Maths Planning and Ideas

Week Commencing: 20th April 2020

Year Group: 4

Mathematical Focus: Decimals

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	Tenths and Hundredths	Tenths as Decimals	Tenths on a Place Value Grid	Tenths on a Number Line	Dividing one digit by 10
Activity	**Starter:** Times Table Rockstar *Battle of the Bands and Garage challenges have been set for Y4 children.* **Main:** White Rose Maths - Watch Week1 Lesson 1 https://whiterosemaths.com/homelearning/year-4/ You might want to pause it and make notes. Or even rewind and watch bits again. **Independent:** The questions below the plan can be completed by children independently.	**Starter:** Times Table Rockstar *Battle of the Bands and Garage challenges have been set for Y4 children.* **Main:** White Rose Maths - Watch Week1 Lesson 2 https://whiterosemaths.com/homelearning/year-4/ You might want to pause it and make notes. Or even rewind and watch bits again. **Independent:** The questions below the plan can be completed by children independently.	**Starter:** Times Table Rockstar *Battle of the Bands and Garage challenges have been set for Y4 children.* **Main:** White Rose Maths - Watch Week1 Lesson 3 https://whiterosemaths.com/homelearning/year-4/ You might want to pause it and make notes. Or even rewind and watch bits again. **Independent:** The questions below the plan can be completed by children independently.	**Starter:** Times Table Rockstar *Battle of the Bands and Garage challenges have been set for Y4 children.* **Main:** White Rose Maths - Watch Week1 Lesson 4 https://whiterosemaths.com/homelearning/year-4/ You might want to pause it and make notes. Or even rewind and watch bits again. **Independent:** The questions below the plan can be completed by children independently.	**Starter:** Times Table Rockstar *Battle of the Bands and Garage challenges have been set for Y4 children.* **Main:** White Rose Maths - Watch Week1 Lesson 5 https://whiterosemaths.com/homelearning/year-4/ You might want to pause it and make notes. Or even rewind and watch bits again. **Independent:** The questions below the plan can be completed by children independently.

	Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS1-Recognise-tenths-and-hundredths-2019.pdf No peeking until after you have had a go.	Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS2-Tenths-as-decimals-2019.pdf No peeking until after you have had a go.	Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS3-Tenths-on-a-place-value-grid-2019.pdf No peeking until after you have had a go.	Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS4-Tenths-on-a-number-line-2019.pdf No peeking until after you have had a go.	Answers can be found here: https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/homelearning/year-4/Y4-Spring-Block-4-ANS5-Dividing-1-digit-by-10-2019.pdf No peeking until after you have had a go.

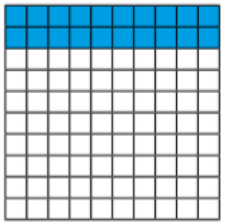
20.04.2020

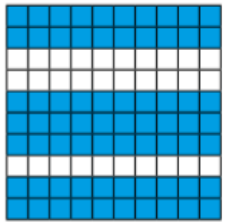
LC: Can you recognise tenths and hundredths?

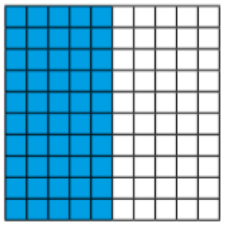
Recognise tenths and hundredths

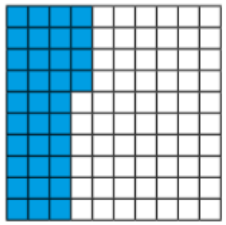
1 The hundred square represents 1 whole.

What fraction of each hundred square is shaded?

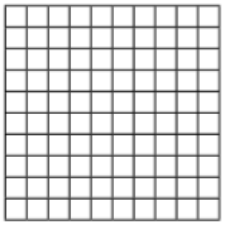
a) 

c) 

b) 

d) 

2 Here is a hundred square.



What fraction of the whole does each represent?

a) 4 full rows = ☐

b) 6 full columns = ☐

c) 13 squares = ☐

d) 2 full rows and 5 squares = ☐

e) 3 full columns and 8 squares = ☐

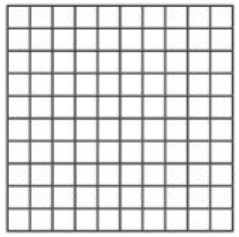
3 Complete the sentences.

a) 4 tenths is equivalent to ☐ hundredths.

b) 70 hundredths is equivalent to ☐ tenths.

c) 5 tenths is equivalent to ☐ hundredths or 1 _____

4



Is Dexter correct? _____

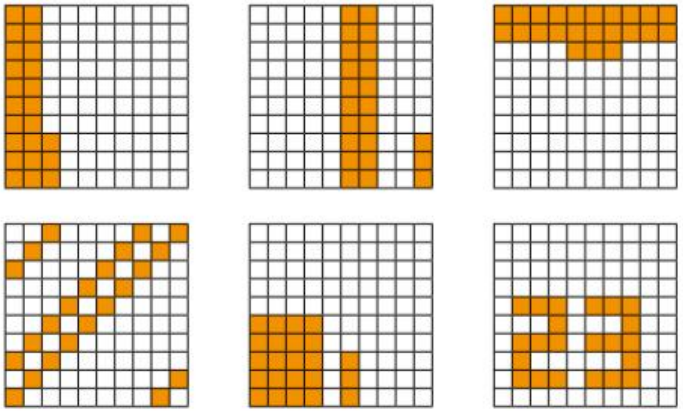
Explain your answer.

