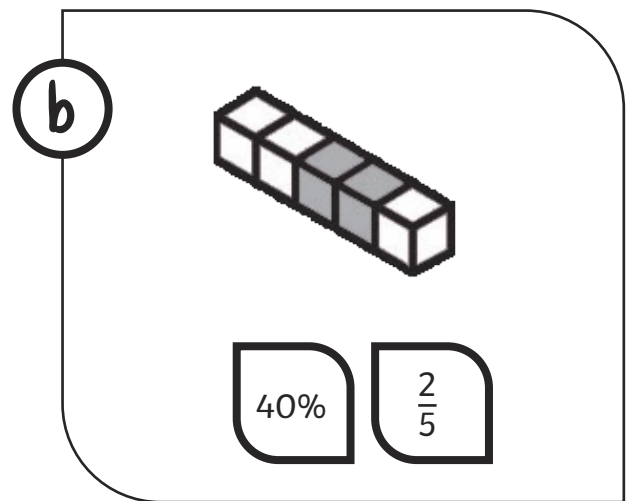
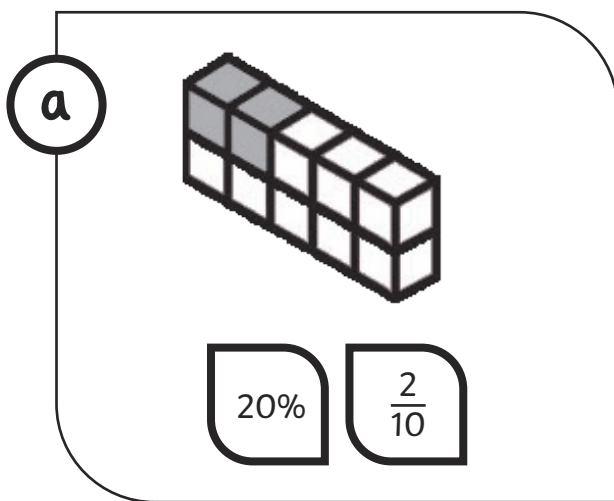
l

15%     $\frac{3}{20}$     0.15



# Equivalent Fractions, Decimals and Percentages - Answers

1 For each model, write the fraction and percentage of the cubes that are shaded.



2

Calculate the values of the following, then order them from smallest to largest.

a

$\frac{4}{5}$ of 45	36	75% of 32	24	$\frac{1}{2}$ of 52	26
smallest	75% of 32	$\frac{1}{2}$ of 52	$\frac{4}{5}$ of 45	largest	

b

$\frac{1}{25}$ of 75	3	$\frac{2}{5}$ of 15	6	40% of 10	4
smallest	$\frac{1}{25}$ of 75	40% of 10	$\frac{2}{5}$ of 15	largest	

c

50% of 48	24	$\frac{1}{5}$ of 125	25	30% of 70	21
smallest	30% of 70	50% of 48	$\frac{1}{5}$ of 125	largest	

