Mrs Jones' Maths Group
27.04.20

LO: To be able to make a whole with decimal numbers

Success Criteria

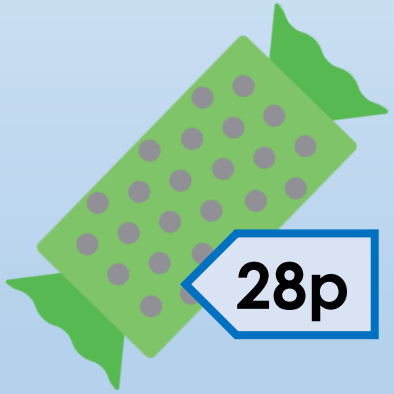
- I can record fractions and decimals
- I can calculate what I need to add to make a whole
- I can record answers to part whole models
- I can use my knowledge to solve problems (challenge question)

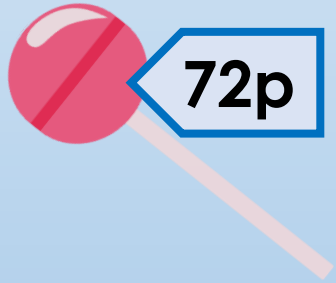
Either work through the powerpoint slides or watch
https://whiterosemaths.com/homelearning/year-4/

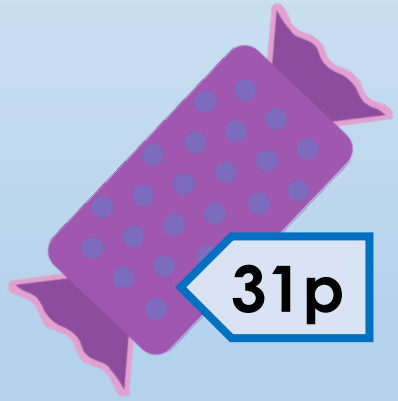
Select Summer week 1, lesson 1 – and complete the sheets on slides 10 and 11.

Let's do this!

If you buy one of these sweets, how much change would you get from £1?







What if you bought 2 sweets?

Let's revisit what we should know…

10 tenths make 1 whole.

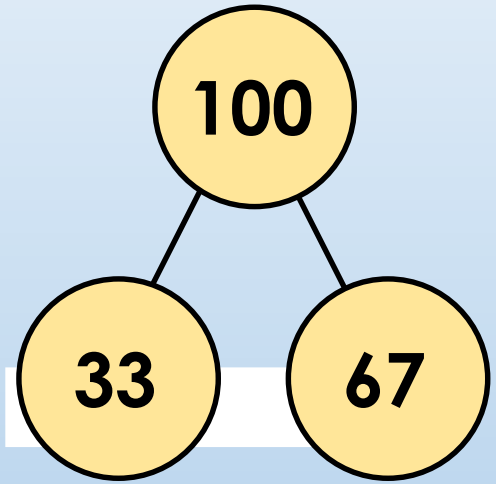
We can use number bonds to help

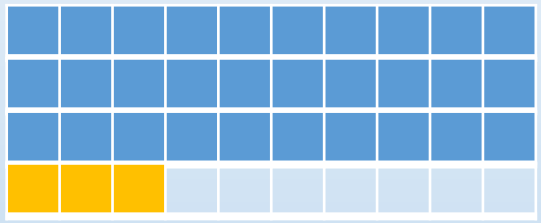
0.6 + 0.4 = 1

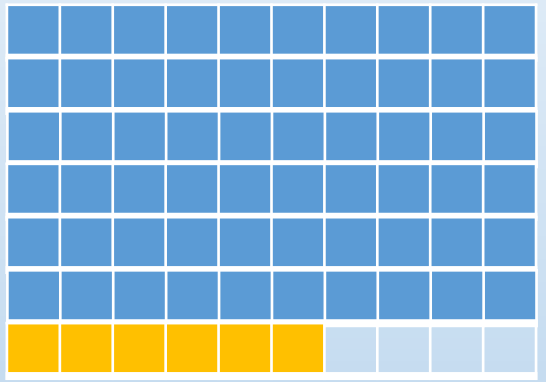
30p + 70p = £1

Let's revisit what we should know…

Number bonds can be used to find bonds to 100



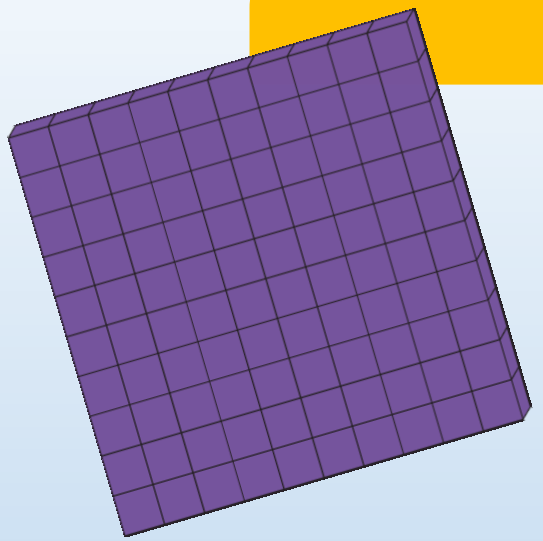


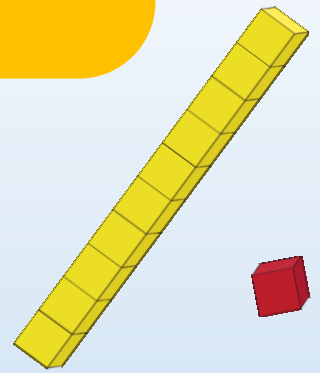


33 + 67 = 100

30 + 60 = 90 and 3 + 7 = 10
90 + 10 = 100

Let's talk





If **10 tenths** = 1 whole…….

How many **hundredths** = 1 whole?

How many **hundredths** = 1 **tenth**?

How can you show this with your resources?

Let's learn

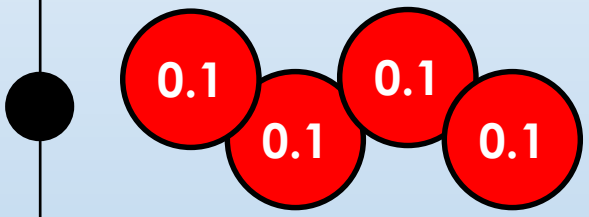
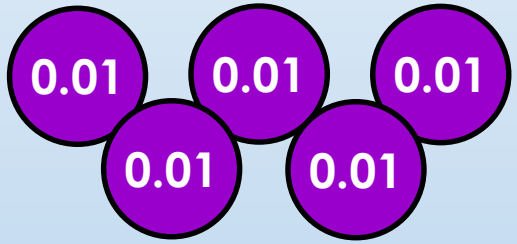
_____ tenths = 1 _____

_____ hundredths = 1 _____

_____ hundredths = 1 tenth

Let's develop our learning

How many more hundredths are needed to make 1 whole?

ones	tenths	hundredths
		

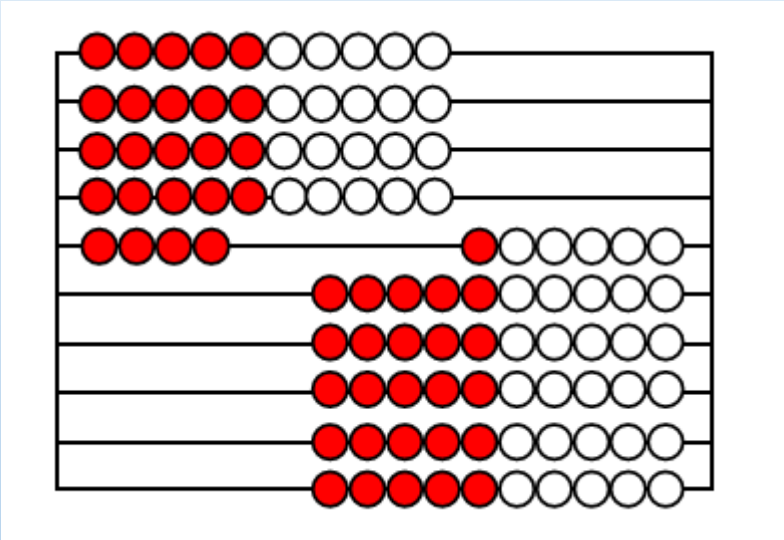
There are _____ hundredths.

_____ more hundredths are needed to make a whole.

0.____ + 0. ____ = 1

Let's talk

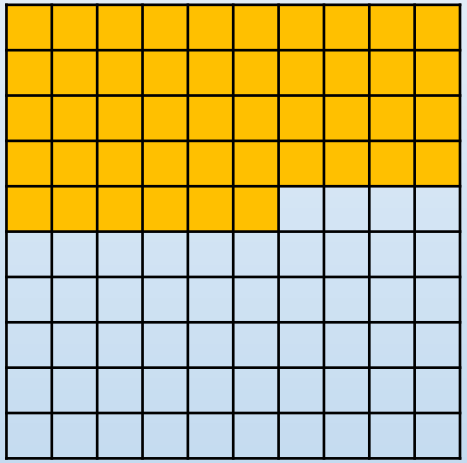
This is a rekenrek.



How can this be used to make a whole?

Let's develop our learning

Each cell represents one hundredth.



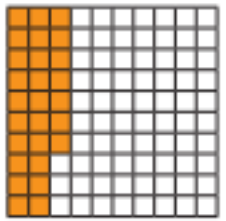
There are _____ hundredths.

