

Maths Planning and Ideas



Week Commencing: 27th April 2020

Year Group: 4

Mathematical Focus: Decimals

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	Divide 2-digits by 10	Hundredths	Hundredths as decimals	Hundredths on a place value grid	Divide 1 or 2-digits by 100
Activity	<p>Starter:</p> <p>Times Table Rockstar</p> <p><i>Battle of the Bands and Garage challenges have been set for Y4 children.</i></p> <p>Main: White Rose Maths - Watch Week 2 Lesson 1 https://whiterosemaths.com/homelearning/year-4/</p> <p>You might want to pause it and make notes. Or even rewind and watch bits again.</p> <p>Independent:</p> <p>The questions below the plan can be completed by children independently.</p>	<p>Starter:</p> <p>Times Table Rockstar</p> <p><i>Battle of the Bands and Garage challenges have been set for Y4 children.</i></p> <p>Main: White Rose Maths - Watch Week 2 Lesson 2 https://whiterosemaths.com/homelearning/year-4/</p> <p>You might want to pause it and make notes. Or even rewind and watch bits again.</p> <p>Independent:</p> <p>The questions below the plan can be completed by children independently.</p>	<p>Starter:</p> <p>Times Table Rockstar</p> <p><i>Battle of the Bands and Garage challenges have been set for Y4 children.</i></p> <p>Main: White Rose Maths - Watch Week 2 Lesson 3 https://whiterosemaths.com/homelearning/year-4/</p> <p>You might want to pause it and make notes. Or even rewind and watch bits again.</p> <p>Independent:</p> <p>The questions below the plan can be completed by children independently.</p>	<p>Starter:</p> <p>Times Table Rockstar</p> <p><i>Battle of the Bands and Garage challenges have been set for Y4 children.</i></p> <p>Main: White Rose Maths - Watch Week 2 Lesson 4 https://whiterosemaths.com/homelearning/year-4/</p> <p>You might want to pause it and make notes. Or even rewind and watch bits again.</p> <p>Independent:</p> <p>The questions below the plan can be completed by children independently.</p>	<p>Starter:</p> <p>Times Table Rockstar</p> <p><i>Battle of the Bands and Garage challenges have been set for Y4 children.</i></p> <p>Main: White Rose Maths - Watch Week 2 Lesson 5 https://whiterosemaths.com/homelearning/year-4/</p> <p>You might want to pause it and make notes. Or even rewind and watch bits again.</p> <p>Independent:</p> <p>The questions below the plan can be completed by children independently.</p>

	<p>Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS6-Dividing-2-digits-by-10-2019.pdf</p> <p>No peeking until after you have had a go.</p>	<p>Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS7-Hundredths-2019.pdf</p> <p>No peeking until after you have had a go.</p>	<p>Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS8-Hundredths-as-decimals-2019.pdf</p> <p>No peeking until after you have had a go.</p>	<p>Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS9-Hundredths-on-a-place-value-grid-2019.pdf</p> <p>No peeking until after you have had a go.</p>	<p>Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS10-Dividing-1-and-2-digits-by-a-hundred-2019.pdf</p> <p>No peeking until after you have had a go.</p>
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27.04.2020

LC: Can you divide 2-digits by 10?

Dividing 2 digits by 10

White
Rose
Maths

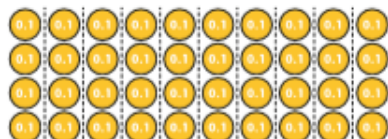
- 1 a) The array shows 20 shared between 10



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



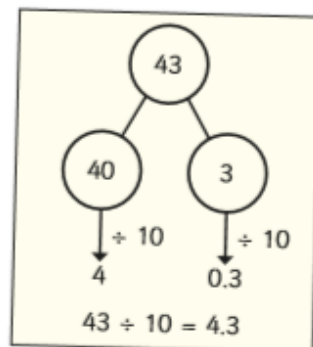
You can't share
13 between 10 because 13 is
not a multiple of 10

Do you agree with Rosie? _____

Explain your answer.