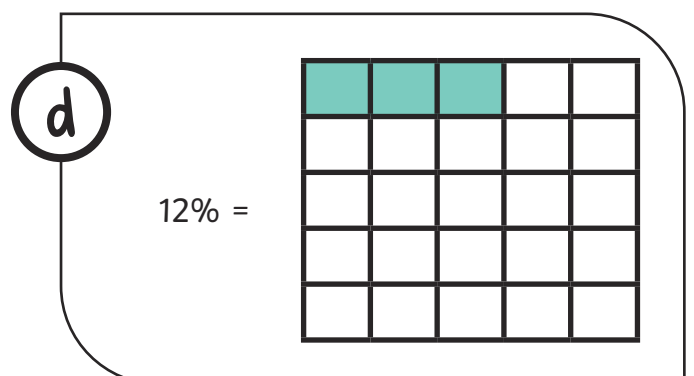
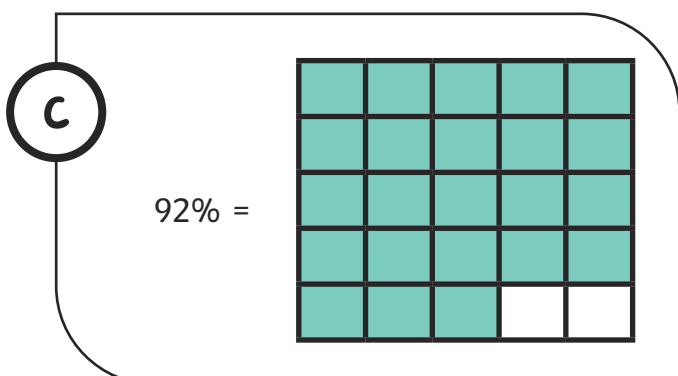
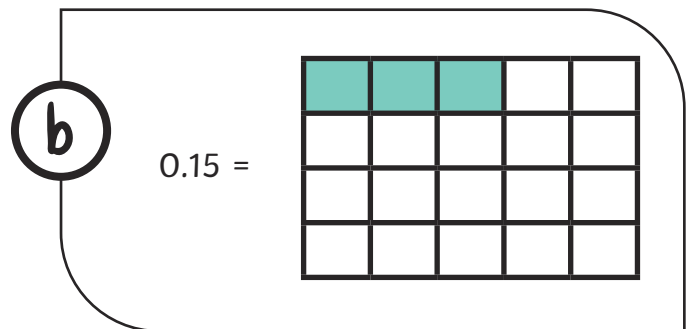
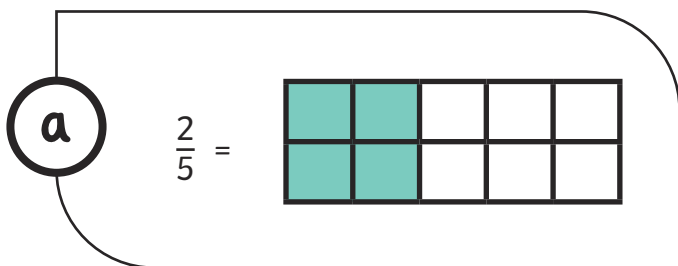
d

36% of 125	45	$\frac{2}{5}$ of 105	42	$\frac{3}{4}$ of 64	48
smallest	$\frac{2}{5}$ of 105	36% of 125	$\frac{3}{4}$ of 64	largest	

3 Complete the table to match the fractions, decimals and percentages.

Fraction	Decimal	Percentage
$\frac{4}{5}$	0.8	80%
$\frac{3}{10}$	0.3	30%
$\frac{1}{5}$	0.2	20%
$\frac{3}{4}$	0.75	75%
$\frac{7}{25}$	0.28	28%

4 Shade the following shapes so that the given fraction, decimal fraction or percentage is shaded.



# Parent Guide



@twinklparents

We're excited to share this activity with you. If you are interested in finding more exciting, fun and interesting activities for you and your children, then check out these links to different areas of the [Twinkl Parents](#) website.

games



crafts



puzzles



experiments



word searches



## What is this resource and how do I use it?

This booklet includes everything you need to help you practise the spelling, grammar and punctuation skills you will learn in year 5. Simply print it out and complete each activity as and when you want to. You will find the answers to each activity at the end of the booklet.

## What skills does this practise?

Spelling

Grammar

Punctuation

Proofreading

## Further Activity Ideas and Suggestions

For some more fun activities to practise your skills, check out our [Parents Hub](#). As well as practising your spelling, punctuation and grammar, it's important to practise your times tables too. Why not check out our [Beat the Clock Mixed Times Tables Game](#)?

Parents Blog



Twinkl Kids' TV



Homework Help



twinkl

Parents  
Hub

# Year 5



## SPaG Booklet

This booklet belongs to

\_\_\_\_\_



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# Spellings

In year 5 in England, your child will begin to learn the year 5 and 6 statutory spellings as set out by the national curriculum. There will be more focus placed on the accurate use of punctuation, such as apostrophes and the spellings of prefixes and suffixes.