_____ more hundredths are needed to make a whole.

0.____ + 0. ____ = 1

Make a whole

1 Here is a hundred square.



a) How many hundredths are shaded? ☐

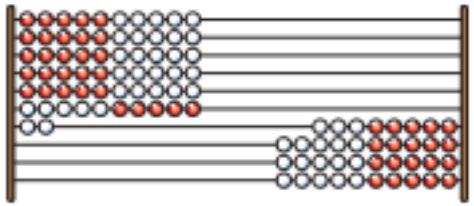
b) How many more hundredths do you need to shade so that the whole hundred square is shaded? ☐

c) Complete the sentence.

☐ hundredths + ☐ hundredths = 1 whole

2 Here is a Rekenrek with 100 beads.

Each bead is one hundredth of the whole.



Complete the sentences.

a) ☐ hundredths are on the left.

b) ☐ hundredths are on the right.

c) ☐ + ☐ = 1

3 Fill in the missing digits.

a) 1 tenth = ☐ hundredths

b) $\frac{2}{10} = \frac{\square}{100}$

c) 70 hundredths = ☐ tenths

d) 32 hundredths = ☐

e) 0.4 = ☐ tenths

f) 50 hundredths = ☐

4 Dora has shaded 4 tenths of a hundred square.

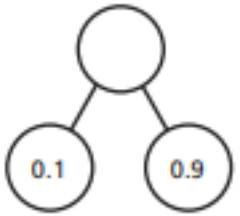
I need to shade 96 more squares to fully shade it.

Do you agree with Dora? _____

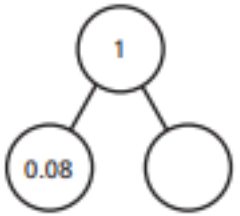
Explain your reasoning.

5 Complete the part-whole models.

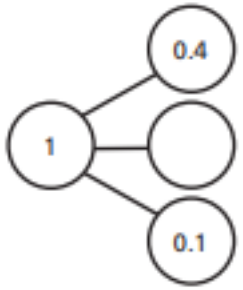
a)



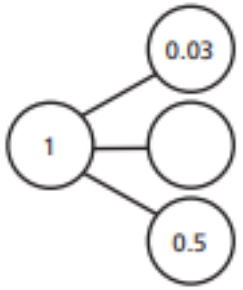
c)



b)



d)



6 Tick the calculations that do **not** sum to 1

0.4 + 0.6 ☐	0.4 + 0.06 ☐	0.04 + 0.06 ☐
0.8 + 0.92 ☐	0.08 + 0.92 ☐	0.92 + 0.08 ☐

How did you work this out?

7 Mo has a metre-long piece of ribbon.

He cuts off a piece of ribbon 24 cm long.

What is the length of the remaining ribbon?

The length of the remaining ribbon is ☐ m.

8 Fill in the missing numbers.

a) 0.1 + ☐ = 1

b) ☐ + 0.01 = 1

c) 0.03 + ☐ = 1

d) 0.15 + 0.64 + ☐ = 1

e) 0.15 + ☐ + 0.65 = 1

f) ☐ + 0.04 + 0.5 = 1

9 Two identical bead strings have a total length of 64 cm.

Would the total length of three of these bead strings be longer or shorter than a metre? _____

Explain how you know.

_____

_____

10 Here are eight number cards.

$\frac{6}{10}$	$\frac{19}{100}$	0.2	0.5	$\frac{8}{10}$	0.01	$\frac{30}{100}$	0.4

Use the number cards to make each calculation correct.

You can use each number once only.

☐ + ☐ = 1

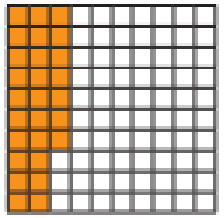
☐ + ☐ + ☐ = 1

☐ + ☐ + ☐ = 1

How many other ways can you find to make a total of 1?

Make a whole

1 Here is a hundred square.



a) How many hundredths are shaded? 27

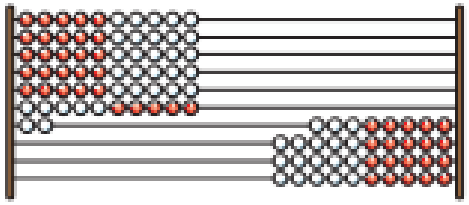
b) How many more hundredths do you need to shade so that the whole hundred square is shaded? 73

c) Complete the sentence.

27 hundredths + 73 hundredths = 1 whole

2 Here is a Rekenrek with 100 beads.

Each bead is one hundredth of the whole.



Complete the sentences.

a) 62 hundredths are on the left.

b) 38 hundredths are on the right.

c) 0·62 + 0·38 = 1

3 Fill in the missing digits.

a) 1 tenth = 10 hundredths

b) $\frac{2}{10} = \frac{20}{100}$

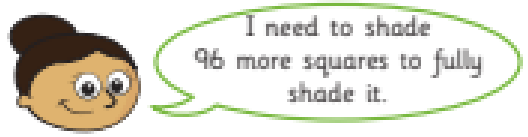
c) 70 hundredths = 7 tenths

d) 32 hundredths = 0·32

e) 0.4 = 4 tenths

f) 50 hundredths = 0·5

4 Dora has shaded 4 tenths of a hundred square.

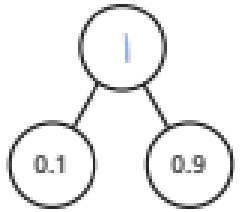


Do you agree with Dora? No

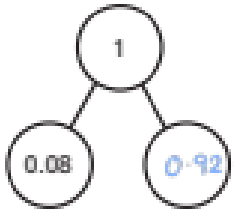
Explain your reasoning.

5 Complete the part-whole models.

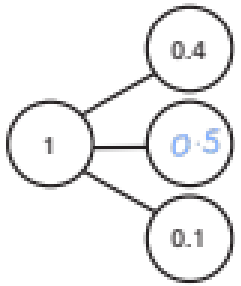
a)



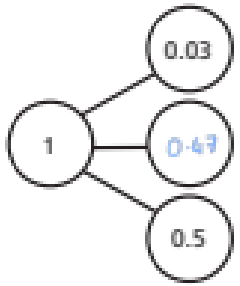
c)



b)



d)



6 Tick the calculations that do **not** sum to 1

0.4 + 0.6 ☐	0.4 + 0.06 ☑	0.04 + 0.06 ☑
0.8 + 0.92 ☑	0.08 + 0.92 ☐	0.92 + 0.08 ☐

How did you work this out?

7 Mo has a metre-long piece of ribbon.

He cuts off a piece of ribbon 24 cm long.

What is the length of the remaining ribbon?

1m = 100 cm

100 - 24 = 76

76cm = 0·76 m

The length of the remaining ribbon is [0·76] m.

8 Fill in the missing numbers.

a) 0.1 + [0·9] = 1

b) [0·99] + 0.01 = 1

c) 0.03 + [0·97] = 1

d) 0.15 + 0.64 + [0·21] = 1

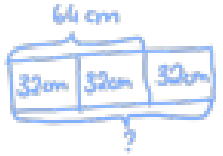
e) 0.15 + [0·2] + 0.65 = 1

f) [0·46] + 0.04 + 0.5 = 1

9 Two identical bead strings have a total length of 64 cm.

Would the total length of three of these bead strings be longer or shorter than a metre? Shorter

Explain how you know.



64 ÷ 2 = 32

1 bead string is 0·32 m

3 × 0·32 = 0·96 m

0·96 m < 1 m

10 Here are eight number cards.

$\frac{6}{10}$	$\frac{19}{100}$	0.2	0.5	$\frac{8}{10}$	0.01	$\frac{30}{100}$	0.4

Use the number cards to make each calculation correct.

You can use each number once only.

$\frac{6}{10}$ + [0·4] = 1

$\frac{8}{10}$ + $\frac{19}{100}$ + [0·01] = 1

[0·5] + [0·2] + $\frac{30}{100}$ = 1

How many other ways can you find to make a total of 1?

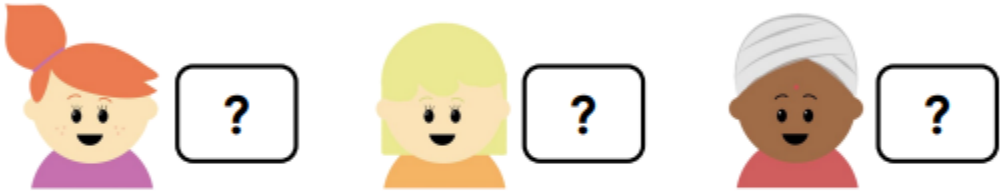
Challenge questions

YR4 PROGRESSION IN MASTERY LESSON PACK - MAKING A WHOLE

PROBLEM SOLVING 1

Three children have a number of hundredths.

All their numbers add to make a whole.



Millie has at least 45 hundredths

Jane has less than 5 hundredths more than Millie

Ranjit has an odd number of hundredths

What could their numbers be?

Can you find all possibilities?

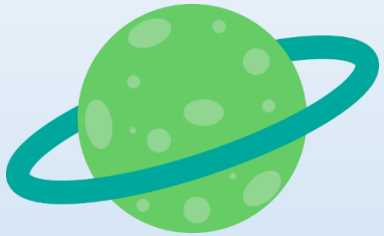
PROBLEM SOLVING TASKS

Problem Solving 1

There are 4 different solutions:

Millie – 0.46	Jane 0.47	Ranjit – 0.07
Millie – 0.46	Jane 0.49	Ranjit – 0.05
Millie – 0.48	Jane 0.49	Ranjit – 0.03
Millie – 0.48	Jane 0.51	Ranjit – 0.01

Exit task – Dong Nao Jin



These are Decimaliens from the planet Whola!

To return home safely, they have to travel in combinations that fill **a whole** UFO!
Their **body equals 1 tenth** and **each eye equals 1 hundredth** of the UFO's space.

What is the fewest number of Decimaliens that can travel together?