4

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

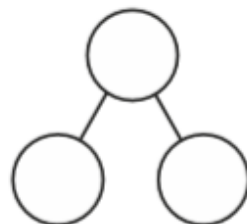
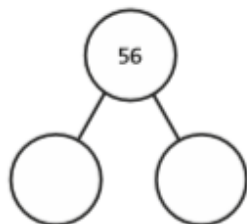


a) Talk to a partner about why Dexter's method works.

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?

28.04.2020

LC: Can you identify and recognise hundredths?

Hundredths

1

I'm going to use this piece to represent 1

What is the value of each of these pieces?
Give your answer as a fraction.

a)

b)

2 Write <, > or = to compare the fractions.

a) $\frac{1}{10}$ ○ $\frac{9}{100}$

c) $\frac{1}{10}$ ○ $\frac{20}{100}$

b) $\frac{1}{10}$ ○ $\frac{12}{100}$

d) $\frac{2}{10}$ ○ $\frac{20}{100}$

3

Eva

You can only partition 25 hundredths into 2 tenths and 5 hundredths.

Jack

I can partition it another way.

Who do you agree with? _____

Explain why.

Compare answers with a partner.

4

Fill in the missing numerators to make the statements correct.

a) $\frac{3}{10} = \frac{\square}{100}$

d) $\frac{20}{100} = \frac{\square}{10}$

b) $\frac{7}{10} = \frac{\square}{100}$

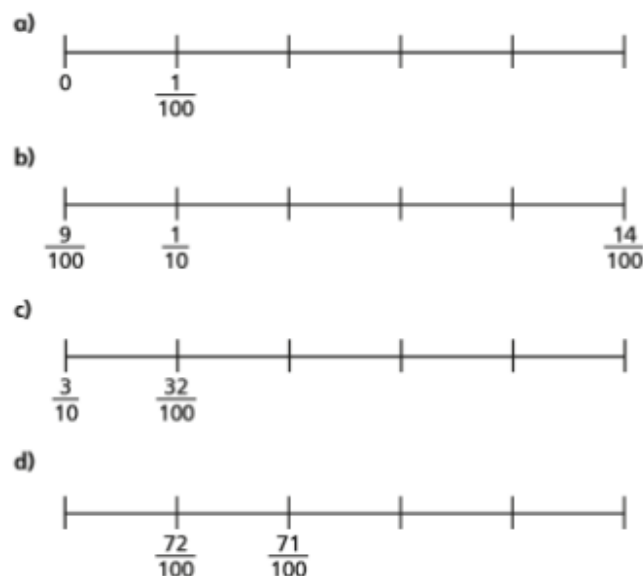
e) $\frac{27}{100} = \frac{\square}{10} + \frac{\square}{100}$

c) $\frac{80}{100} = \frac{\square}{10}$

f) $\frac{67}{100} = \frac{\square}{10} + \frac{\square}{100}$

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- 5 Complete the number lines using fractions.



- 6 Amir is counting 67 hundredths on a bead string.



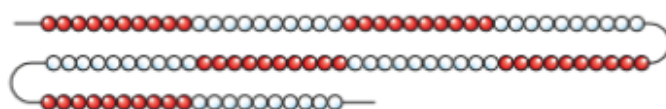
Amir

This will take a long time, because I have to count 67 beads.



Annie

You can do it faster by using tenths as well.