Here are ten fun ideas to help keep spelling practice fun and fresh. Why not print these out, cut them up and choose a different one at random each time you do spelling practice?



[Click here to try this resource](#)

This resource includes a checklist of 360 words that your child can tackle one day at a time.



• Write your spelling words in different handwriting styles.

twinkl.com

• Make your spelling words out of magnetic letters.

twinkl.com

• Write your spelling words with your finger in sand or glitter.

twinkl.com

• Write a story using your spelling words.

twinkl.com

• Make your spelling words out of blocks or playdough.

twinkl.com

• Type your spelling words on a computer or tablet and use a fun typeface.

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• Write sentences that include your spelling words.

twinkl.com

• Cut out letters from a magazine or newspaper to make your spelling word.

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• Write your spelling words with your finger in shaving foam.

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• Write your spelling words with vowels in one colour and consonants in another.

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Some words can be changed into other words by adding sets of letters called prefixes at the start.

**Prefixes = dis, de, mis, over, re**

1. **Choose** one of the above prefixes to fill in the gaps.

The steak was very chewy because it was  cooked.

The game was a draw so they're going to have a  match next week.

"Oh no!" Kelly said, "I think I've  understood."

We're going too fast, we need to  celerate.

The runner's shoes were too big, which was putting him at a  advantage.

2. **Fill** in the gaps in this table. The first one has been done for you.

Prefix	Prefix + Root word	Meaning
dis	disadvantage	Not at an advantage
de		
mis		
over		
re		



# Prefixes



3. Can you use each of the words in the list to **write** 5 new sentences?

1.

2.

3.

4.

5.



# Suffixes

Some words can be changed into other words by adding sets of letters called **suffixes** at the **end**. Adding these suffixes turns nouns and adjectives into verbs.

## Suffix = -ate, -ise, -ify

1. **Underline** the correct word from each set. The root word is at the start of the set to help you.

<b>terror</b>	<b>terrorate</b>	<b>terrorise</b>	<b>terrorify</b>
<b>vaccine</b>	<b>vaccinate</b>	<b>vaccinise</b>	<b>vaccinify</b>
<b>apology</b>	<b>apologate</b>	<b>apologise</b>	<b>apologify</b>
<b>horror</b>	<b>horrorate</b>	<b>horrorise</b>	<b>horrify</b>
<b>pure</b>	<b>pureate</b>	<b>purise</b>	<b>purify</b>

2. **Fill** in the blanks in these sentences with the correct word. The root word has been added in brackets to help you.

Mina raced back to her class, hoping to  (apology) to Calvin.

The bees were beginning to  (terror) the bus stop.

It was nearly midday so the sun's heat was starting to  (intense).

As the clay dried out, it began to  (solid).





# Suffixes

Use the parts of the table that have been completed to help you fill in the blanks.

Root word	Suffix	Root word + suffix	What happened to the root word?
value	ate	valuate	The 'e' was removed.
note	ify		
	ise	advertise	
medical	ate		
theory	ise		



# Relative Clauses



Relative clauses give extra information. They start with relative pronouns, which are:

**who, which, where, when, whose, that**

1. **Match** the relative pronoun with its meaning.

which

refers to people

when

refers to places

who

refers to time

where

refers to objects or animals

that

refers to possessions

whose

refers to people, things or animals

2. **Choose** the correct relative pronoun to add into these sentences.

I called my sister  lives in Spain.

Do you like this t-shirt,  I got for my birthday?

The lamp  was on my desk has broken.

I'm going to visit the town  my grandparents grew up.

You'll love the beach  we take you to visit.

They are the boys  ball got stolen.

# Relative Clauses



3. **Write** some of your own sentences using relative clauses.

who -

which -

where -

when -

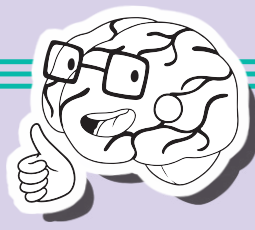
whose -

that -





# Brain Break #1



You've been working hard! Why not have a quick brain break? Just 5 minutes doing a quick burst of exercise can help re-energise your brain. You can either roll a dice to decide which brain break exercise to do or you can have a go at whichever one you like.



