

Home Learning: Year 4 Maths

We have set out each week's learning as a series of suggested daily activities. However, the time may look very different for each family. Building in time to look after each other, be physical, creative and relax is as important as completing the set activities. You need to decide what works for you and your family. You could do more of the activities on one day and fewer on another, or you may find it helpful to have a more structured approach. It may help to give clear times for doing activities and clear times for breaks. You will also notice that some of the science, history and DT activities are the same and therefore can be done as a family.

Year 4	Day 1	Day 2	Day 3	Day 4	Day 5
Factual Fluency	https://uk.ixl.com/math/year-4/add-two-numbers-with-up-to-three-digits	https://uk.ixl.com/math/year-4/subtract-numbers-with-up-to-three-digits	https://uk.ixl.com/math/year-4/multiplication-tables-up-to-12	https://uk.ixl.com/math/year-4/multiplication-word-problems	https://uk.ixl.com/math/year-4/price-lists
Four Days of Reasoning (Monday - Thursday)	https://whiterosemaths.com/homelearning/year-4/ Summer week 7 (w/c 8th June) Worksheets (and answers) for each lesson can be found below.	Click onto the link each day. There is a video to watch for each day and then activities to complete. White Rose is an excellent resource and one often used by teachers in our schools. As you support your child, you will see that it presents concepts clearly and incrementally. The lessons will start very simply – however, we do not recommend that you race ahead; spend time on the straightforward before moving onto more complex, abstract ideas. <i>If you feel your child needs greater challenge click onto this link, they could work on the learning set for Y5.</i> <i>If your child struggles with maths, they could work on the learning set for year groups lower down the school.</i>			
Friday	Revise any aspects of this week's learning that you have been unsure of. You can simply repeat the lesson(s). You can also use the visual tool by clicking on the link above. Please practise your times table and division facts. You could also spend some time on https://www.bbc.co.uk/bitesize/subjects/z826n39 Guardians: Defenders of Mathematica (start with the Addition and Subtraction section).				

Home Learning: Year 4 English

Y3	Day 1	Day 2	Day 3 & Day 4	Day 5
Reading	Make sure you have some quiet time for daily reading of your own book. Record your reading in your Reading Record as you normally do. Check out https://www.ccht.rbkc.sch.uk/learning-at-home/story-time/ for some on-line stories and some good book recommendations.			
Writing	<p>LO: Revise word classes (nouns, adjectives and adverbs) Read Mario Profile. Think about the following: What questions does this profile answer? What other questions could be answered? Do you know any other information about this video-game character? Remind yourself about word classes Use the Revision Cards to remind yourself about the different word classes. Task Look at the key provided under the Mario profile. Go through the profile and underline and highlight all the different word classes according to the key. For example, all the nouns in the profile should be underlined or highlighted in blue. When you have finished the task you could ask an adult to check your task. The answers can be found at the bottom of this week's resources if you scroll down. Finally Write some sentences about a video-game that you know. When you have written them, highlight the different classes of words that you have used. Can you add any adjectives or adverbs to your writing?</p>	<p>LO: consolidate understanding of word classes. Look at the profile for Luigi. Fill in the colour code for the Key. Read Profiles 1-5. Collect examples of different word classes from these profiles. Write them on the Word Class Grid. If you don't have a printer, you can make your own grid</p>	<p>LO: to design a character Day Three Look at New Characters (see below) These are six possible new characters that could join Mario in a game. Label each character, writing about 3-5 things that you notice about them. Remind yourself about word classes Use the Revision Card to remind yourself about word classes. Complete Character Sentences. Invent a name for each of the six new characters, fill in the grid for them and then write a sentence about them. Day Four Design your own character – either for a Mario game or for a game of your choice. Draw the character and write a detailed profile. Remember:</p> <ul style="list-style-type: none"> - Describe the character's appearance - Give details of his/her family, background and friends. <p>Include:</p> <ul style="list-style-type: none"> - Information of personality, hobbies. - Information about special powers. - Information about the character's particular aims or objectives within the game. <p>Read through your profile. Are you happy with it? If so show it to someone in your family before uploading to ClassDojo.</p> <p>Fun time extra: if you want to you could make a 3D model of your character or a story scene.</p>	<p>LO: Learn spellings Ask someone to test you on the spellings you were set before half term. How did you do? Ask the adult to help you mark your spellings. If you made any mistakes, practise writing these spellings out three of four times like you would at school.</p>

