Maths Planning and Ideas

Week Commencing: Monday 12th April 2021

Year Group: 4

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	**LC: Can you divide 1-digit numbers by 10?**	**LC: Can you divide 2-digit numbers by 10?**	**LC: Can you recognise hundredths?**	**LC: Can you represent hundredths as decimals?**	**LC: Can you use a place value grid to represent hundredths?**
Activity	**Starter:** Times Tables Rockstars **Main:** Go to the following website: https://vimeo.com/519495647 Find and watch 'Divide 1 digit by 10' video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task**: Children to complete the worksheet found in the resources. Answers can be found in the resources.	**Starter:** Times Tables Rockstars **Main:** Go to the following website: https://vimeo.com/519556201 Find and watch 'Divide 2 digits by 10' video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task**: Children to complete the worksheet found in the resources. Answers can be found in the resources.	**Starter:** Times Tables Rockstars **Main:** Go to the following website: https://vimeo.com/519976198 Find and watch 'Hundredths' video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task**: Children to complete the worksheet found in the resources. Answers can be found in the resources.	**Starter:** Times Tables Rockstars **Main:** Go to the following website: https://vimeo.com/520024278 Find and watch 'Hundredths as decimals' video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task**: Children to complete the worksheet found in the resources. Answers can be found in the resources.	**Starter:** Times Tables Rockstars **Main:** Go to the following website: https://vimeo.com/521312134 Find and watch 'Hundredths on a Place Value Grid' video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task**: Children to complete the worksheet found in the resources. Answers can be found in the resources.

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.

BBC Bitesize Primary – Free learning resources available for KS1 and KS2 across all subjects.

Oxford Owl – Free ebooks and reading resources available when you create a free login.

Phonics Play – Subscription service is offering free access to their learning resources during this period. Follow the link for details on how to gain free access.

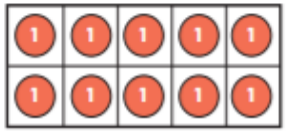
Top Marks – Free educational resources and games for English and Maths.

ICT Games – Free educational resources and games for English and Maths.

Dividing 1 digit by 10

1 Look at the ten frames.

a)



What number is represented? ☐

Complete the division. ☐ ÷ 10 = ☐

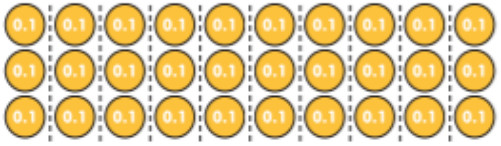
b)

What number is represented? ☐

Complete the division. ☐ ÷ 10 = ☐

c) What is the same? What is different?

2 **a)** What calculation is represented by the counters?



☐ ÷ 10 = ☐

b) Complete the number sentence.

☐ ones divided by ten = ☐ tenths.

3 **a)** Draw counters on the place value chart to show 7

Ones	Tenths

b) Complete the division. 7 ÷ 10 = ☐

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

Ones	Tenths

d) What do you notice?

e) Complete the sentence.

☐ ones divided by ten = ☐ tenths.

4 **a)** Use a place value chart to represent 9

b) Move the counters to the right to represent 0.9

c) Complete the division.

9 ÷ 10 = ☐

d) What do you notice?

e) Complete the sentence.

☐ ones divided by ten equals ☐ tenths.

5

To divide by 10, you split the counters into 10 equal parts.

Dora

To divide by 10, you put the counters on a place value chart and move them one column to the right.

Alex

Who is correct? Circle your answer.

Dora **Alex** **neither** **both**

Compare answers with a partner.

6 Here is a one-digit number on a place value chart.

Ones	Tenths
6	

a) Complete the division.

$6 \div 10 =$ ☐

b) Write your answer on the place value chart.

O	Tth

c) In your own words, describe what happens to the digits in a number when you divide by 10

d) Use this method to work out the divisions.

$7 \div 10 =$ ☐ ☐ $\div 10 = 0.8$

7 Complete the divisions.

a) $4 \div 10 =$ ☐

b) $2 \div 10 =$ ☐

c) ☐ $= 5 \div 10$

d) $9 \div 10 =$ ☐

e) ☐ $\div 10 = 0.3$

f) ☐ $\div 10 = 0.1$

8 Complete the number sentences.

a) $6 \div$ ☐ $\div 10 = 3 \div 10$

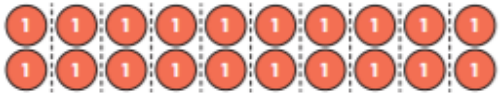
b) $24 \div 6 \div 10 =$ ☐ $\div 10$

c) $42 \div$ ☐ $\div 10 = 21 \div 7 \div 10$

d) Write a problem like this for a partner to solve.