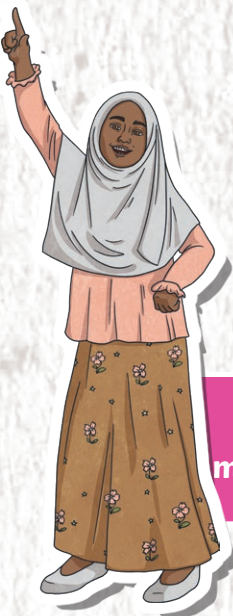
Jog on the spot.



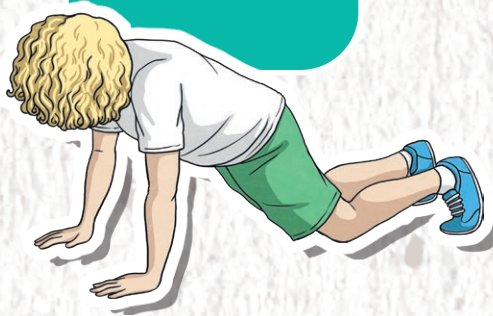
Stretch to the sky, then touch your toes.



Do some star jumps.



Do a slow motion dance.



Do some press ups.



Hop on one foot, then switch.





Adverbial phrases give more information about a verb. They can tell us more about time, place and possibility.

1. **Underline** the type of adverbials these are.

<b>later on</b>	time	place	possibility
<b>maybe</b>	time	place	possibility
<b>behind the school</b>	time	place	possibility
<b>tomorrow morning</b>	time	place	possibility
<b>if you're here</b>	time	place	possibility

2. **Add** a time adverbial to these sentences.

\_\_\_\_\_, we are going to do our homework.

The girls are going to their karate class \_\_\_\_\_.

We'll have lunch \_\_\_\_\_ we'll go for a walk.

3. **Add** a place adverbial to these sentences.

The children are playing \_\_\_\_\_.

\_\_\_\_\_, you will find a golden ticket.

My best friend lives in a big house \_\_\_\_\_.

3. **Add** a possibility adverbial to these sentences.

\_\_\_\_\_ we can visit your uncle after school.

Julie is going out for a treat later, \_\_\_\_\_.

Look at the clouds, it is \_\_\_\_\_ going to rain.

Modal verbs are verbs that are used to give more detail to a verb such as possibility, ability and permission. Some common modal verbs are:

**could, should, may, must, might, can, will, ought**

1. **Cross out** the incorrect modal verbs in these sentences.

You might / must not run by the pool.

Before the concert, we should / ought practise.

Will / Can I sit in this chair, please?

It looks great, but it should / might be very dangerous.

2. **Underline** the modal verbs in these sentences.

Aiden can speak three languages.

You ought to check your spellings first.

Could you be the next winner?

I need to run, I should be at the bus stop already!

3. **Write** your own sentences using some modal verbs.





You can add extra information to a sentence using parenthesis such as brackets ( ), dashes - or commas , . The sentence will still make sense without the parenthesis; it is more like an afterthought.

E.g. My drink - which is healthy and delicious - was only £1.

My drink (which is healthy and delicious) was only £1.

My drink, which is healthy and delicious, was only £1.

1. Add extra information to these sentences using **brackets**. There is a hint after each one if you are struggling for ideas.

Put some berries  into the bowl.

[Hint: how many?]

My dog Polly  loves to chase cats.

[Hint: what kind of dog?]

Aleks  doesn't speak much English yet.

[Hint: from where?]

2. Add extra information to these sentences using **dashes**.

My grandparents  are going on holiday next week.

[Hint: what are their names?]

I won a race  on sports day.

[Hint: what race?]

The restaurant served a pizza  which we all loved.

[Hint: what kind of pizza?]

# Parenthesis

3. Add extra information to these sentences using commas. You may find starting your extra information with 'which' is helpful when using commas.