Home Learning: Year 4 Curriculum

Day 1	Day 2	Day 3	Day 4	Day 5
Geography	Science	History	RE	Spanish
<p>LO: Think about food waste in our homes</p> <p>Click here and here to listen to why we waste so much food and the effect it has on the wider world.</p> <ul style="list-style-type: none"> • Listen and write down any surprising facts you hear about food waste or unknown vocabulary to help you remember the meaning. • Use ideas from the video or create your own to think of 5 ways you can reduce food waste in your homes. Share this with your family. Use the resources below to get ideas. 	<p>LO Understand natural environments</p> <p>Planning an even better nature area</p> <ul style="list-style-type: none"> • Design a plan for wildlife area in a local park. You could carry out some research online: Website 1 Website 2 Website 3 Website 4 <p>or look at books you have at home to help you.</p> <ul style="list-style-type: none"> • Think about the living things that will inhabit the wildlife area. What will they need to survive? How will you make sure the habitat is suitable? • Write a Code of Conduct or create a poster for visitors to your new, improved wildlife area. What rules will people have to follow? 	<p>LO: Understand Viking beliefs</p> <p>Think about beliefs you have learnt about in previous topics – which Gods and Goddesses do you remember?</p> <ul style="list-style-type: none"> • Watch the video about Viking beliefs. • Research the nine worlds of the Yggdrasil Tree here draw your own version of the Yggdrasil Tree using the attached illustration to help your ideas. 	<p>Baptism</p> <p>Many Christians believe that it is important to welcome a new baby into the Christian faith by baptising them. Watch these two clips about the baptism of Baby Jamie. Make some notes about the things that happened during the baptism ceremony.</p> <p>https://www.bbc.co.uk/bit/size/clips/zxd2hyc https://www.bbc.co.uk/bit/size/clips/zcb9jxs</p> <p>Design an invitation to a baby's baptism. Decorate it to show the symbols used in a baptism. Include a sentence or two about what the baptism will be like and why it is important to the baby and his or her family.</p>	<p>Watch this video about daily routines in Spanish</p> <p>https://www.youtube.com/watch?v=kcrVFU4nNDo</p> <p>Can you guess what they are?</p> <ul style="list-style-type: none"> -Me levanto - Desayuno - Me ducho - Me visto -Salgo de casa - Voy al trabajo -Trabajo -Como -Hago deporte -Quedo con amigos -Voy a clase -Cenar -Veo series de TV -Leo un libro -Me voy a dormir
Everything is Interesting – Are You Ready for a Challenge?				

Tenths as decimals



1 Shade the bar models to represent the amounts.

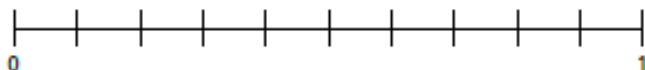
- a) 7 tenths
- b) $\frac{4}{10}$
- c) 0.3

2 Complete the table to show the fractions and decimals the bar models represent.

Bar model	Fraction	Decimal

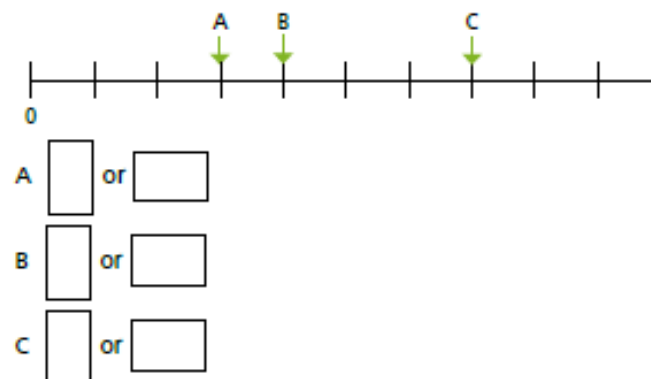
3 Write each fraction and decimal in the correct place on the number line.

$\frac{2}{10}$ 0.6 $\frac{9}{10}$ 0.1



4 Work out the values of A, B and C.

Give your answers as fractions and decimals.



5 Match the equivalent fractions, decimals and words.

$\frac{3}{10}$

0.7

four tenths

$\frac{9}{10}$

0.3

one tenth

$\frac{7}{10}$

0.4

three tenths

$\frac{4}{10}$

0.1

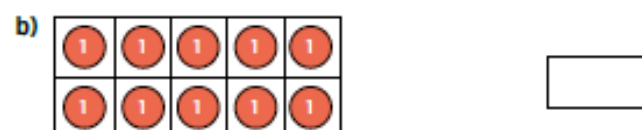
nine tenths

$\frac{1}{10}$

0.9

seven tenths

6 What is the total value represented by each ten frame?



7

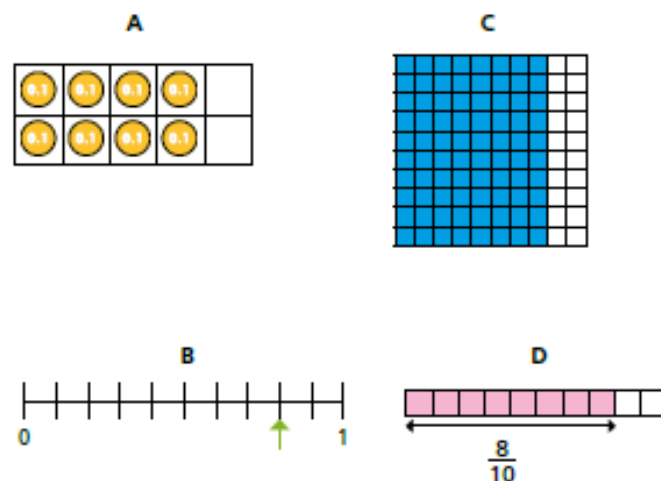


Nine tenths
can be written 0.9, so ten
tenths must be 0.10

Do you agree with Ron? _____

Explain your answer.

8 Eight tenths can be represented in all of the ways shown.



Which do you think is the best representation? _____

Discuss your answer with a partner.

Represent six tenths in each different way.



Dividing 2 digits by 10



- 1 a) The array shows 20 shared between 10



Complete the calculation.

$$20 \div 10 = \square$$

- b) The array shows 4 shared between 10



Complete the calculation.

$$4 \div 10 = \square$$

- c) Complete the calculation.

$$24 \div 10 = \square$$

Compare answers with a partner.



- 2 a) Draw counters to represent 30 on the place value chart.

Tens	Ones	Tenths

Complete the division.

$$30 \div 10 = \square$$

Draw counters to show your answer on the place value chart.