28.04.20

LO: To know how to write decimals

Success Criteria

- I can use a place value grid to make numbers up to 2 decimal places.
- I can read and write decimals.
- I know the value of each digit.
- I can partition decimals.
- I can solve questions using decimals (Challenge questions)

Write decimals

Either work through the powerpoint slides or watch

https://whiterosemaths.com/homelearning/year-4/

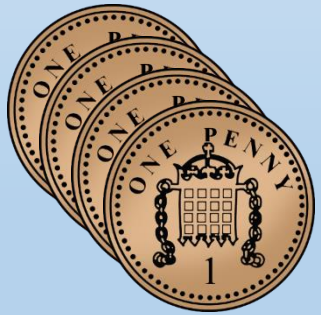
Select Summer week 1, lesson 2.

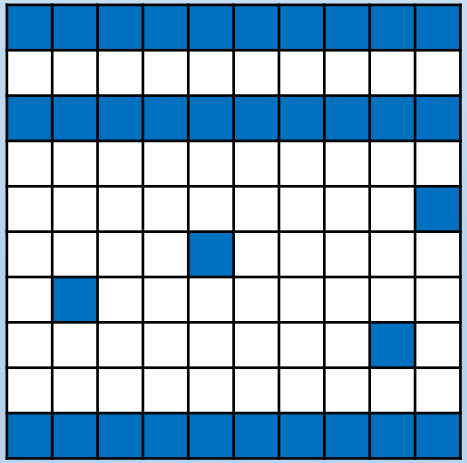
Then complete the worksheets in your book. Slides 27 and 28

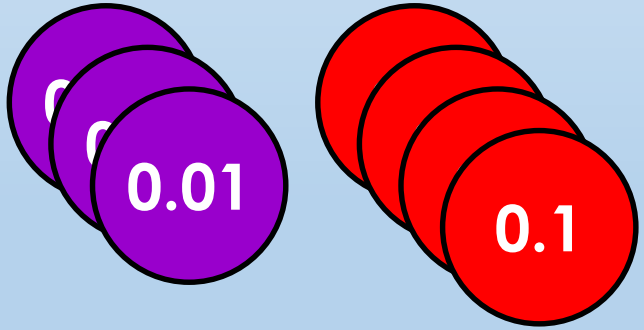
Let's do this!

Which of these representations is the odd one out?

1	2	3	4	5	6	7	8	9
0.1	0.2		0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03		0.05	0.06	0.07	0.08	0.09







Let's revisit what we should know…

_____ tenths = 1 _____

_____ hundredths = 1 _____

_____ hundredths = 1 tenth

Let's revisit what we should know…

This decimal number has…

ones	tenths	hundredths
1 1 1 1	0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01

_____ ones, _____ tenths and _____ hundredths.

Let's learn

This decimal number is written in numerals as 3.62

ones	tenths	hundredths
3 ●	6	2

It is written in words as three point six two <u>not</u> three point sixty-two.

This is because there are **3** ones, a decimal point, **6** tenths and **2** hundredths and <u>not</u> **60** tenths and **2** hundredths

Let's talk

1	2		4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	
0.01	0.02	0.03	0.04	0.05		0.07	0.08	0.09

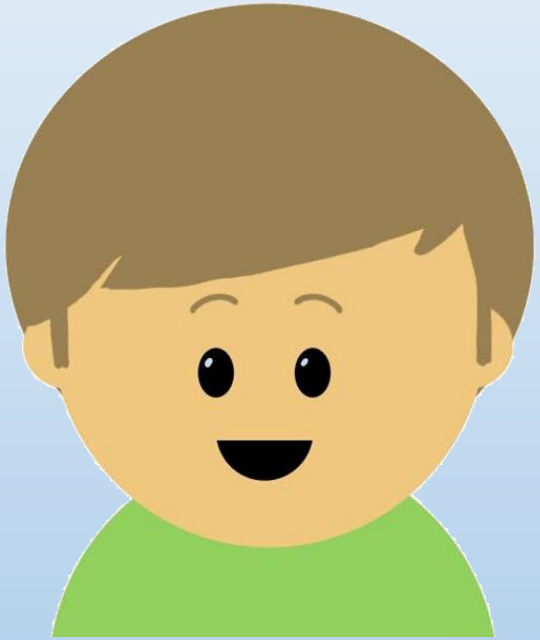
How many ones, tenths and hundredths are in the number?

How do we write this as a decimal?
Why?

Let's develop our learning

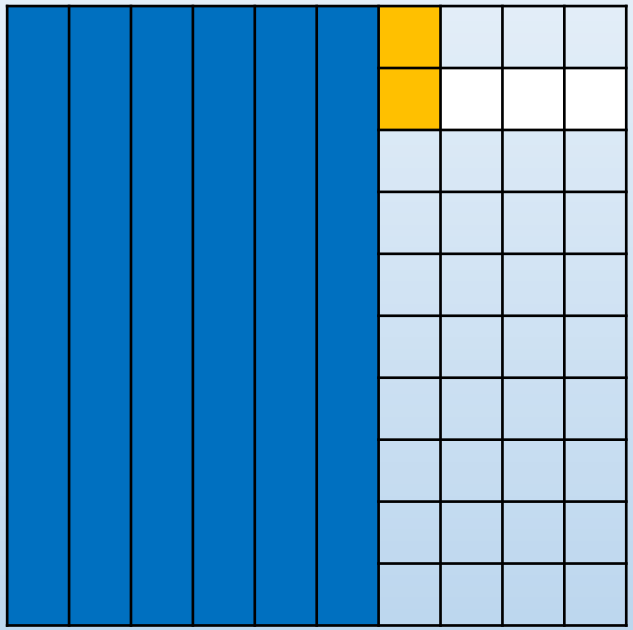
Jerry says.....

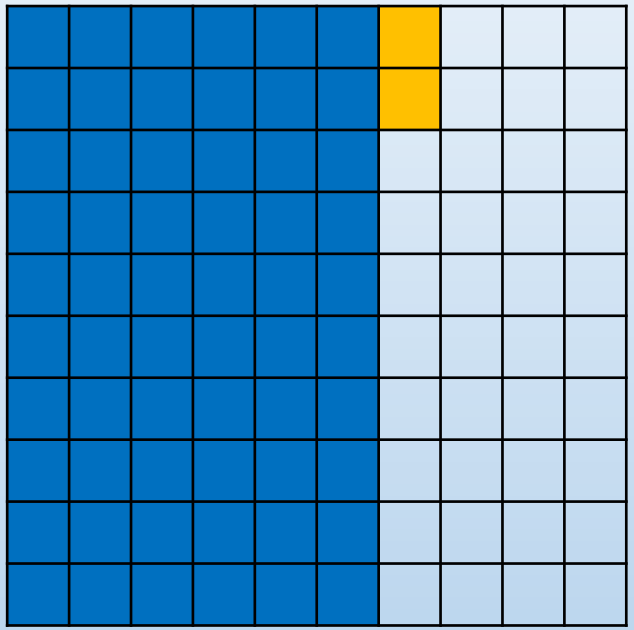
I can say that 0.62 has sixty-two hundredths...



Is he correct?

Let's develop our learning





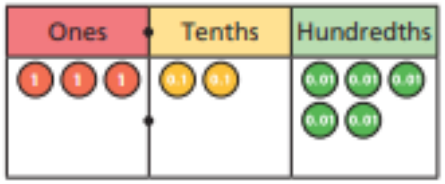
Jerry is correct because there are 10 hundredths in 1 tenth so 6 tenths = 60 hundredths

Write decimals

1 Make the number represented on each of the place value charts.

Complete the sentences to describe each number.

a)



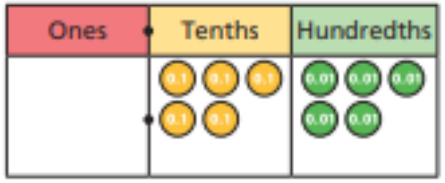
There are ☐ ones,

☐ tenths and

☐ hundredths.

The number is ☐

b)



There are ☐ ones,

☐ tenths and

☐ hundredths.

The number is ☐

c)

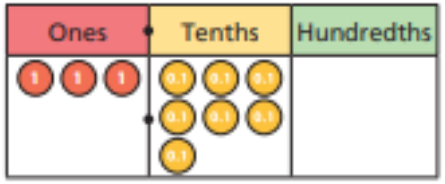
There are ☐ ones,

☐ tenths and

☐ hundredths.

The number is ☐

d)



There are ☐ ones,

☐ tenths and

☐ hundredths.

The number is ☐

2 Make each number on a place value chart.

Write the value of the underlined digit.

a) 6.3̲1 _____

b) 1̲2.09 _____

c) 0.0̲7 _____

d) 5̲6.82 _____

3 Alex says the number on the place value chart is 3.4

Do you agree with Alex? _____

Explain your answer.

4 Fill in the zeros needed as placeholders for each number.

a)

T	O	Tths	Hths
3	2		4

b)

T	O	Tths	Hths
	2		4

c)

T	O	Tths	Hths
			4

d)

T	O	Tths	Hths
		5	

e)

T	O	Tths	Hths
	2		

f)

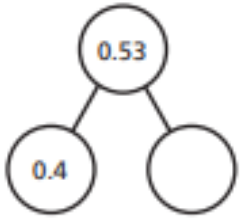
T	O	Tths	Hths
3		5	

Compare answers with a partner.

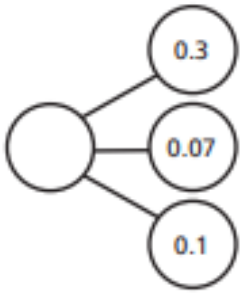
5 Complete the part-whole models.

a)

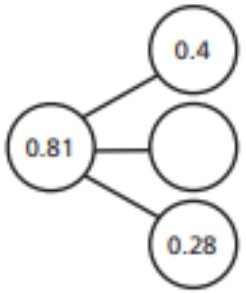
c)



b)



d)



6 Here is a part-whole model.

Partition 0.72 in three different ways and complete the number sentences.