Tigers \_\_\_\_\_ are a dangerous predator.

**[Hint: where do tigers live?]**

Dad and Papa made us cookies \_\_\_\_\_ after the match.

**[Hint: why?]**

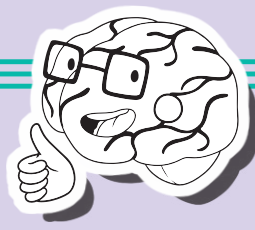
I visited Stella \_\_\_\_\_ on the weekend.

**[Hint: who is Stella?]**





# Brain Break #2



You've been working hard! Why not have a quick brain break? Just 5 minutes doing a quick burst of active listening can be great for relaxing your brain and getting the creative juices flowing.

Put on your favourite song and then doodle away! Listen to the speed, the tone and the texture of the music and use this to influence your drawing.



Commas can be used for a variety of reasons including to separate items in a list, to add parenthesis and to clarify meaning.

Sometimes, the placement of commas can change the meaning of a sentence.

E.g. He loves eating dogs and football.

He loves eating, dogs and football.

1. Add commas to these sentences to change the meaning.

Don't kick Grandpa!

Steve loves baking giraffes and dancing.

Let's eat Jana.

As the sun shone bright people searched for shade.

When he saw the soldiers on the hill the captain sounded the alarm.

2. Add commas into these lists.

For this recipe, you will need sugar salt flour and vanilla extract.

I bought apples bananas and pears at the supermarket.

We saw lions tigers cheetahs pumas and jaguars at the zoo.

The coach called the strikers defenders midfielders and goalkeeper to the sideline.

My favourite colours are red green blue black and yellow.





If a sentence is a **fact**, it is something that can be proven correct.

If a sentence is an **opinion**, it is something that is based on personal feelings.

1. Write **fact** or **opinion** after these sentences, then explain why.

Winter is colder than summer in England.

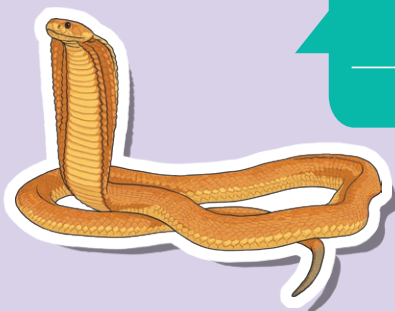
My hamster is the cutest pet.

Carrots taste nicer than brussel sprouts.

Pizza is a meal that originated in Italy.

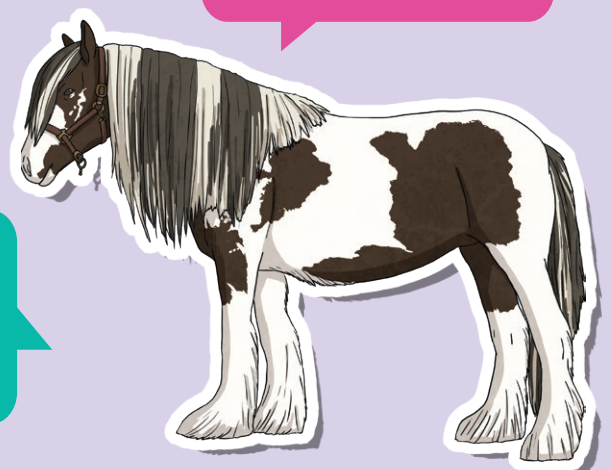
Rock music sounds good when it is loud.