Tens	Ones	Tenths

- b) Draw counters to show 35 on the place value chart.

Tens	Ones	Tenths

Complete the division.

$$35 \div 10 = \square$$

Draw counters to show your answer on the place value chart.

Tens	Ones	Tenths

- c) What do you notice about your answers in parts a) and b)?

- d) Complete the sentence.

When dividing by 10, you move the counters place to the _____.

3



You can't share
13 between 10 because 13 is
not a multiple of 10

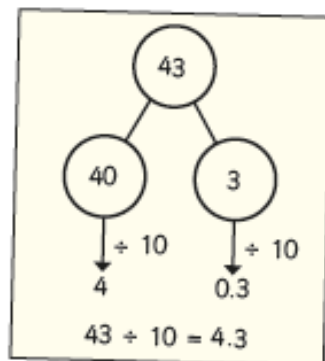
Do you agree with Rosie? _____

Explain your answer.

4

Dexter is calculating $43 \div 10$

Here are Dexter's workings.

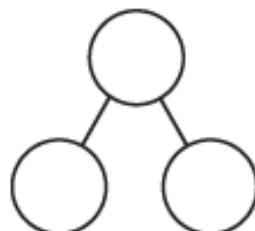
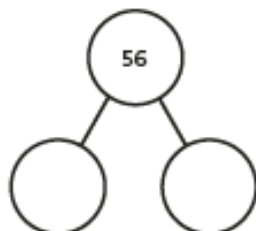


a) Talk to a partner about why Dexter's method works.

b) Use Dexter's method to complete the divisions.

$56 \div 10 = \square$

$71 \div 10 = \square$



5

Complete the divisions.

$a) 37 \div 10 = \square$

$e) 80 \div 10 = \square$

$b) 11 \div 10 = \square$

$f) \square = 29 \div 10$

$c) 48 \div 10 = \square$

$g) \square \div 10 = 6.3$

$d) 99 \div 10 = \square$

$h) 3.9 = \square \div 10$

6

This Gattegno chart shows the number 37

100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

a)

I need to move
the counters one place
to the left, so
 $37 \div 10 = 26$



Do you agree with Teddy? _____

Explain your answer.

b) How can you use a Gattegno chart to divide by 10?

Hundredths as decimals



1 Complete the table.

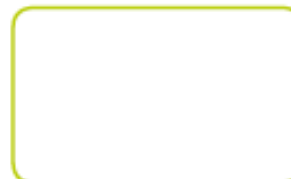
Hundred square	Words	Fraction	Decimal
	thirty-six hundredths		
		$\frac{82}{100}$	
			0.27
	seven tenths		
			0.3



2 Draw decimal place value counters to represent the numbers.

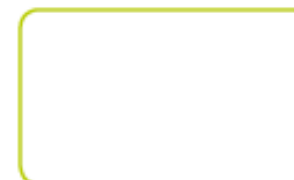
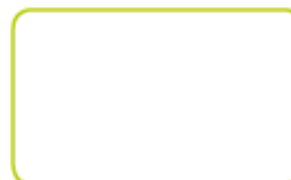
a) 0.03

c) 0.63



b) 0.6

d) 0.36



3 The counters represent tenths and hundredths.

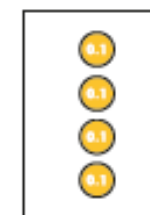
a) Match the decimals to the groups of counters.

0.04

0.4

0.14

0.41



b) Write each decimal as a fraction.

$0.04 = \square$

$0.4 = \square$

$0.14 = \square$

$0.41 = \square$

4

3 hundreds is
the same as $\frac{3}{100}$



Is Rosie correct? _____

Explain your answer.

5

Match the decimals to the descriptions.

Some of the numbers can be described in two ways.

1.3

one tenth and three hundredths

thirty hundredths

0.03

one and three tenths

thirteen tenths

0.3

thirteen hundredths

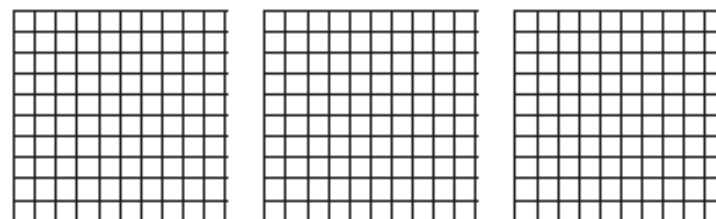
three tenths

0.13

three hundredths

6

Shade the hundred squares to represent 12 hundredths in three different ways.



Compare answers with a partner.

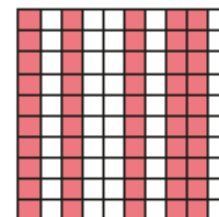
What is the same? What is different?

7

0.6 of the
hundred square
is shaded.



Dora



6 tenths of the
hundred square
is shaded.



Ron

0.60 of the
hundred square
is shaded.



Whitney

60 hundredths
of the hundred square
is shaded.



Jack

Who do you agree with? _____

Explain why.

Dividing 1 and 2 digits by a hundred



- 1 a) Draw counters to show 8 on the place value chart.

Ones	Tenths	Hundredths

- b) Complete the division.

$$8 \div 100 = \square$$

- c) Draw counters to show your answer on the place value chart.

Ones	Tenths	Hundredths

What do you notice?

- 2 a) Draw counters to show 80 on the place value chart.

Tens	Ones	Tenths	Hundredths

- b) Complete the division.

$$80 \div 100 = \square$$

- c) Draw counters to show your answer on the place value chart.