Dividing 2 digits by 10

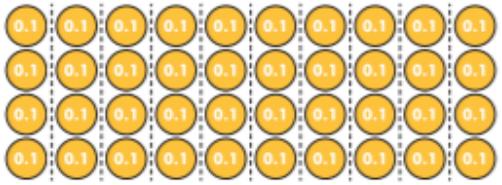
1 **a)** The array shows 20 shared between 10



Complete the calculation.

20 ÷ 10 = ☐

b) The array shows 4 shared between 10



Complete the calculation.

4 ÷ 10 = ☐

c) Complete the calculation.

24 ÷ 10 = ☐

Compare answers with a partner.

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

Tens	Ones	Tenths

Complete the division.

30 ÷ 10 = ☐

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 ÷ 10 = ☐

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

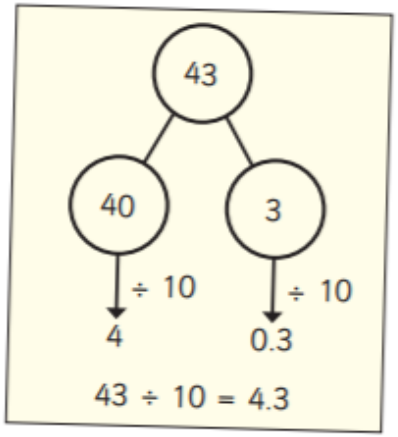
You can't share 13 between 10 because 13 is not a multiple of 10

Do you agree with Rosie? _____

Explain your answer.

4 Dexter is calculating 43 ÷ 10

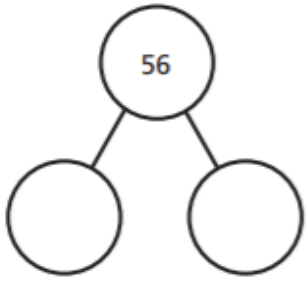
Here are Dexter's workings.



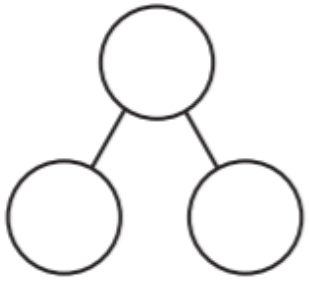
a) Talk to a partner about why Dexter's method works.

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

56 ÷ 10 = ☐



71 ÷ 10 = ☐



5 Complete the divisions.

a) 37 ÷ 10 = ☐

b) 11 ÷ 10 = ☐

c) 48 ÷ 10 = ☐

d) 99 ÷ 10 = ☐

e) 80 ÷ 10 = ☐

f) ☐ = 29 ÷ 10

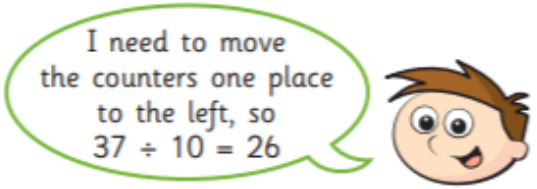
g) ☐ ÷ 10 = 6.3

h) 3.9 = ☐ ÷ 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 ÷ 10 = 26

Do you agree with Teddy? _____

Explain your answer.

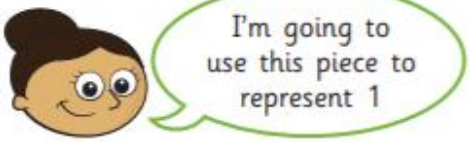
_____

_____

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

Hundredths

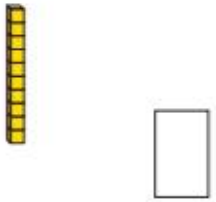
1



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

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

Eva

I can partition it another way.

Jack

Who do you agree with? _____

Explain why.

_____

_____

Compare answers with a partner.

4 Fill in the missing numerators to make the statements correct.

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

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

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

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

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

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

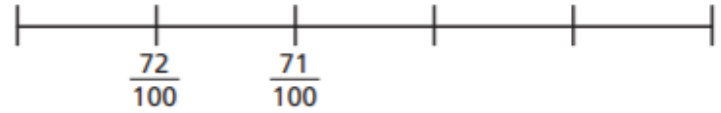
5 Complete the number lines using fractions.

a)

b)

c)

d)



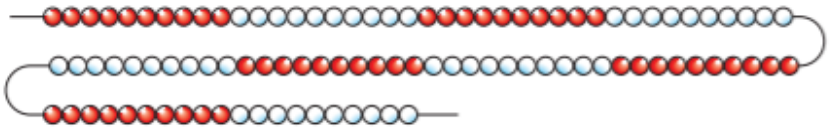
6 Amir is counting 67 hundredths on a bead string.

Amir

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

You can do it faster by using tenths as well.

Annie



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

7 These are Rekenreks made from 100 beads.

Each Rekenrek represents one whole.