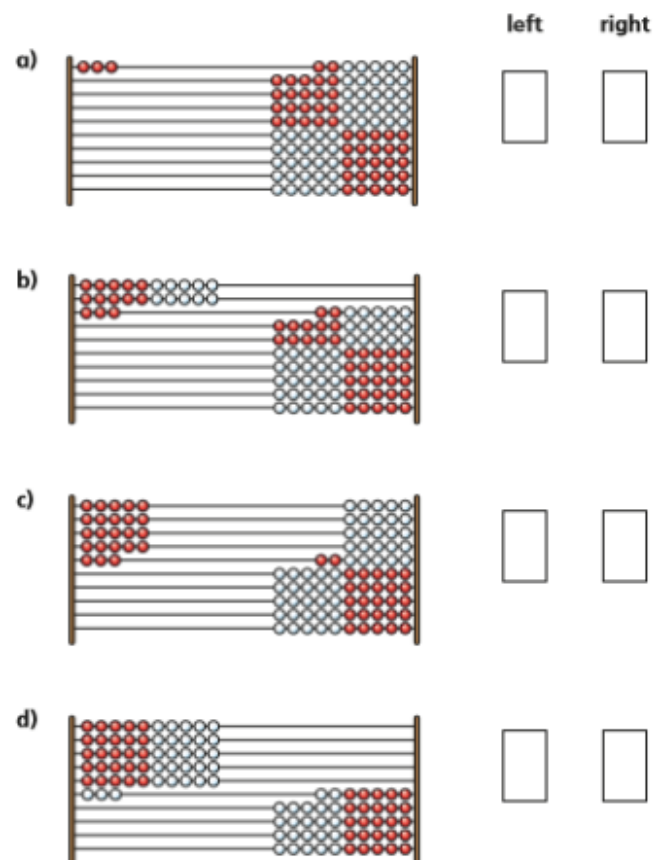


Explain to a partner how to use Annie's method.

- 7 These are Rekenreks made from 100 beads.

Each Rekenrek represents one whole.

Write the fraction represented on the left and on the right.



Did you use the same method as your partner?

29.04.2020

LC: Can you identify hundredths as decimals?

Hundredths as decimals



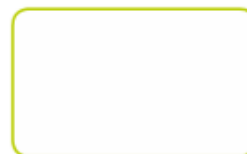
1 Complete the table.

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

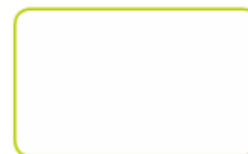


2 Draw decimal place value counters to represent the numbers.

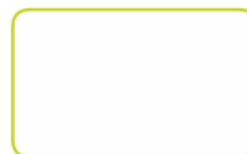
a) 0.03



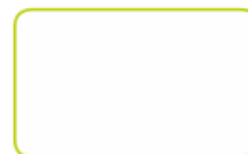
c) 0.63



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 =

0.4 =

0.14 =

0.41 =

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

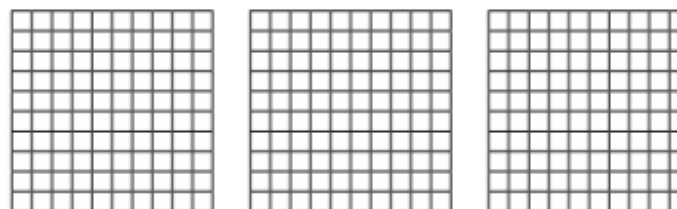
three tenths

0.13

three hundredths

6

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



Compare answers with a partner.

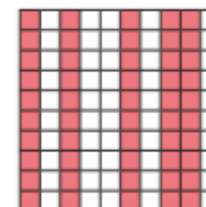
What is the same? What is different?

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.

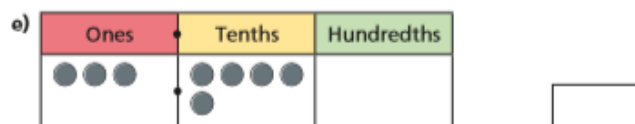
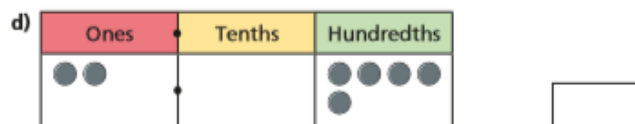
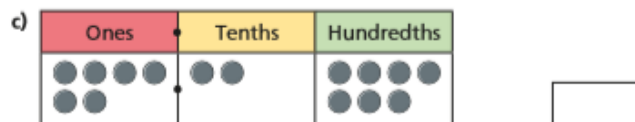
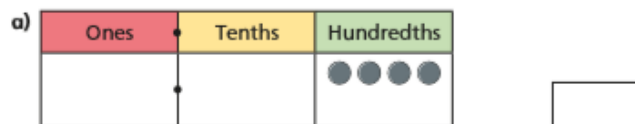
30.04.2020

LC: Can you represent hundredths on a place value grid?