Tens	Ones	Tenths	Hundredths

What do you notice?

- 3 Complete the sentence.

To divide by 100 you move the counters places to the _____.

- 4 Complete the calculations.

a) $3 \div 100 = \square$

d) $\square = 60 \div 100$

b) $90 \div 100 = \square$

e) $\square \div 100 = 0.5$

c) $\square = 5 \div 100$

f) $0.02 = \square \div 100$

- 5 Dora is working out $48 \div 100$ using a place value chart.

Tens	Ones	Tenths	Hundredths
● ● ● ●	● ● ● ● ● ● ● ●		



To divide by 100 you move two places to the right, so $48 \div 100$ is 40.08

Tens	Ones	Tenths	Hundredths
● ● ● ●			● ● ● ● ● ● ● ●

- a) Explain the mistake that Dora has made.

- b) Complete the division.

$$48 \div 100 = \square$$

- 6 This Gattegno chart shows the number 37

10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

- a) Explain how you would work out $37 \div 100$ using this chart.

Compare answers with a partner.

- b) Use the Gattegno chart to complete the division.

$$92 \div 100 = \boxed{}$$

- c) Use the Gattegno chart to complete the division.

$$19 \div 100 = \boxed{}$$

- 7 Complete the calculations.

a) $31 \div 100 = \boxed{}$

e) $\boxed{} = 29 \div 100$

b) $60 \div 100 = \boxed{}$

f) $\boxed{} \div 100 = 0.58$

c) $\boxed{} = 85 \div 100$

g) $0.5 = \boxed{} \div 100$

d) $0.01 = \boxed{} \div 100$

h) $0.3 = 30 \div \boxed{}$



- 8 Complete the calculations.

a) $36 \div 10 = \boxed{}$

b) $91 \div 10 = \boxed{}$

$$36 \div 100 = \boxed{}$$

$$91 \div 100 = \boxed{}$$

$$36 \div 10 \div 10 = \boxed{}$$

$$91 \div 10 \div 10 = \boxed{}$$

What do you notice?

9

Dividing by 100
is always the same as
dividing by 10 twice.



Do you agree with Amir? _____

Explain your answer.

10

Roll two dice to make two 2-digit numbers.

Divide your numbers by 100. Record your answer. Roll again.

Here is an example.



$36 \div 100$ and $63 \div 100$

$$\boxed{} \div 100 = \boxed{} \text{ and } \boxed{} \div 100 = \boxed{}$$

$$\boxed{} \div 100 = \boxed{} \text{ and } \boxed{} \div 100 = \boxed{}$$

What is the greatest possible answer you can get?

What is the smallest possible answer?

Compare answers with a partner.



English Day One

Mario Profile



Look at the Key below and underline all the different word classes according to the colour code eg all the nouns should be underlined in blue

Mario is a short, Italian plumber with a round portly tummy. He lives within the Mushroom Kingdom with his younger brother, Luigi. Mario usually wears a long-sleeved red shirt, a pair of blue overalls with yellow buttons and a red cap. Mario has countless adventures that usually result in him bravely rescuing Princess Peach from the villain, Bowser.

Mario jumps high and is widely known for his jump-stomp move which can entirely crush smaller enemies. This attack often enables Mario to quickly knock the turtle-like Koopa Troopas into or out of their shells. He can also perform an impressive back-flip and the *Wall Kick*, which rapidly propels him upwards by kicking off walls.

Key			
noun	adjective	adverb	verb

English Day One – Revision Cards

Nouns

A **noun** names a person, place, idea, thing or feeling.



a plumber
the rescue
a race
a mushroom

In front of a **noun**, we often have

a an the → determiners

Verbs

Verbs indicate that someone or something is **doing, feeling or being**.

Mario *gasped*.
The kart *hurtled*.
He *has* Princess Peach.
I *win!*



Usually **verbs** have the name of a person or thing or a pronoun in front of them.

Adjectives

An **adjective** is a describing word.
It tells you more about a **noun**.



those funny clothes
some exciting news
a nice, normal day
his clenched fist

The clothes were funny.

Adjectives sometimes come next to 'their' **nouns**...
but sometimes they do not.

Adverbs

An **adverb** tells you more about a **verb**.
It helps us express **manner, time and place**.



English Day Two

Key				
Word class	noun	verb	adjective	adverb
colour				

Luigi

Luigi is taller than his older brother, Mario, and is usually dressed in a green shirt with dark blue overalls. Luigi is an Italian plumber, just like his brother. He always seems nervous and timid but is kind. He is calmer than his famous brother. If there is conflict, Luigi will smile and walk away. It is often thought that Luigi may secretly love Princess Daisy.

Profiles 1-5

Princess Peach

Princess Peach has long, blonde hair and blue eyes. She is tall and usually wears a pink evening gown with frilly trimmings. Her hair is sometimes pulled back into a high ponytail.

Peach is mostly kind and does not show an aggressive nature, even when she is fearlessly fighting or confronting her enemies.

Although often kidnapped by huge Bowser, Peach is always happy to have Bowser on the team when a bigger evil threatens the Mushroom Kingdom. She puts previous disagreements aside.



Profiles (cont'd)

Bowser

Bowser is the King of the Koopas. Koopas are active turtles that live in the Mushroom Kingdom. Bowser has a large, spiked turtle shell, horns, razor-sharp fangs, clawed fingers and toes, and bright red hair. He is hugely strong and regularly breathes fire. Bowser can also jump high. He often kidnaps Princess Peach to lure poor Mario into a trap. Bowser occasionally works with Mario and Luigi to defeat a greater evil. Then they work together.