2. Write down **one fact** and **one opinion** about each picture.



Fact: \_\_\_\_\_  
\_\_\_\_\_

Opinion: \_\_\_\_\_  
\_\_\_\_\_



Fact: \_\_\_\_\_  
\_\_\_\_\_

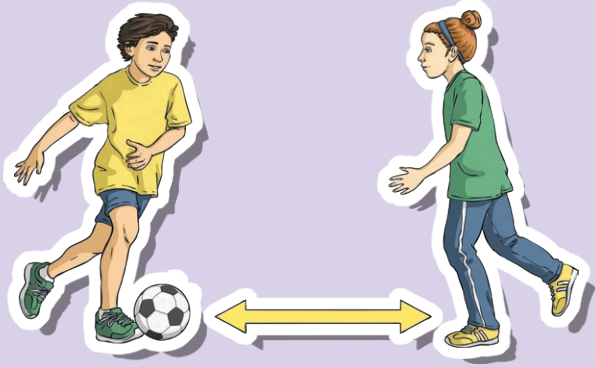
Opinion: \_\_\_\_\_  
\_\_\_\_\_

# Fact and Opinion



Fact: \_\_\_\_\_  
\_\_\_\_\_

Fact: \_\_\_\_\_  
\_\_\_\_\_



Opinion: \_\_\_\_\_  
\_\_\_\_\_

Opinion: \_\_\_\_\_  
\_\_\_\_\_

Fact: \_\_\_\_\_  
\_\_\_\_\_

Fact: \_\_\_\_\_  
\_\_\_\_\_



Opinion: \_\_\_\_\_  
\_\_\_\_\_

Opinion: \_\_\_\_\_  
\_\_\_\_\_



Proofreading is the process of reading through and **checking** your work once you have finished. You can look out for **spelling** mistakes, **punctuation** errors and make sure that it all makes **sense**.

Capital letters **Aa**

Full stops **.**

Commas **,**

Apostrophes **'**

Question marks **?**

Exclamation marks **!**

Inverted commas **" "**

Brackets **( )**

Commas after fronted adverbials **" "**



1. Read through this story and **colour** all the errors in red.

The road witch run passed the too towns Barrow and greenford) was bizy with Traffic. "Watch outt? Shouted jerry as marshall slamming on the breaks. as it pass by them the hewj truck blasting it's horn jerry And marshall who where used two traffic bye now - sighing and settled down four The long journie a head

2. **Rewrite** the story with the errors fixed.

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**\*Disclaimer:** We hope you find the information on our website and resources useful. As far as possible, the contents of this resource are reflective of current professional research. However, please be aware that every child is different and information can quickly become out of date. The information given here is intended for general guidance purposes only and may not apply to your specific situation.





1. Choose one of the above prefixes to fill in the gaps.

The steak was very chewy because it was **over**cooked.

The game was a draw so they're going to have a **re**match next week.

"Oh no!" Kelly said, "I think I've **mis**understood."

We're going too fast, we need to **de**celerate.

The runner's shoes were too big, which was putting him at a **dis**advantage.

2. Fill in the gaps in this table. The first one has been done for you.

Prefix	Prefix + Root word	Meaning
dis	disadvantage	Not at an advantage
de	decelerate	Off the acceleration
mis	misunderstood	Not understanding
over	overcooked	Cooked too much
re	rematch	Play the match again



3. Can you use each of the words in the list to **write** 5 new sentences?

1. **Any appropriate answer.**
2. **Any appropriate answer.**
3. **Any appropriate answer.**
4. **Any appropriate answer.**
5. **Any appropriate answer.**

# Suffixes

## Answers



1. **Underline** the correct word from each set. The root word is at the start of the set to help you.

terror	terrorate	<u>terrorise</u>	terrorify
vaccine	<u>vaccinate</u>	vaccinise	vaccinify
apology	apologate	<u>apologise</u>	apologify
horror	horrorate	horrorise	<u>horrify</u>
pure	pureate	purise	<u>purify</u>

2. **Fill** in the blanks in these sentences with the correct word. The root word has been added in brackets to help you.

Mina raced back to her class, hoping to apologise (apology) to Calvin.

The bees were beginning to terrorise (terror) the bus stop.

It was nearly midday so the sun's heat was starting to intensify (intense).

As the clay dried out, it began to solidify (solid).



# Suffixes

## Answers



Use the parts of the table that have been completed to help you fill in the blanks.