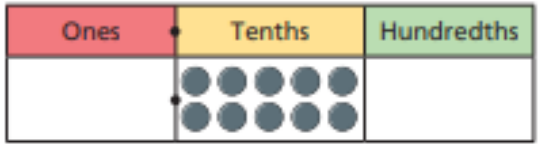
$\square + \square = 0.72$

$\square + \square = 0.72$

$\square + \square = 0.72$

7 Eva is asked to show 10 tenths on a place value chart.

Here is her answer.



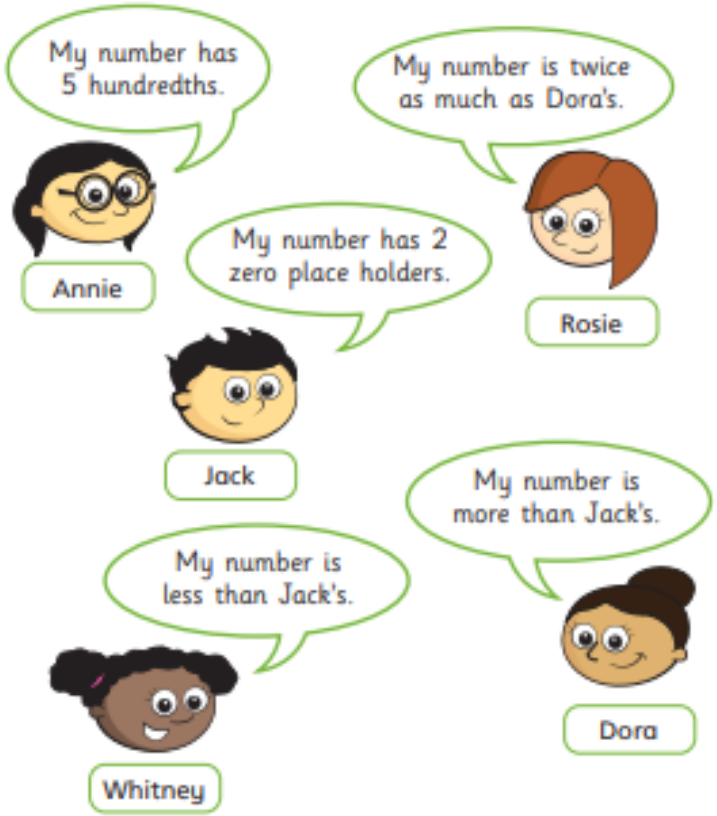
Is Eva correct?

8 Here are five number cards.

Annie, Rosie, Jack, Dora and Whitney take one card each.

0.06	0.4	0.2	0.05	0.03

Use the clues to work out which number they each have.



Annie ☐ Dora ☐ Whitney ☐

Rosie ☐ Jack ☐

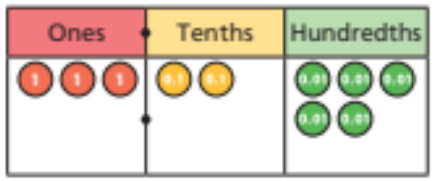
Did your partner use the same method?

Write decimals

1 Make the number represented on each of the place value charts.

Complete the sentences to describe each number.

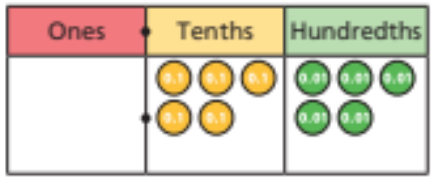
a)



There are 3 ones, 2 tenths and 5 hundredths.

The number is 3.25

b)



There are 0 ones, 5 tenths and 5 hundredths.

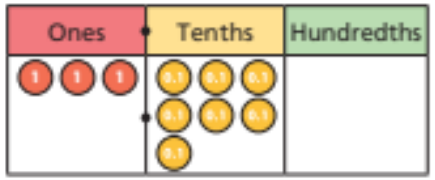
The number is 0·55

c)

There are 3 ones, 0 tenths and 7 hundredths.

The number is 3·07

d)



There are 3 ones, 7 tenths and 0 hundredths.

The number is 3·7

2 Make each number on a place value chart.

Write the value of the underlined digit.

a) 6.31 3 tenths (0·3)

b) 12.09 2 ones (2)

c) 0.07 7 hundredths (0·07)

d) 56.82 5 tens (50)

3 Alex says the number on the place value chart is 3.4

Do you agree with Alex? No

Explain your answer.

4 Fill in the zeros needed as placeholders for each number.

a)

T	O	Tths	Hths
3	2	0	4

b)

T	O	Tths	Hths
	2	0	4

c)

T	O	Tths	Hths
	0	0	4

d)

T	O	Tths	Hths
	0	5	

e)

T	O	Tths	Hths
	2		

f)

T	O	Tths	Hths
3	0	5	

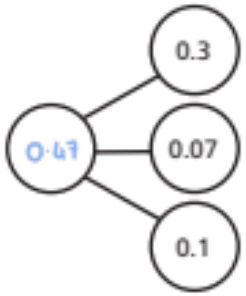
Compare answers with a partner.

5 Complete the part-whole models.

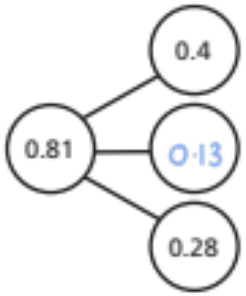
a)

c)

b)



d)



6 Here is a part-whole model.

Partition 0.72 in three different ways and complete the number sentences.

e.g.

0·7 + 0·02 = 0.72

0·6 + 0·12 = 0.72

0·5 + 0·22 = 0.72

7 Eva is asked to show 10 tenths on a place value chart.

Here is her answer.

Ones	Tenths	Hundredths
	●●●●● ●●●●●	

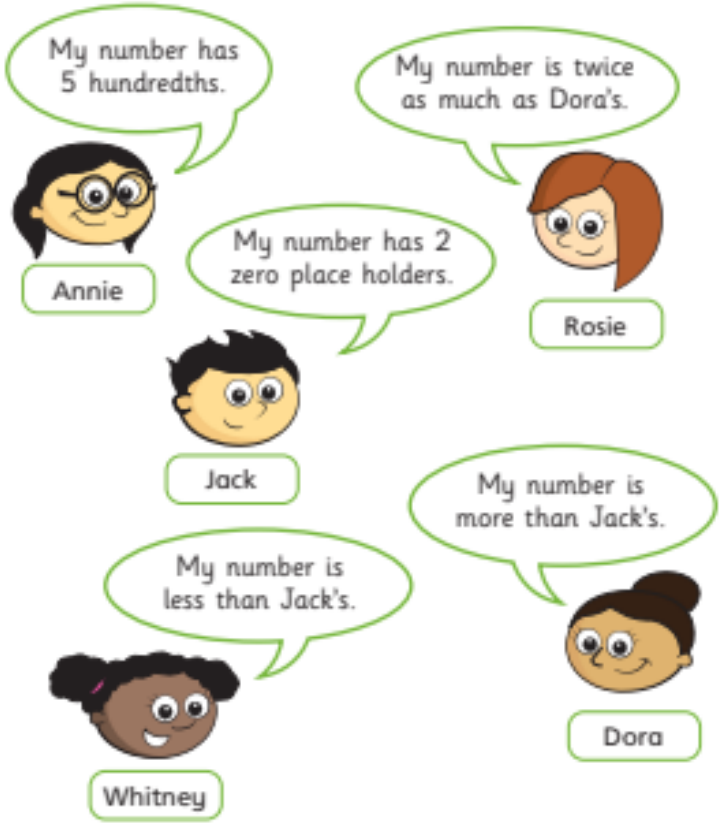
Is Eva correct?

8 Here are five number cards.

Annie, Rosie, Jack, Dora and Whitney take one card each.

0.06	0.4	0.2	0.05	0.03

Use the clues to work out which number they each have.



Annie 0·05 Dora 0·2 Whitney 0·03

Rosie 0·4 Jack 0·06

Did your partner use the same method?

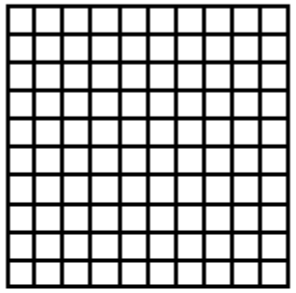
Challenge questions

YR4 PROGRESSION IN MASTERY LESSON PACK - WRITING AND VALUE OF DECIMALS

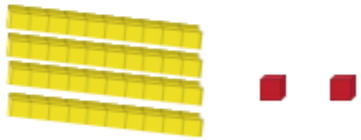
PROBLEM SOLVING TASKS

PROBLEM SOLVING 1

Here is a hundredth square.



Using these dienes, how many different numbers can you represent? Write them in figures and words.



Find all possibilities!

PROBLEM SOLVING 2

Here are two decimal numbers...

1 . 3

2 . 5

The sum of the digits in the first number add to make the sum of the digits in the second number.

Write down all of the pairs of number the splats could represent as decimals.

Problem Solving 1

Encourage pupils to work methodically to find all possibilities.

one tenth = 0.1, two tenths = 0.2, 3 tenths = 0.3, four tenths = 0.4.

one hundredth = 0.01, two hundredths = 0.02.

one tenth and one hundredth = 0.11, one tenth and two hundredths = 0.12.

two tenths and one hundredth = 0.21, two tenths and two hundredths = 0.22.

three tenths and one hundredth = 0.31, three tenths and two hundredths = 0.32

four tenths and one hundredth = 0.41, four tenths and two hundredths = 0.42.

Problem Solving 2

Again, encourage pupils to work methodically to find the solutions.