Yoshi

Yoshi is a human-like dinosaur who faithfully acts as Mario and Luigi's faithful sidekick. Wherever the brothers are, Yoshi is often found nearby. The Yoshi species, to which Yoshi belongs, appear in various colours. His grasping tongue can extend a huge distance to successfully grab distant objects or out-of-reach areas. Yoshi sometimes makes high-pitched babyish squeals as well as recognisable words.

Wario

Wario is Mario's wicked arch enemy. He has a large head and chin, huge muscular arms, a wide and short, tubby body, and a zig-zag moustache. He always wears a yellow and purple outfit. Wario was a childhood rival to Mario and Luigi who gradually became jealous of their success. He cackles aggressively and often uses exploding bombs. He throws them everywhere.

Toad

Toad is one of Princess Peach's loyal attendants; constantly working on her behalf. He is very small in size but has a large head that hugely resembles a mushroom in shape and colour. Sometimes, Toad appears with a red vest, though he is usually seen with his blue vest. Toad is generally a cheerful character, and quite shy, but he can suddenly become extremely distressed when a major event happens nearby.

English Day Two - Word Classes Grid

[illegible]

English Day Three – Name and Label Characters



English Day Three - Character sentences

Invent a name for each character. Complete the grid and then use those words to make a sentence for them.

[illegible]

Mario is an enthusiastic plumber who jumps high.

English Day Five

Friday 12th June - Spelling Test!

Ask someone to test you on the words. Give yourself time to work on the words first if you would like extra practice.

<https://www.bbc.co.uk/bitesize/topics/zqgsw6f/articles/zqcpv9q>

Watch the short film and try some of the activities. Then read through the list of words to learn.

Green words - everyone must learn to spell these words

Blue words - most people will learn to spell these words too

Red words - some people will also learn these words

	-ous	1st Attempt	2nd Attempt	3rd Attempt
1	enormous			
2	famous			
3	dangerous			
4	obvious			
5	poisonous			
6	jealous			
7	curious			
8	various			
9	serious			
10	hideous			
11	courageous			
12	outrageous			
13	mischievous (NOT -ious)			
14	glamorous			
15	humorous			
16	spontaneous			

Spelling Strategies

Pyramid Writing

b
be
bec
beca
becau
becaus
because

Rainbow writing

Write the word over and over again using different colours.

remember

Create a mnemonic



Sound Buttons

suppose

****Note,** this may not work for words you cannot 'sound out'

Underline the tricky part

separate

library

naughty

Look, Say, Cover, Write, Check

Look at the word

Say it out loud

Cover it up

Write it

Check whether it is spelt correctly

Geography

Having a food bin is a great way to recycle any cooked or raw food scraps. Items of food that can be recycled are all uneaten food, out of date or mouldy food, raw and cooked meat and fish including bones, dairy products such as cheese, eggs and egg shells, bread, fruit and vegetables including the peelings. **Just remember to make sure you remove all packaging from your food waste, especially plastic.**



The next step is to turn all of the food waste into compost. This can be done by mixing food waste with garden waste – composting it in an enclosed system for around 2-4 weeks. **Make sure to turn over the food waste and garden waste regularly to mix everything up!** This will allow the material to mature into a nice compost consistency that can be used as a soil conditioner.



After about 2 months the food waste and garden waste would have matured into a nice compost mixture. **This can be used as soil to grow fruit and vegetables, such as delicious courgettes!**

There are many inventive ways you can reduce food waste in your homes, what could you do?



Here are three ideas to make the most of your fab food:

-Millions of apples/pears are chucked every day, but you can store them in the fridge, loosely wrapped and they will last up to two weeks longer. And if they've had a knock, try putting them in a pie, crumble or smoothie!