Hundredths on a place value grid



1 Write the decimal that is represented in each place value chart.



2 Use place value counters to make each number.
Draw your answers on the place value charts.

a) 0.06



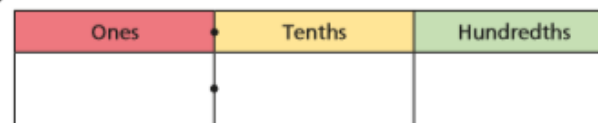
b) 0.24



c) 1.72

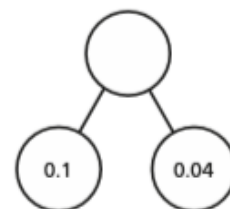


d) 3.08

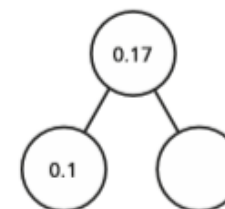


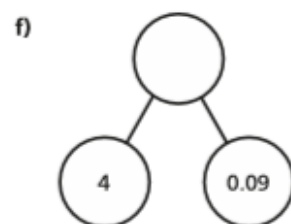
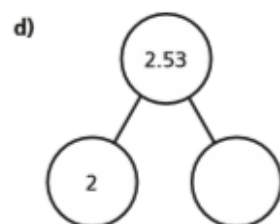
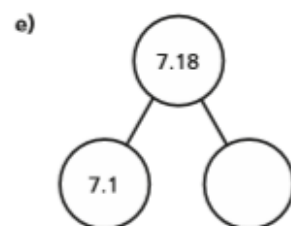
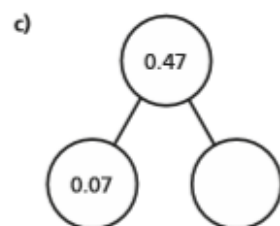
3 Complete the part-whole models.

a)



b)

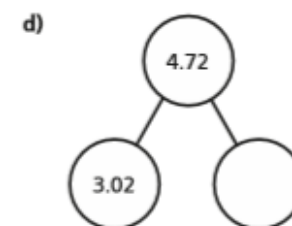
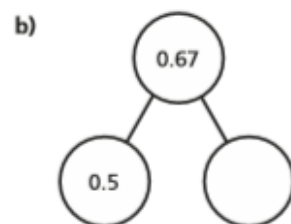
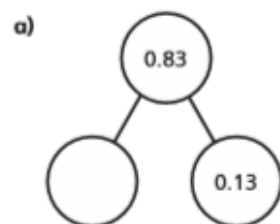




4 Complete the sentences.

- a) 2 tenths can be exchanged for hundredths.
- b) 7 tenths can be exchanged for hundredths.
- c) 7 tenths and 4 hundredths is equivalent to hundredths.
- d) tenths and hundredths is equivalent to 26 hundredths.

5 Complete the part-whole models.



6 Whitney, Tommy, Esther and Dexter each have the same three digit cards and a place value chart.

Ones	Tenths	Hundredths			
			0	3	6

When they put the cards in the chart with one in each space, they each make a different number.

Use the clues to work out each person's number and write it on their place value chart.

- Dexter makes the greatest number possible.
- Tommy makes the number closest to four.
- Esther and Whitney choose the two numbers closest together (Esther makes the slightly greater number).

Dexter			Tommy		
Ones	Tenths	Hundredths	Ones	Tenths	Hundredths
Whitney			Esther		
Ones	Tenths	Hundredths	Ones	Tenths	Hundredths

01.05.2020

LC: Can you divide 1 or 2-digits by 100?

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.



Where can I complete further work?

[Twinkl](#) – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, PowerPoints and interactive games to support all areas of learning.

[Classroom Secrets](#) – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

[White Rose Maths](#) – Free Maths home learning resources for all ages. Watch the videos and try the questions.

[Primary Stars](#) – Free Maths home learning packs for Year 1 and 2.

[BBC Bitesize Primary](#) – Free learning resources available for KS1 and KS2 across all subjects.

[I See Maths](#) – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

[Top Marks](#) – Free educational resources and games for English and Maths.

[ICT Games](#) – Free educational resources and games for English and Maths.