1.33 = 2.05

1.34 = 2.15

1.35 = 2.25

1.36 = 2.35

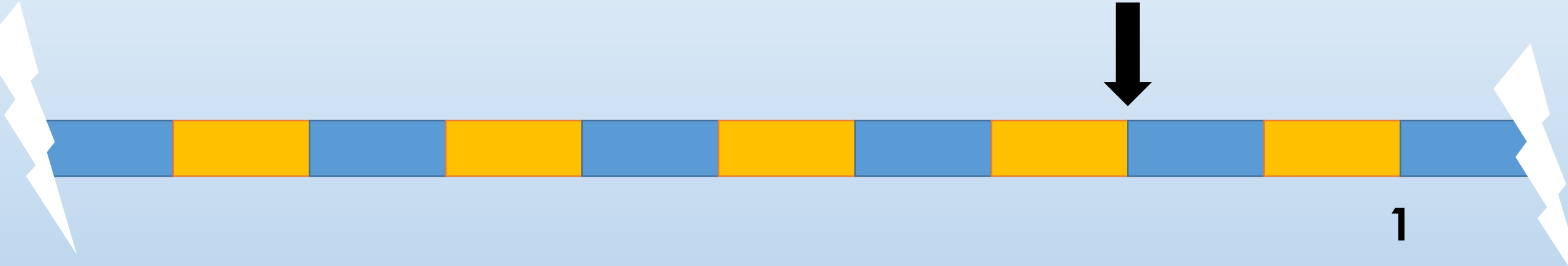
1.37 = 2.45

1.38 = 2.55

1.39 = 2.65

Exit task – Dong Nao Jin

Here is part of a number line?



Write the decimal the arrow may be pointing to in figures and words.
Convince me!

29.04.20

LO: To be able to compare decimals

Success Criteria

- I can use what I know about place value to compare decimals
- I can use what I know about 0 as a place holder in decimal numbers to help order them
- I can use my knowledge to solve problems (challenge question)

Compare decimals

Either work through the powerpoint slides or watch

https://whiterosemaths.com/homelearning/year-4/

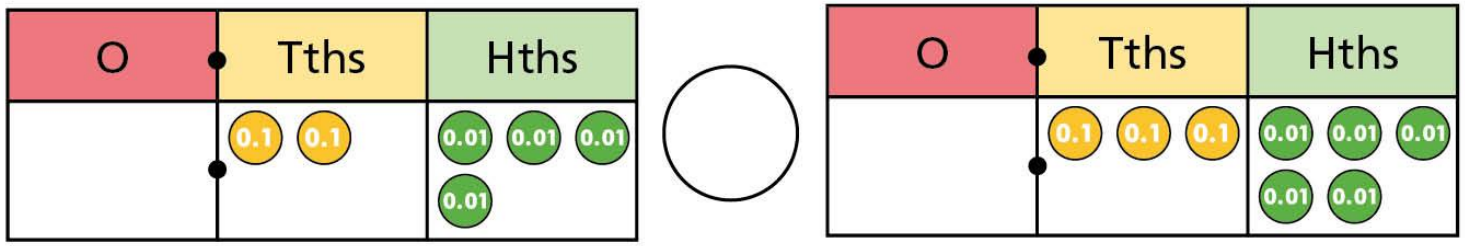
Select Summer week 1, lesson 3.

Then complete the worksheets in your book, the slides go through the questions on the worksheet.

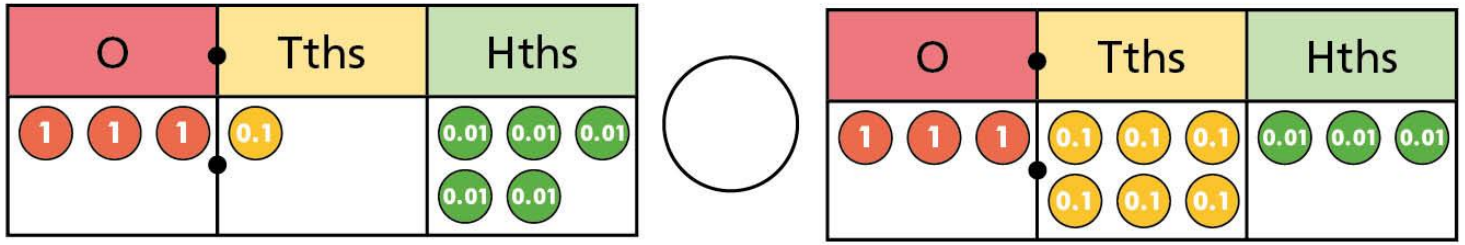
Compare decimals

1 Write < or > to compare the decimals.

a)

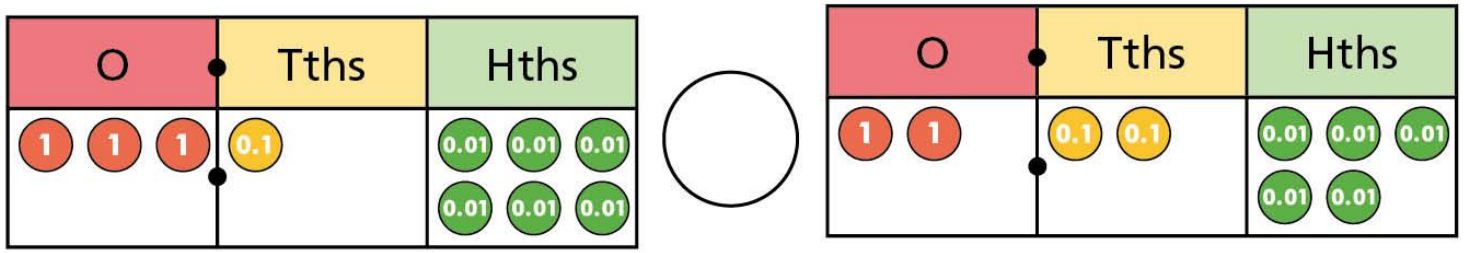


b)

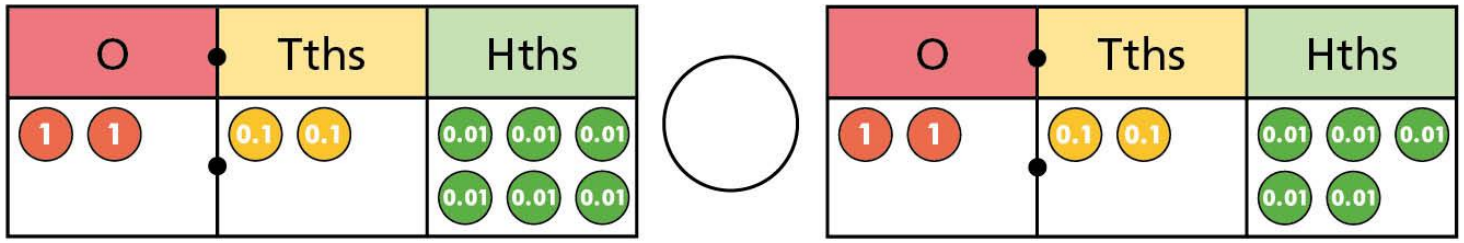


1

c)



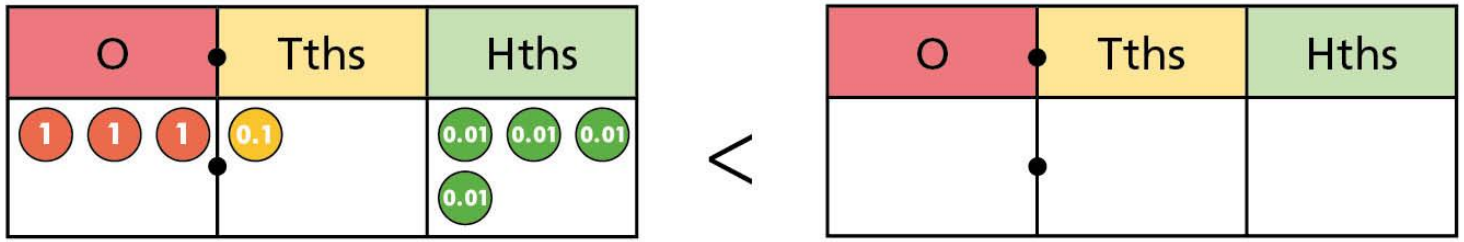
d)



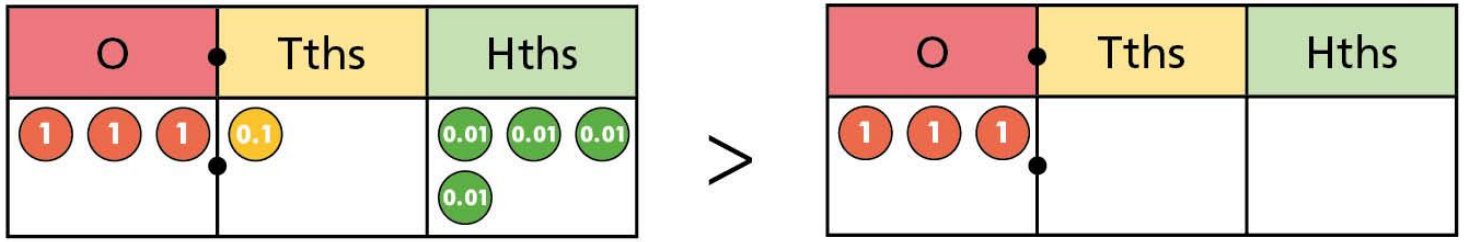
Did you have to compare all the columns for every question?