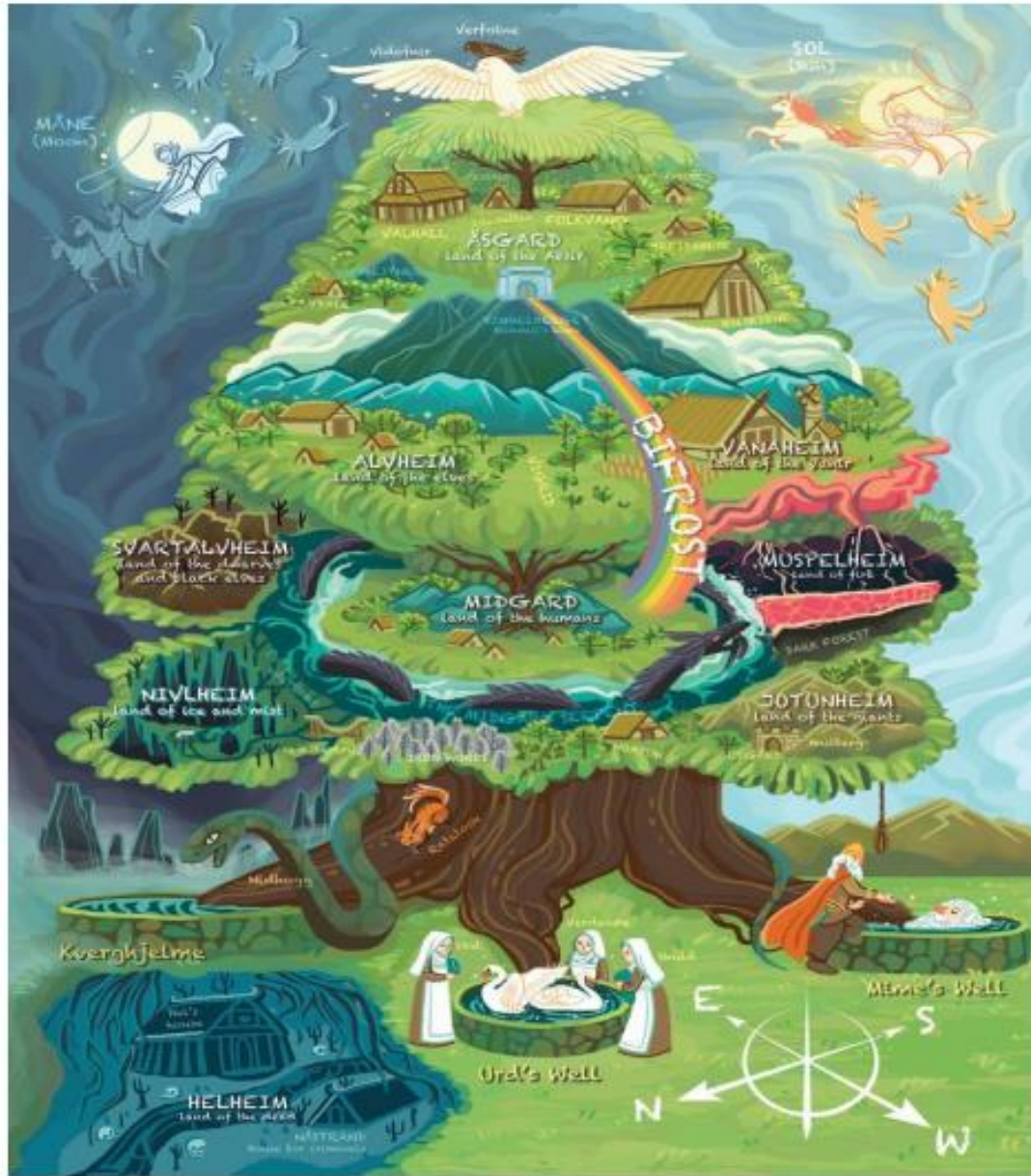
-Did you know you can freeze baked beans? Freeze within two days of opening and then defrost in the microwave until piping hot.



-Turn potato peelings into crisps – sprinkle with salt and pepper and pop them in the oven.



Science



Maths Answers

Tenths as decimals

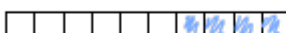


1 Shade the bar models to represent the amounts.

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b) $\frac{4}{10}$



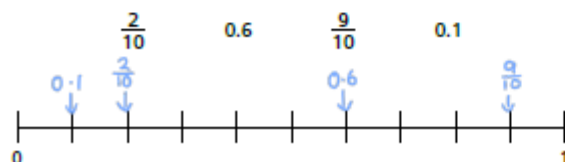
c) 0.3



2 Complete the table to show the fractions and decimals the bar models represent.

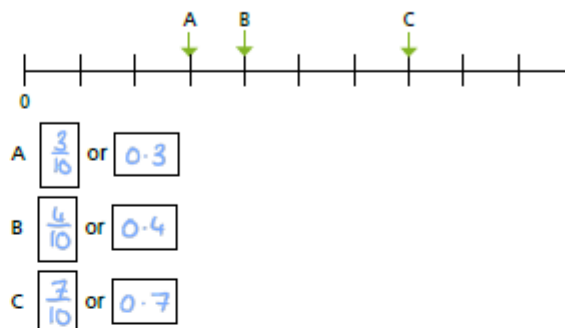
Bar model	Fraction	Decimal
	$\frac{1}{10}$	0.1
	$\frac{5}{10}$	0.5
	$\frac{6}{10}$	0.6
	$\frac{3}{10}$	0.3

3 Write each fraction and decimal in the correct place on the number line.

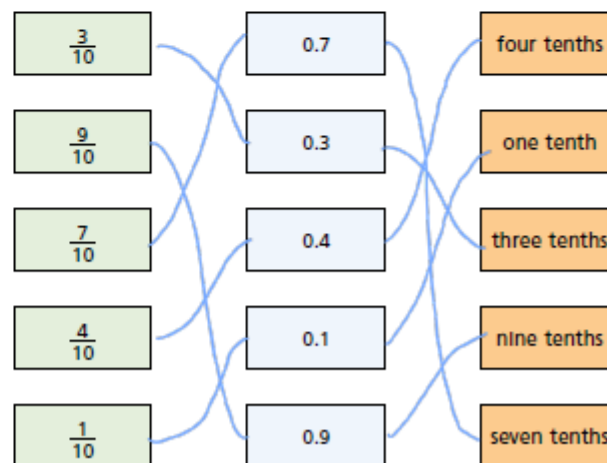


4 Work out the values of A, B and C.

Give your answers as fractions and decimals.



5 Match the equivalent fractions, decimals and words.



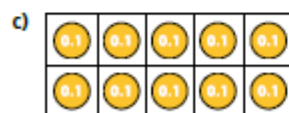
6 What is the total value represented by each ten frame?