You may use the hundred square to help you.

_____

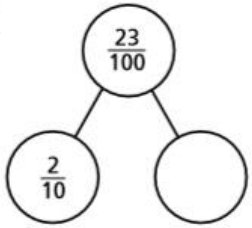
_____

5 Tick the hundred squares with $\frac{23}{100}$ shaded.

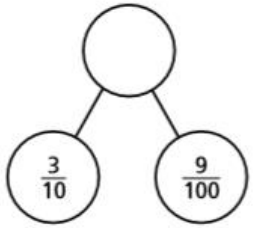


6 Complete the part-whole models.

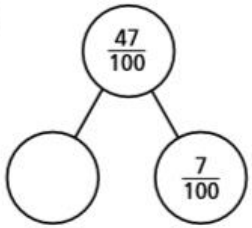
a)



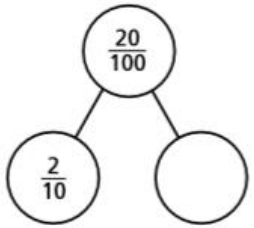
c)



b)



d)



7

$\frac{73}{100} = \frac{7}{10} + \frac{3}{100}$

$\frac{73}{100} = \frac{6}{10} + \frac{13}{100}$

Annie

Ron

Who is correct? _____

How many ways can you partition $\frac{73}{100}$?

21.04.2020

LC: Cam you recognise and represent tenths as decimals?

Tenths as decimals

White Rose Maths

1 Shade the bar models to represent the amounts.

a) 7 tenths

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

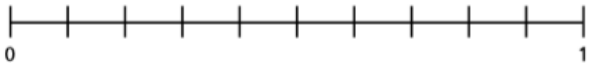
c) 0.3

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.

A ☐ or ☐

B ☐ or ☐

C ☐ or ☐

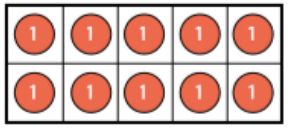
5 Match the equivalent fractions, decimals and words.

$\frac{3}{10}$	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?

a)

b)



c)

7

Do you agree with Ron? _____

Explain your answer.

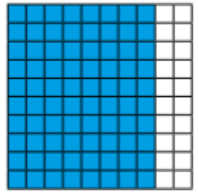
_____

_____

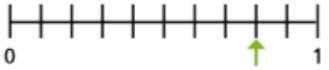
8 Eight tenths can be represented in all of the ways shown.

A

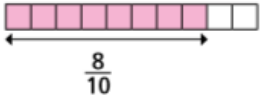
C



B



D



Which do you think is the best representation? _____

Discuss your answer with a partner.

Represent six tenths in each different way.

22.04.2020

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

Tenths on a place value grid

White Rose Maths

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

Ones	Tenths
	●●●●

Ones	Tenths
●	●●●

Ones	Tenths
●●	●●●● ●●●●

2 Draw counters on the place value charts to represent each number.

a) 2.1

Ones	Tenths

c) 0.2

Ones	Tenths

b) 1.2

Ones	Tenths

d) 2

Ones	Tenths

3 Rosie is using this place value chart to make numbers.

Ones	Tenths

She uses all 8 counters each time.

Complete the sentences.

a) The smallest number possible is ☐

b) The greatest number possible is ☐

c) A number between 3 and 4 is ☐

d) The closest possible number to 5 is ☐

4 Tommy has made a number on a place value chart.

Ones	Tenths
	●●●●● ●●●●●

a) What number has Tommy represented? ☐

b) Draw counters to show how Tommy could have represented this differently.

Ones	Tenths

c) What method did you use? Talk about it with a partner.

5 Complete the number sentences to match the place value charts.

a)

Ones	Tenths
2	6

There are ☐ ones and ☐ tenths.

☐ ones + ☐ tenths = ☐ + ☐ = ☐

b)

Ones	Tenths
0	9

There are ☐ ones and ☐ tenths.

☐ ones + ☐ tenths = ☐ + ☐ = ☐

6 Draw counters to represent each number.

Write each number as a decimal.

a) There are 3 ones and 2 tenths.

Ones	Tenths

☐

b) There are 5 ones and 2 tenths.

Ones	Tenths

☐

c) There are 2 tenths.