Root word	Suffix	Root word + suffix	What happened to the root word?
value	ate	valuate	The 'e' was removed.
note	ify	<b><u>notify</u></b>	<b><u>The 'e' was removed.</u></b>
<b><u>advert</u></b>	ise	advertise	<b><u>Nothing.</u></b>
medical	ate	<b><u>medicate</u></b>	<b><u>The 'al' was removed.</u></b>
theory	ise	<b><u>theorise</u></b>	<b><u>The 'y' was removed.</u></b>

# Relative Clauses

## Answers



1. **Match** the relative pronoun with its meaning.

which		refers to people
when		refers to places
who		refers to time
where		refers to objects or animals
that		refers to possessions
whose		refers to people, things or animals

2. **Choose** the correct relative pronoun to add into these sentences.

I called my sister who lives in Spain.

Do you like this t-shirt, which I got for my birthday?

The lamp that was on my desk has broken.

I'm going to visit the town where my grandparents grew up.

You'll love the beach when we take you to visit.

They are the boys whose ball got stolen.

# Relative Clauses

## Answers



3. **Write** some of your own sentences using relative clauses.

who - any appropriate answer.

which - any appropriate answer.

where - any appropriate answer.

when - any appropriate answer.

whose - any appropriate answer.

that - any appropriate answer.





Adverbial phrases give more information about a verb. They can tell us more about time, place and possibility.

1. **Underline** the type of adverbials these are.

later on	<u>time</u>	place	possibility
maybe	time	place	<u>possibility</u>
behind the school	time	<u>place</u>	possibility
tomorrow morning	<u>time</u>	place	possibility
if you're here	time	place	<u>possibility</u>

2. **Add** a time adverbial to these sentences.

Various answers, such as:

After dinner, we are going to do our homework.

The girls are going to their karate class at 2 o'clock.

We'll have lunch then later on we'll go for a walk.

3. **Add** a place adverbial to these sentences.

Various answers, such as:

The children are playing out in the playground.

In the briefcase, you will find a golden ticket.

My best friend lives in a big house down the street.

3. **Add** a possibility adverbial to these sentences.

Various answers, such as:

Maybe we can visit your uncle after school.

Julie is going out for a treat later, if she is good.

Look at the clouds, it is definitely going to rain.





1. **Cross out** the incorrect modal verbs in these sentences.

You might / **must** not run by the pool.

Before the concert, we **should** / ought practise.

Will / **Can** I sit in this chair, please?

It looks great, but it should / **might** be very dangerous.

2. **Underline** the modal verbs in these sentences.

Aiden can speak three languages.

You ought to check your spellings first.

Could you be the next winner?

I need to run, I should be at the bus stop already!

3. **Write** your own sentences using some modal verbs.

**Any appropriate answers.**





1. Add extra information to these sentences using **brackets**. There is a hint after each one if you are struggling for ideas.

Put some berries (**five or six is enough**) into the bowl.

[Hint: how many?]

My dog Polly (**a jack russell**) loves to chase cats.

[Hint: what kind of dog?]

Aleks (**who is from Latvia**) doesn't speak much English yet.

[Hint: from where?]

2. Add extra information to these sentences using **dashes**.

My grandparents - **Paula and Hamad** - are going on holiday next week.

[Hint: what are their names?]

I won a race - **the egg and spoon race** - on sports day.

[Hint: what race?]

The restaurant served a pizza - **ham and pineapple** - which we all loved.

[Hint: what kind of pizza?]



3. Add extra information to these sentences using commas. You may find starting your extra information with 'which' is helpful when using commas.

Tigers, **which are found in the jungle**, are a dangerous predator.

[Hint: where do tigers live?]

Dad and Papa made us cookies, **which are my favourite treat**, after the match.

[Hint: why?]

I visited Stella, **my aunt**, on the weekend.

[Hint: who is Stella?]





1. **Add** commas to these sentences to change the meaning.

Don't kick, Grandpa!

Steve loves baking, giraffes and dancing.

Let's eat, Jana.

As the sun shone bright, people searched for shade.

When he saw the soldiers on the hill, the captain sounded the alarm.

2. **Add** commas into these lists.