2 Draw counters to make the statements correct.

a)



b)



3 Write < or > to compare the decimals.

a)

O	Tths	Hths
7	6	8

◯

O	Tths	Hths
7	0	2

b)

O	Tths	Hths
3	2	5

◯

O	Tths	Hths
3	9	6

c)

O	Tths	Hths
0	4	1

◯

O	Tths	Hths
0	2	9

d)

O	Tths	Hths
1	0	3

◯

O	Tths	Hths
1	2	0

e)

O	Tths	Hths
2	7	2

◯

O	Tths	Hths
2	7	1

4 Complete the place value charts to make the statements correct.

a)

O	Tths	Hths
6	2	8

<

O	Tths	Hths

b)

O	Tths	Hths
3	2	6

>

O	Tths	Hths
3		

c)

O	Tths	Hths
9	9	8

<

O	Tths	Hths

d)

O	Tths	Hths
1	4	6

>

O	Tths	Hths
	8	

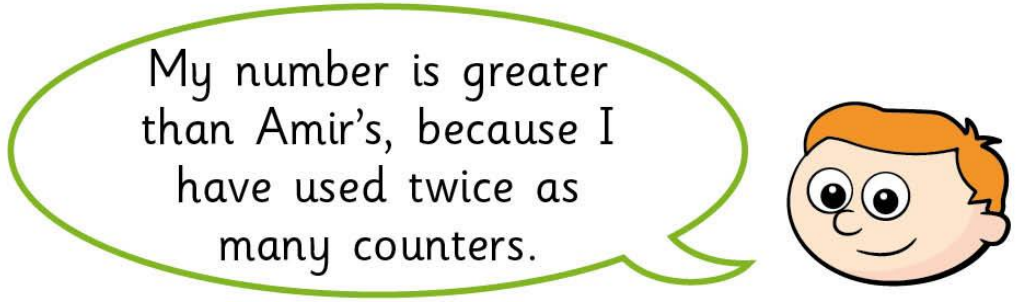
5 Ron and Amir have each made a number using counters on a place value chart.

Ron's looks like this:

Ones	Tenths	Hundredths
	● ● ● ●	● ●

Amir's looks like this:

Ones	Tenths	Hundredths
● ● ●		



Do you agree with Ron? _____

Explain your reasoning.

6 Draw exactly 8 counters in each chart to represent a number that matches each statement.

a) a number less than 0.76

Ones	Tenths	Hundredths

b) a number more than 5.74

Ones	Tenths	Hundredths

c) a number between 5.13 and 5.29

Ones	Tenths	Hundredths

How many different answers are there for each statement?

7 Write < or > to compare the numbers.

a) 3.2 ◯ 3.8

b) 1.46 ◯ 1.43

c) 1 ◯ 0.99

d) 0.16 ◯ 0.8

8 Fill in the missing digits to make the statements correct.

a) 0.34 < 0.3__

b) 2.42 > 2.4__

c) 0.74 < 0.__2

d) 1.3__ < 1.3__

e) 2.__2 > 2.__2

f) 0.8__ < 0.__9

Is there more than one answer for each?

9 Here are four digit cards.

7	0	3	1

Use each digit card once to make this statement correct.

$$\square.\square > \square.\square$$

How many possible answers are there?

Compare decimals

1 Write < or > to compare the decimals.

a) 

b) 

c) 

d) 

Did you have to compare all the columns for every question?

2 Draw counters to make the statements correct. e.g.

a) 

b) 

3 Write < or > to compare the decimals.

a)

O	Tths	Hths		O	Tths	Hths
7	6	8	>	7	0	2

b)

O	Tths	Hths		O	Tths	Hths
3	2	5	<	3	9	6

c)

O	Tths	Hths		O	Tths	Hths
0	4	1	>	0	2	9

d)

O	Tths	Hths		O	Tths	Hths
1	0	3	<	1	2	0

e)

O	Tths	Hths		O	Tths	Hths
2	7	2	>	2	7	1

4 Complete the place value charts to make the statements correct. e.g.

a)

O	Tths	Hths		O	Tths	Hths
6	2	8	<	6	2	9

b)

O	Tths	Hths		O	Tths	Hths
3	2	6	>	3	2	5

c)

O	Tths	Hths		O	Tths	Hths
9	9	8	<	9	9	9

d)

O	Tths	Hths		O	Tths	Hths
1	4	6	>	0	8	9

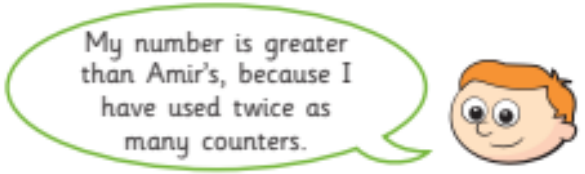
5 Ron and Amir have each made a number using counters on a place value chart.

Ron's looks like this:

Ones	Tenths	Hundredths
	●●●●	●●

Amir's looks like this:

Ones	Tenths	Hundredths
●●●		



Do you agree with Ron? NO

Explain your reasoning.

6 Draw exactly 8 counters in each chart to represent a number that matches each statement. e.g.

a) a number less than 0.76

Ones	Tenths	Hundredths
	○○○○○○	○○

b) a number more than 5.74

Ones	Tenths	Hundredths
○○○○○○	○○	

c) a number between 5.13 and 5.29

Ones	Tenths	Hundredths
○○○○○	○○	○

How many different answers are there for each statement?

7 Write < or > to compare the numbers.

a) 3.2 < 3.8

b) 1.46 > 1.43

c) 1 > 0.99

d) 0.16 < 0.8

8 Fill in the missing digits to make the statements correct. e.g.

a) 0.34 < 0.3<u>5</u>

b) 2.42 > 2.4<u>1</u>

c) 0.74 < 0.<u>8</u>2

d) 1.3<u>1</u> < 1.3<u>2</u>

e) 2.<u>4</u>2 > 2.<u>3</u>2

f) 0.8<u>9</u> < 0.<u>9</u>9

Is there more than one answer for each?

9 Here are four digit cards.

7	0	3	1

Use each digit card once to make this statement correct.

e.g. 7.0 > 3.1

How many possible answers are there?

Challenge questions

YR4 PROGRESSION IN MASTERY LESSON PACK - COMPARE DECIMALS

REASONING TASKS

REASONING 1

Marlon thinks the Gattegno charts below represent the same decimal numbers...

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

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

Do you agree with him?
Explain why / why not!

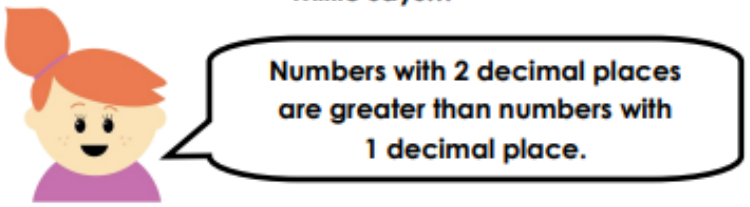
REASONING 2

Asha draws place value counters to prove that 0.5 is less than 0.52

Explain whether her evidence is convincing.

REASONING 3

Millie says...



Explain why the statement is not always correct!

Reasoning 1

Modelled DAB Reasoning Responses

D – I disagree with Marlon.

A – The charts do not represent the same decimal number.

B – The first chart has **4** ones, **2** tenths and **8** hundredths.

The second chart has **5** ones, **2** tenths and **8** hundredth.

The charts show different decimal numbers.

Reasoning 2

Modelled DAB Reasoning Response

D – Asha's evidence is convincing.

A – Her drawing does show that 0.5 is smaller than 0.52

B – Sometimes, fewer counters could show the bigger number although this is not the case here. Asha has shown that both 0.5 and 0.52 have an equal number of tenths. However, she has shown that 0.52 is larger as it also has 2 hundredths, making it greater than 0.5.

Reasoning 3

Modelled DAB Reasoning Response

D – Millie's statement is not always correct.

A – Sometimes, a number with 2 decimal places is greater than a number with 1 decimal place but not always.

B – For example 0.2 is greater than 0.11.

30.04.20

LO: To able to order decimals

Success Criteria

- I can use place value to help me order decimals up to 2 decimal places
- I can use 0 as a place holder

Order decimals

Either work through the powerpoint slides or watch

https://whiterosemaths.com/homelearning/year-4/

Select Summer week 1, lesson 4.

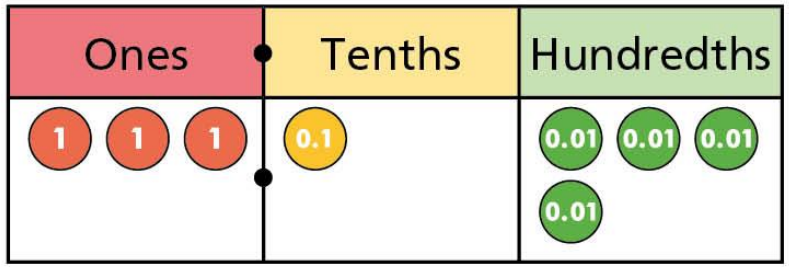
Then complete the worksheets in your book, the slides go through the questions on the worksheet.

Order decimals

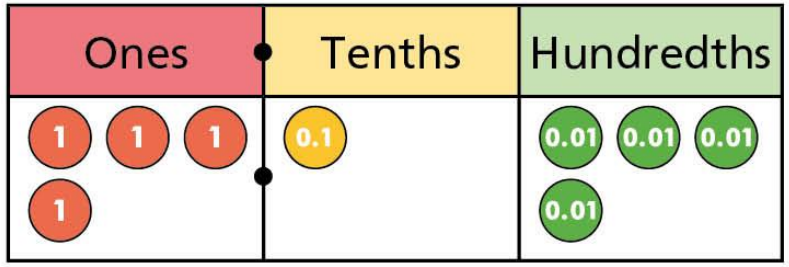
1 Here are four numbers on place value charts.

a) What number is represented in each place value chart?