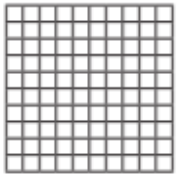
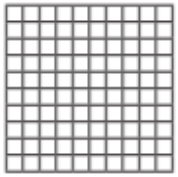
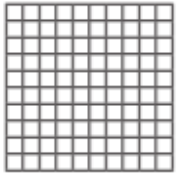
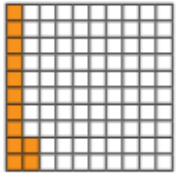
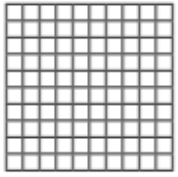
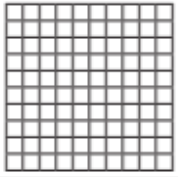
Write the fraction represented on the left and on the right.

	left	right
a)		
b)		
c)		
d)		

Did you use the same method as your partner?

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

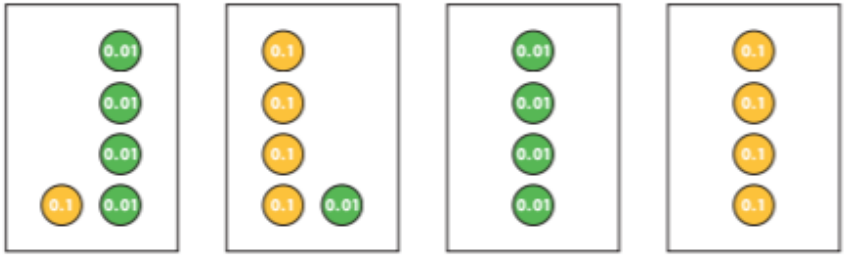
b) 0.6

d) 0.36

3 The counters represent tenths and hundredths.

a) Match the decimals to the groups of counters.

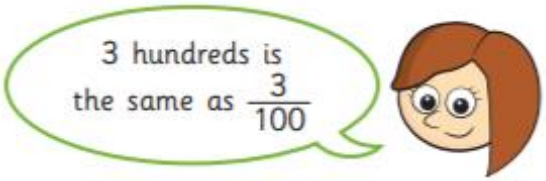
0.04 | 0.4 | 0.14 | 0.41



b) Write each decimal as a fraction.

0.04 = ☐ 0.4 = ☐ 0.14 = ☐ 0.41 = ☐

4



Is Rosie correct? _____

Explain your answer.

_____

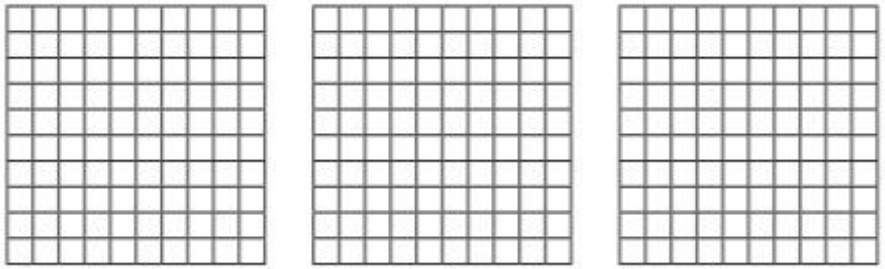
_____

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

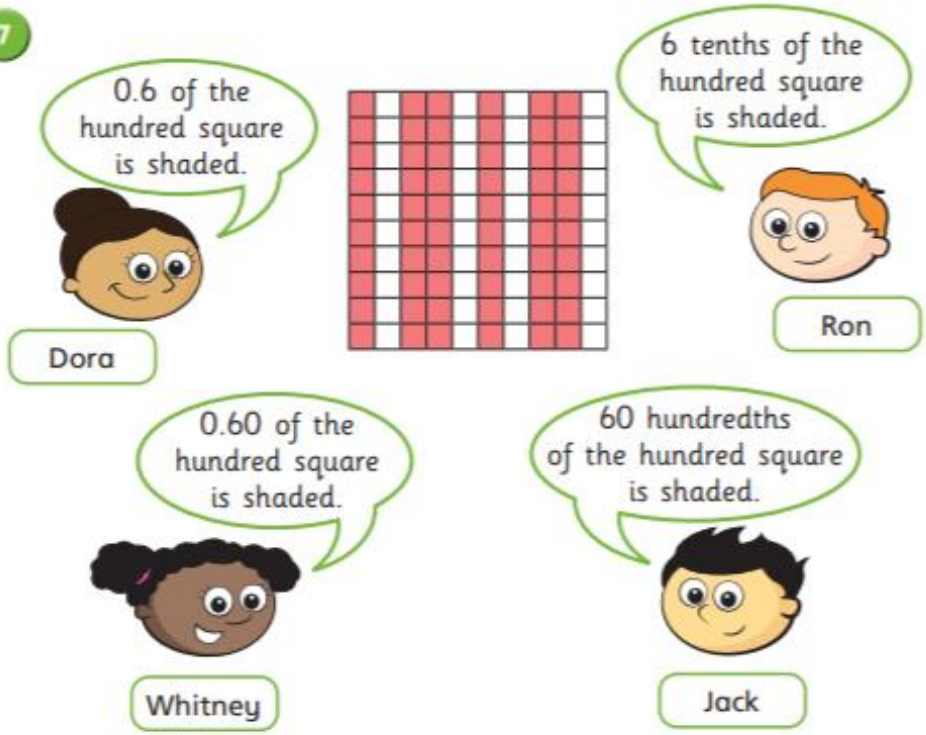
6 Shade the hundred squares to represent 12 hundredths in three different ways.