For this recipe, you will need sugar, salt, flour and vanilla extract.

I bought apples, bananas and pears at the supermarket.

We saw lions, tigers, cheetahs, pumas and jaguars at the zoo.

The coach called the strikers, defenders, midfielders and goalkeeper to the sideline.

My favourite colours are red, green, blue, black and yellow.



1. Write **fact** or **opinion** after these sentences, then explain why.

Winter is colder than summer in England.

**Fact**

My hamster is the cutest pet.

**Opinion**

Carrots taste nicer than brussel sprouts.

**Opinion**

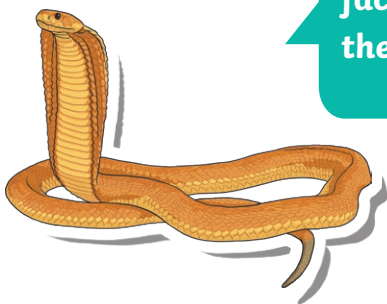
Pizza is a meal that originated in Italy.

**Fact**

Rock music sounds good when it is loud.

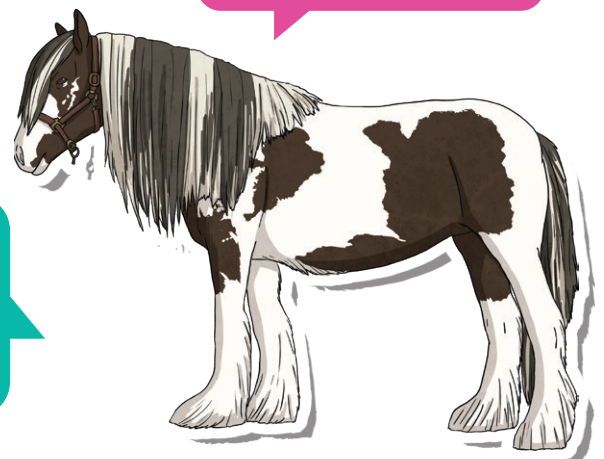
**Opinion**

2. Write down **one fact** and **one opinion** about each picture.



Any appropriate fact referring to the picture.

Any appropriate opinion referring to the picture.

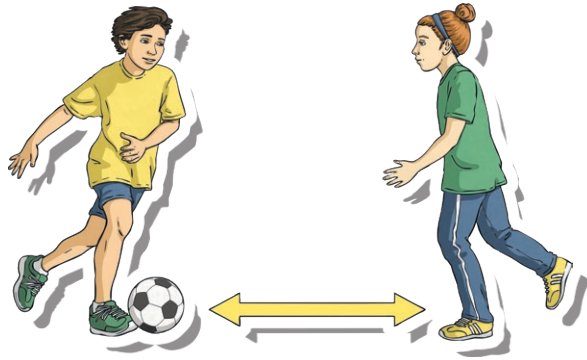


Any appropriate fact referring to the picture.

Any appropriate opinion referring to the picture.



Any appropriate fact referring to the picture.



Any appropriate fact referring to the picture.



Any appropriate opinion referring to the picture.

Any appropriate opinion referring to the picture.

Any appropriate fact referring to the picture.



Any appropriate fact referring to the picture.



Any appropriate opinion referring to the picture.

Any appropriate opinion referring to the picture.





1. Read through this story and colour all the errors in red.

The road **witch run passed** the **too** towns Barrow and **greenford**) was **bizy** with **T**raffic. "Watch **ouff?** **S**houted **jerry** as **marshall** **slamming** on the **breaks**. **as** it **pass** by them the **hewj** truck **blasting it's** horn **jerry** **And** **marshall** who **where** used **two** traffic **bye** now - **sighing and** settled down **four** **The** long **journie a head**

2. Rewrite the story with the errors fixed.

The road which ran past the two towns (Barrow and Greenford) was busy with traffic. "Watch out!" shouted Jerry, as Marshall slammed on the brakes. As it passed by them, the huge truck blasted its horn. Jerry and Marshall - who were used to traffic by now - sighed and settled down for the long journey ahead.