100



10



1

7



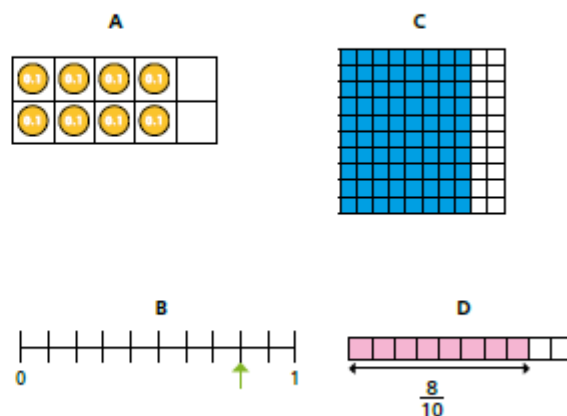
Nine tenths can be written 0.9, so ten tenths must be 0.10

Do you agree with Ron? No

Explain your answer.

Ten tenths is one whole.

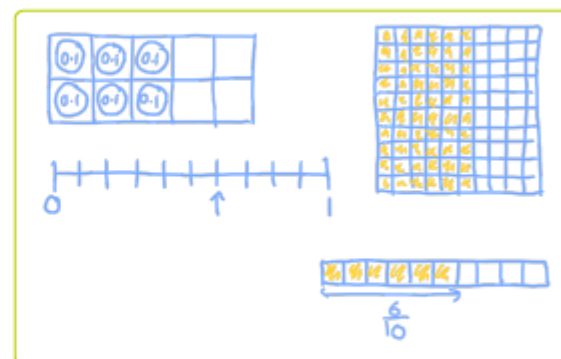
8 Eight tenths can be represented in all of the ways shown.



Which do you think is the best representation? _____

Discuss your answer with a partner.

Represent six tenths in each different way.



Dividing 2 digits by 10

- 1 a) The array shows 20 shared between 10



Complete the calculation.

$$20 \div 10 = \boxed{2}$$

- b) The array shows 4 shared between 10



Complete the calculation.

$$4 \div 10 = \boxed{0.4}$$

- c) Complete the calculation.

$$24 \div 10 = \boxed{2.4}$$

Compare answers with a partner.



- 2 a) Draw counters to represent 30 on the place value chart.

Tens	Ones	Tenths
0 0 0		

Complete the division.

$$30 \div 10 = \boxed{3}$$

Draw counters to show your answer on the place value chart.

Tens	Ones	Tenths
	0 0 0	

- b) Draw counters to show 35 on the place value chart.

Tens	Ones	Tenths
0 0 0	0 0 0 0 0	

Complete the division.

$$35 \div 10 = \boxed{3.5}$$

Draw counters to show your answer on the place value chart.

Tens	Ones	Tenths
	0 0 0	0 0 0 0 0

- c) What do you notice about your answers in parts a) and b)?

- d) Complete the sentence.

When dividing by 10, you move the counters

place to the right.

3



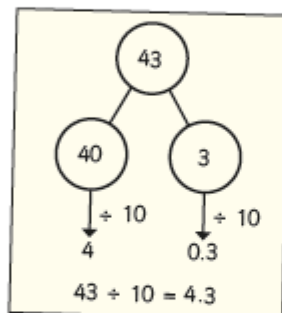
You can't share
13 between 10 because 13 is
not a multiple of 10

Do you agree with Rosie? No

Explain your answer.

4

Dexter is calculating $43 \div 10$
Here are Dexter's workings.

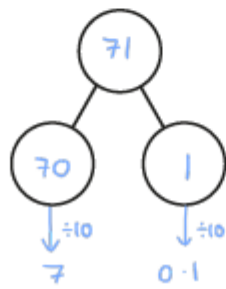
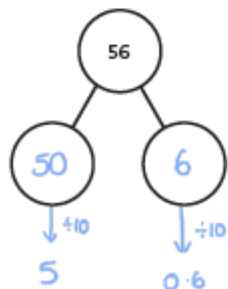


a) Talk to a partner about why Dexter's method works.

b) Use Dexter's method to complete the divisions.

$$56 \div 10 = \boxed{5.6}$$

$$71 \div 10 = \boxed{7.1}$$



5

Complete the divisions.

$$a) 37 \div 10 = \boxed{3.7}$$

$$e) 80 \div 10 = \boxed{8}$$

$$b) 11 \div 10 = \boxed{1.1}$$

$$f) \boxed{2.9} = 29 \div 10$$

$$c) 48 \div 10 = \boxed{4.8}$$

$$g) \boxed{63} \div 10 = 6.3$$

$$d) 99 \div 10 = \boxed{9.9}$$

$$h) 3.9 = \boxed{39} \div 10$$

6

This Gattegno chart shows the number 37

100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

a)

I need to move
the counters one place
to the left, so
 $37 \div 10 = 26$



Do you agree with Teddy? No

Explain your answer.

$$\underline{37 \div 10 = 3.7}$$

b) How can you use a Gattegno chart to divide by 10?

Hundredths as decimals

1 Complete the table.

Hundred square	Words	Fraction	Decimal
	thirty-six hundredths	$\frac{36}{100}$	0.36
	eighty-two hundredths	$\frac{82}{100}$	0.82
	twenty-seven hundredths	$\frac{27}{100}$	0.27
	twelve hundredths	$\frac{12}{100}$	0.12
	seven tenths	$\frac{7}{10}$	0.7
	three tenths	$\frac{3}{10}$	0.3

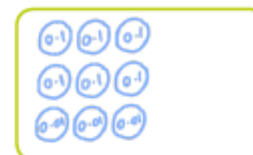


2 Draw decimal place value counters to represent the numbers.

a) 0.03



c) 0.63



b) 0.6

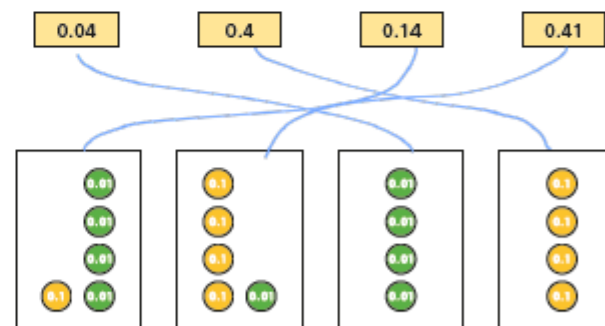


d) 0.36



3 The counters represent tenths and hundredths.

a) Match the decimals to the groups of counters.



b) Write each decimal as a fraction.