Ones	Tenths

☐

7 Match the written numbers to the place value charts.

one tenth
twenty-one tenths
twelve tenths
ten tenths

Ones	Tenths
1	2

Ones	Tenths
2	1

Ones	Tenths
1	0

Ones	Tenths
0	1

8

Six tenths added to four tenths makes ten tenths, which is a whole.

How many other ways can you make a whole from tenths?

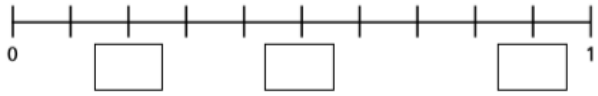
23.04.2020

LC: Can you place tenths on a number line?

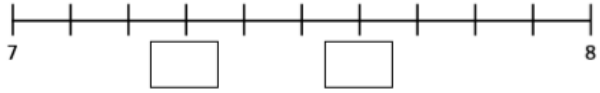
Tenths on a number line

1 Fill in the decimal numbers on each number line.

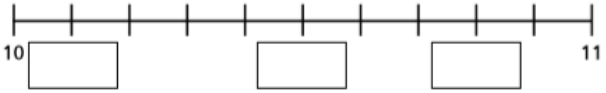
a)



b)



c)

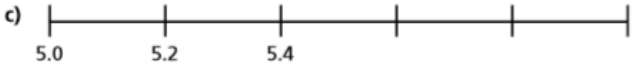


2 Complete the number lines.

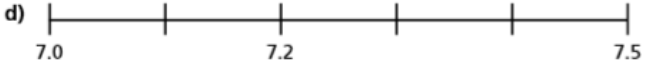
a)

b)

c)

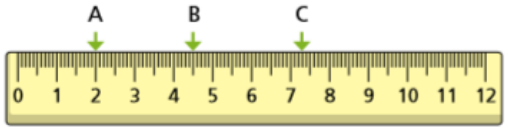


d)



3 Here is a ruler with centimetres as whole numbers and millimetres as tenths.

Complete the sentences about points A, B and C.



Point A is ☐ cm along the ruler.

Point B is ☐ cm and ☐ mm along the ruler.

As a decimal it is ☐ cm.

Point C is ☐ cm and ☐ mm along the ruler.

As a decimal it is ☐ cm.

4 Complete the number lines.

a)

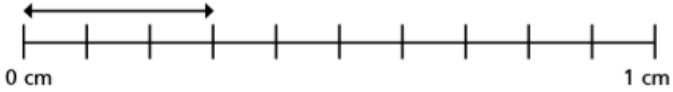
b)

c)

d)

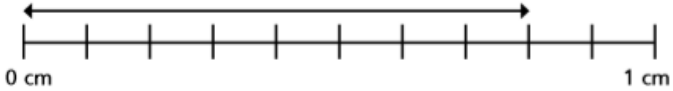
5 How long is each line?

a)



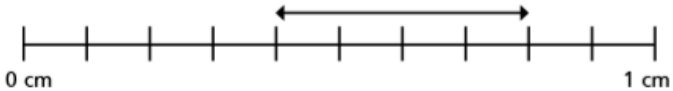
The line is ☐ cm long.

b)



The line is ☐ cm long.

c)

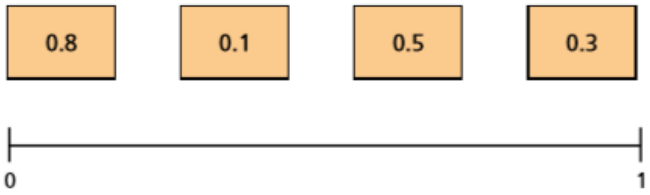


The line is ☐ cm long.

How would your answers have been different if given in millimetres?

6 Draw arrows to estimate the position of the numbers on the number line.

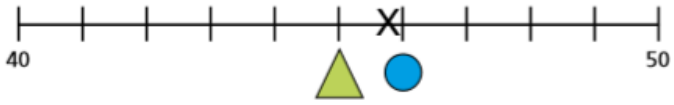
a)

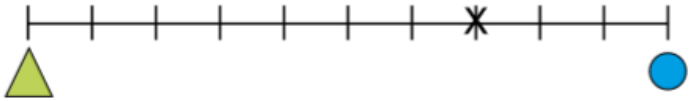


b)

7 The triangle, circle and cross have the same value on both lines.

Work out the values.





△ = ☐ ○ = ☐ X = ☐

Create your own problem like this for a friend.

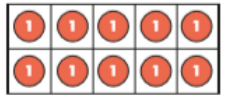
24.04.2020

LC: Can you divide one digit by 10?

Dividing 1 digit by 10

1 Look at the ten frames.

a)



What number is represented? ☐

Complete the division. ☐ ÷ 10 = ☐

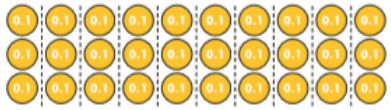
b)

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.

Where can I complete further work?

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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.