A

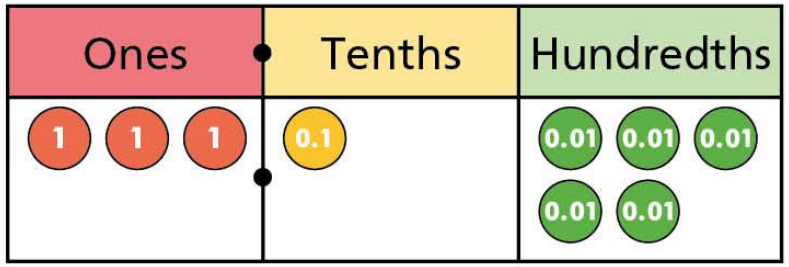


B

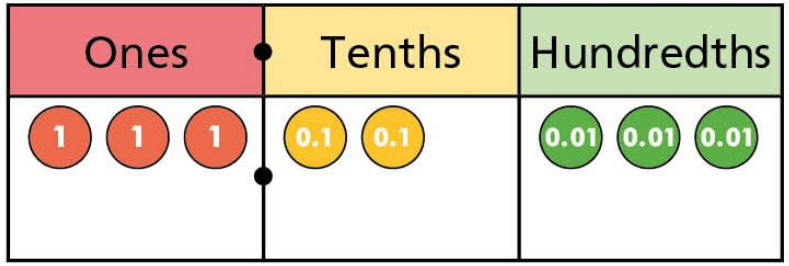


1

C



D



b) Write the numbers in ascending order.

smallest

greatest

2 **a)** Write digits to show the number represented in each place value chart.

O	Tths	Hths
1	0.1 0.1 0.1 0.1	0.01 0.01

O	Tths	Hths
1 1		0.01 0.01 0.01 0.01 0.01 0.01

O	Tths	Hths
1 1	0.1 0.1 0.1	

O	Tths	Hths
1	0.1 0.1 0.1	0.01 0.01 0.01

b) Write the numbers in ascending order.

3 Write the numbers in descending order.

1.42	4.12	1.24	2.41

4 Teddy's teacher asks him to put some numbers in ascending order.

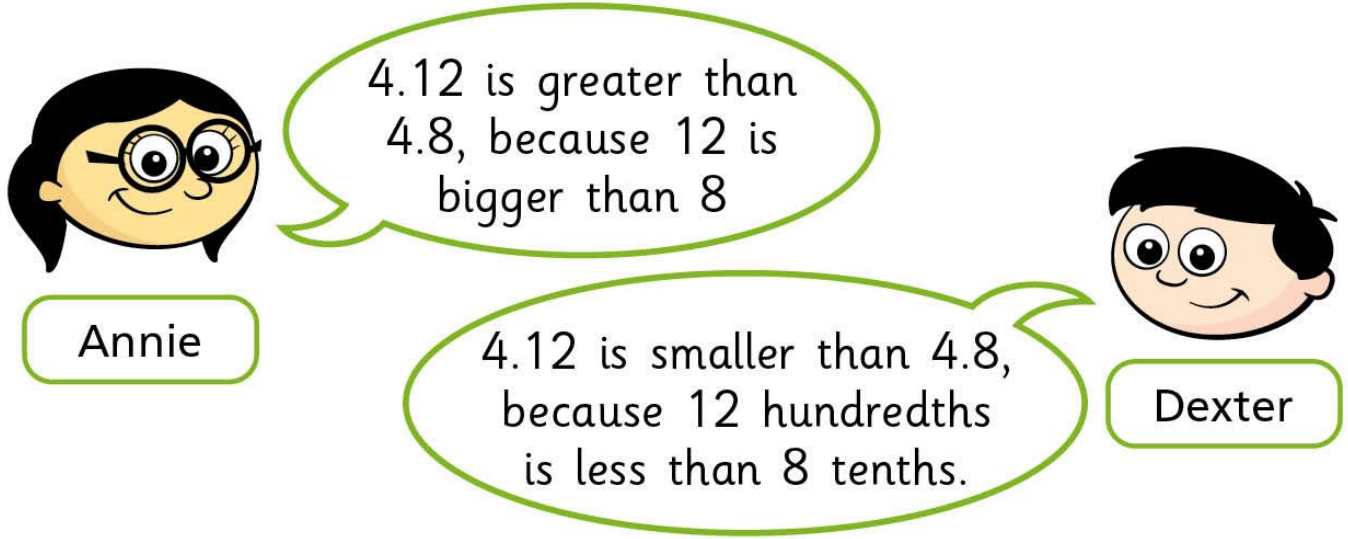
Here is his answer.

0.64	12.7	2.83

Do you agree with Teddy? _____

Talk about it with a partner.

5 Annie and Dexter are comparing the decimals 4.12 and 4.8



Who do you agree with? _____

Explain your answer.

6 Write < or > to complete the statements.

Decide whether the numbers are ascending or descending in each part.

a) 3.2 ◯ 3.8 ◯ 3.9 _____

b) 0.41 ◯ 0.38 ◯ 0.25 _____

c) 4.2 ◯ 4.17 ◯ 4.085 _____

7 Write the numbers in ascending order.

a) 2.38 0.97 1.45 1.81

_____

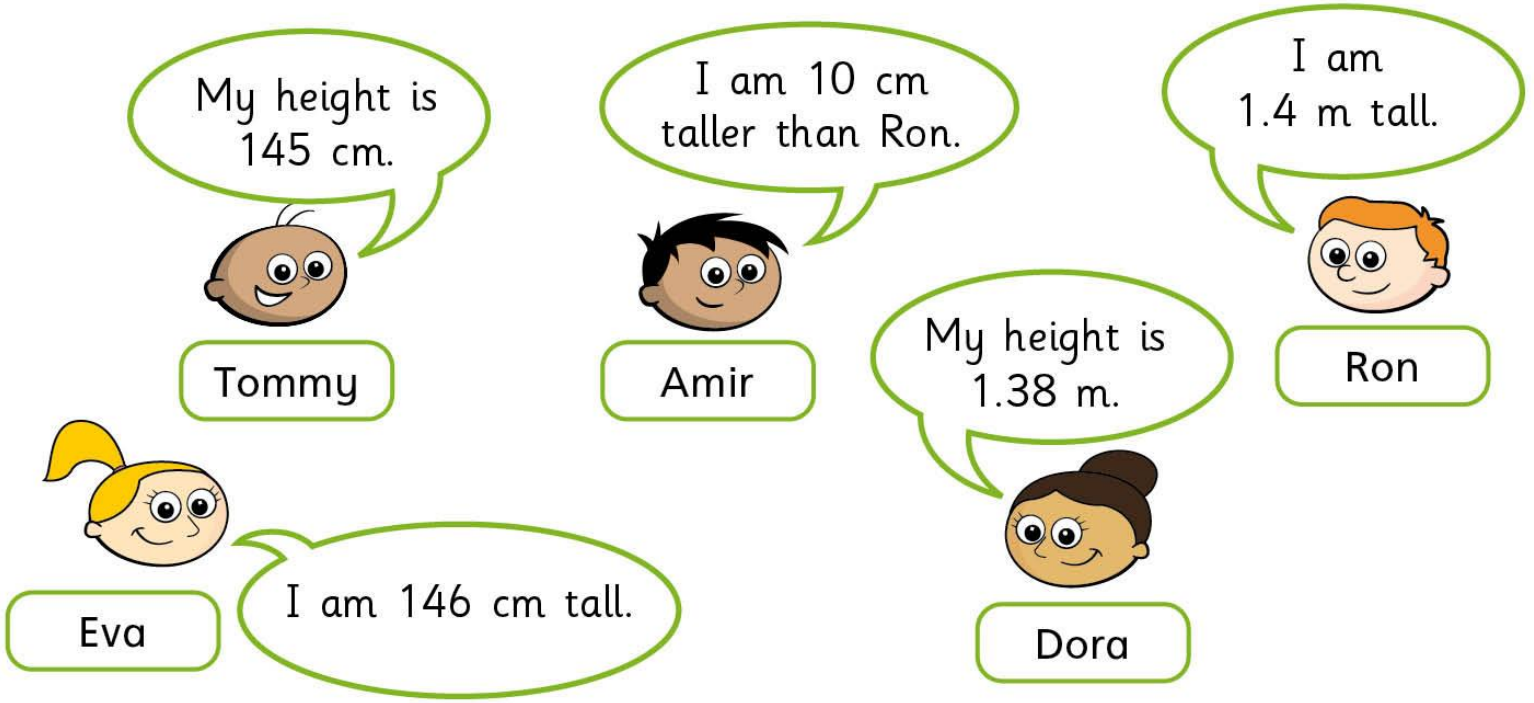
b) 0.64 0.7 0.09 0.46

_____

c) 12.3 2 7.83 0.99

_____

8 Tommy, Ron, Amir, Dora and Eva have measured their heights.



Write the children's names in order from shortest to tallest.

9 Here are two lists of numbers.

Use the digits 0 to 9 once each to complete the lists.

ascending order	__.4__	__.41	7.__9	__.41
descending order	__.41	7.__9	__.41	__.4__

Compare answers with a partner.

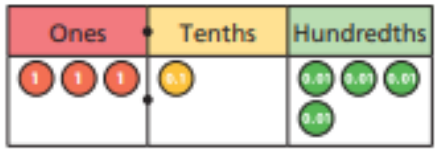
Is there more than one way to complete each list?

Order decimals

1 Here are four numbers on place value charts.

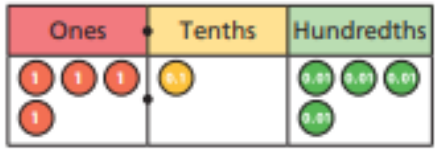
a) What number is represented in each place value chart?