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

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

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

$$0.41 = \frac{41}{100}$$

4

3 hundreds is
the same as $\frac{3}{100}$



Is Rosie correct? No

Explain your answer.

3 hundreds = 300 3 hundredths = $\frac{3}{100}$

5

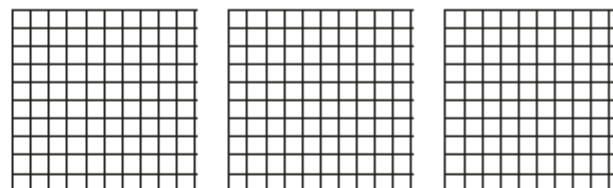
Match the decimals to the descriptions.

Some of the numbers can be described in two ways.

1.3	one tenth and three hundredths
0.03	thirty hundredths
0.3	one and three tenths
0.13	thirteen tenths
	thirteen hundredths
	three tenths
	three hundredths

6

Shade the hundred squares to represent 12 hundredths in three different ways. *Various answers*



Compare answers with a partner.

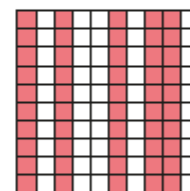
What is the same? What is different?

7

0.6 of the
hundred square
is shaded.



Dora



6 tenths of the
hundred square
is shaded.



Ron

0.60 of the
hundred square
is shaded.



Whitney

60 hundredths
of the hundred square
is shaded.



Jack

Who do you agree with? All

Explain why.

Dividing 1 and 2 digits by a hundred



- 1 a) Draw counters to show 8 on the place value chart.

Ones	Tenths	Hundredths
0.0000000		

- b) Complete the division.

$$8 \div 100 = 0.08$$

- c) Draw counters to show your answer on the place value chart.

Ones	Tenths	Hundredths
		0.0000000

What do you notice?

- 2 a) Draw counters to show 80 on the place value chart.

Tens	Ones	Tenths	Hundredths
0.000000			

- b) Complete the division.

$$80 \div 100 = 0.8$$

- c) Draw counters to show your answer on the place value chart.

Tens	Ones	Tenths	Hundredths
		0.00000	0.0

What do you notice?

- 3 Complete the sentence.

To divide by 100 you move the counters 2 places to the right.

- 4 Complete the calculations.

$$a) 3 \div 100 = 0.03$$

$$d) 0.6 = 60 \div 100$$

$$b) 90 \div 100 = 0.9$$

$$e) 50 \div 100 = 0.5$$

$$c) 0.05 = 5 \div 100$$

$$f) 0.02 = 2 \div 100$$

- 5 Dora is working out $48 \div 100$ using a place value chart.

Tens	Ones	Tenths	Hundredths
0.00000	0.00000		



To divide by 100 you move two places to the right, so $48 \div 100$ is 40.08

Tens	Ones	Tenths	Hundredths
0.00000			0.00000

- a) Explain the mistake that Dora has made.

She hasn't moved all of the counters

- b) Complete the division.

$$48 \div 100 = 0.48$$

- 6 This Gattegno chart shows the number 37

10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

- a) Explain how you would work out $37 \div 100$ using this chart.

Move the counters down 2

Compare answers with a partner.

- b) Use the Gattegno chart to complete the division.

$$92 \div 100 = 0.92$$

- c) Use the Gattegno chart to complete the division.

$$19 \div 100 = 0.19$$

- 7 Complete the calculations.

a) $31 \div 100 = 0.31$

e) $0.29 = 29 \div 100$

b) $60 \div 100 = 0.6$

f) $58 \div 100 = 0.58$

c) $0.85 = 85 \div 100$

g) $0.5 = 50 \div 100$

d) $0.01 = 1 \div 100$

h) $0.3 = 30 \div 100$

- 8 Complete the calculations.

a) $36 \div 10 = 3.6$

b) $91 \div 10 = 9.1$

$$36 \div 100 = 0.36$$

$$91 \div 100 = 0.91$$

$$36 \div 10 \div 10 = 0.36$$

$$91 \div 10 \div 10 = 0.91$$

What do you notice?

- 9

Dividing by 100
is always the same as
dividing by 10 twice.



Do you agree with Amir? Yes

Explain your answer.

- 10

Roll two dice to make two 2-digit numbers.

Divide your numbers by 100. Record your answer. Roll again.

Here is an example.



$36 \div 100$ and $63 \div 100$

$$\boxed{36} \div 100 = \boxed{0.36} \text{ and } \boxed{63} \div 100 = \boxed{0.63}$$

$$\boxed{63} \div 100 = \boxed{0.63} \text{ and } \boxed{36} \div 100 = \boxed{0.36}$$

What is the greatest possible answer you can get?

0.66

What is the smallest possible answer?

0.11

Compare answers with a partner.