Compare answers with a partner.

What is the same? What is different?

7



Who do you agree with? _____

Explain why.

Hundredths on a place value grid

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

a)

Ones	Tenths	Hundredths
		●●●●

b)

Ones	Tenths	Hundredths
	●●●	●●●● ●

c)

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

d)

Ones	Tenths	Hundredths
●●		●●● ●

e)

Ones	Tenths	Hundredths
●●●	●●●● ●	

2 Use place value counters to make each number.

Draw your answers on the place value charts.

a) 0.06

Ones	Tenths	Hundredths

b) 0.24

Ones	Tenths	Hundredths

c) 1.72

Ones	Tenths	Hundredths

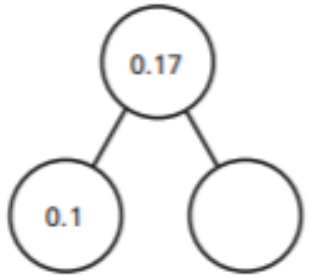
d) 3.08

Ones	Tenths	Hundredths

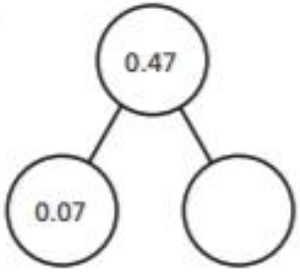
3 Complete the part-whole models.

a)

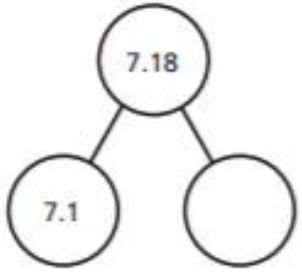
b)



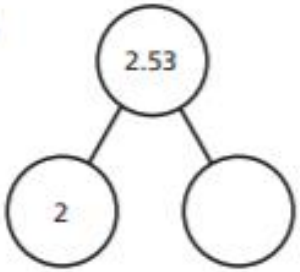
c)



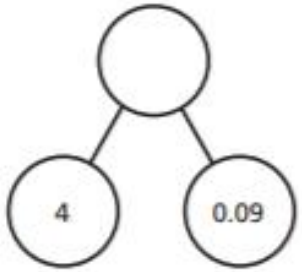
e)



d)



f)



4 Complete the sentences.

a) 2 tenths can be exchanged for ☐ hundredths.

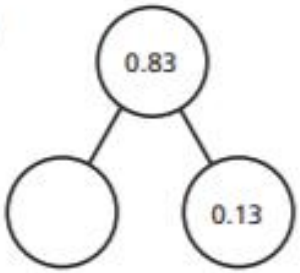
b) 7 tenths can be exchanged for ☐ hundredths.

c) 7 tenths and 4 hundredths is equivalent to ☐ hundredths.

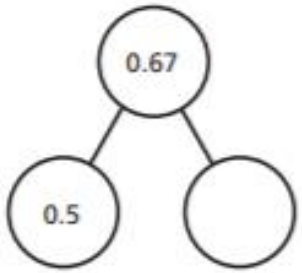
d) ☐ tenths and ☐ hundredths is equivalent to 26 hundredths.

5 Complete the part-whole models.

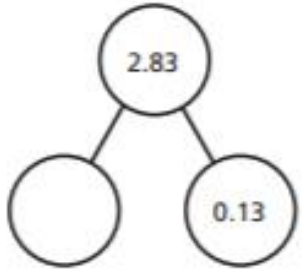
a)



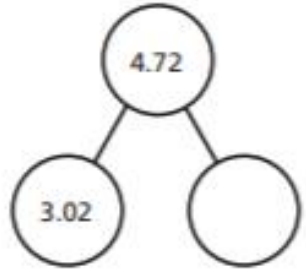
b)



c)



d)



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

Ones	Tenths	Hundredths

Tommy

Ones	Tenths	Hundredths

Whitney

Ones	Tenths	Hundredths

Esther

Ones	Tenths	Hundredths