A



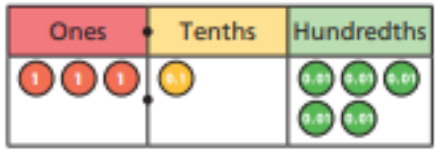
3·14

B



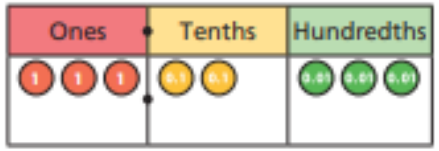
4·14

C



3·15

D



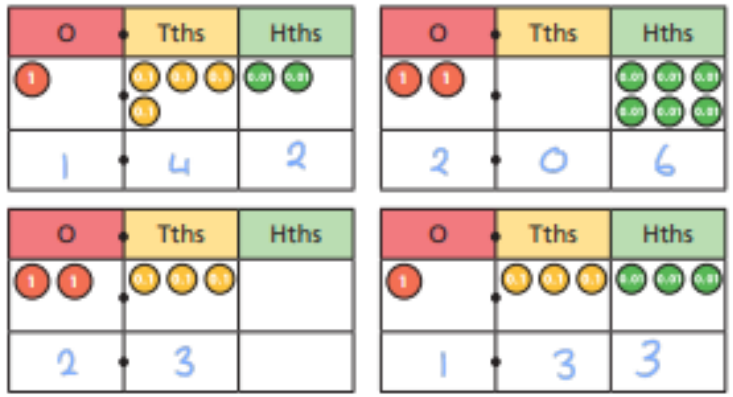
3·23

b) Write the numbers in ascending order.

3·14, 3·15, 3·23, 4·14

smallest greatest

2 **a)** Write digits to show the number represented in each place value chart.



b) Write the numbers in ascending order.

1·33, 1·42, 3·06, 2·3

3 Write the numbers in descending order.

1.42	4.12	1.24	2.41

4·12, 2·41, 1·42, 1·24

4 Teddy's teacher asks him to put some numbers in ascending order.

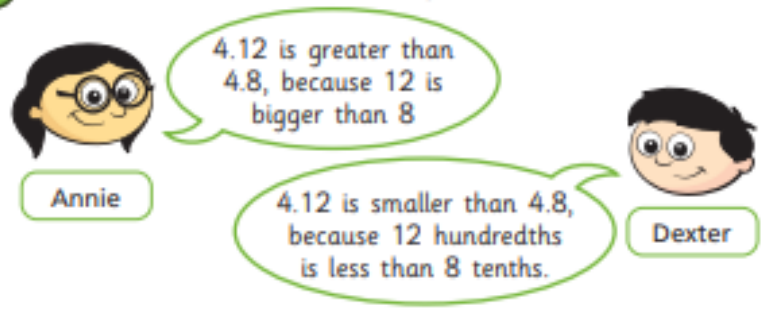
Here is his answer.

0.64	12.7	2.83

Do you agree with Teddy? No

Talk about it with a partner.

5 Annie and Dexter are comparing the decimals 4.12 and 4.8



Who do you agree with? Dexter

Explain your answer.

6 Write < or > to complete the statements.

Decide whether the numbers are ascending or descending in each part.

a) 3.2 < 3.8 < 3.9 ascending

b) 0.41 > 0.38 > 0.25 descending

c) 4.2 > 4.17 > 4.085 descending

7 Write the numbers in ascending order.

a) 2.38 0.97 1.45 1.81

0·97, 1·45, 1·81, 2·38

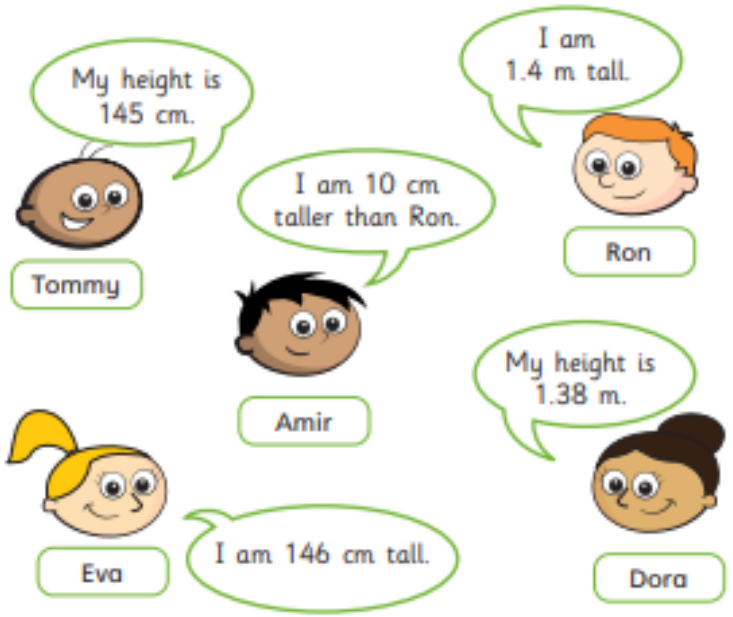
b) 0.64 0.7 0.09 0.46

0·09, 0·46, 0·64, 0·7

c) 12.3 2 7.83 0.99

0·99, 2, 7·83, 12·3

8 Tommy, Ron, Amir, Dora and Eva have measured their heights.



Write the children's names in order from shortest to tallest.

Dora, Ron, Tommy, Eva, Amir

9 Here are two lists of numbers.

Use the digits 0 to 9 once each to complete the lists. e.g.

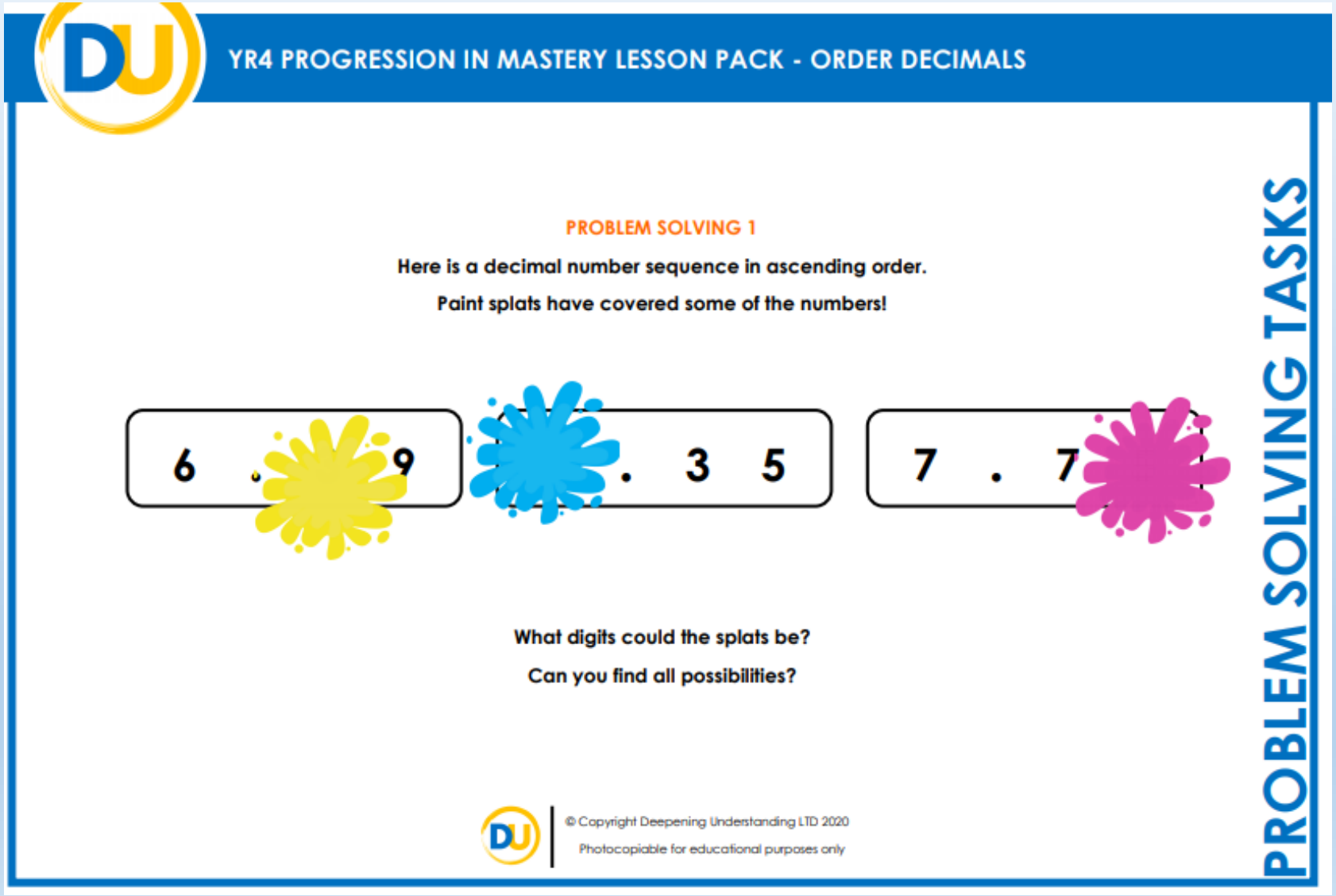
ascending order 0.41 2.41 7.39 9.41

descending order 8.41 7.49 6.41 5.47

Compare answers with a partner.

Is there more than one way to complete each list?

Challenge question



Problem Solving 1

The yellow splat could be any digit 0-9

The blue splat could be 6 or 7. It could only be 6 if the yellow splat was 0, 1 or 2.

The purple splat could be any digit between 0-9.

01.05.20

LO: To able to round decimals

Success Criteria

- I can round numbers with 1 decimal place to the nearest whole number
- I know to look at the digit in the tenths column to understand which way to round

Round decimals

Either work through the powerpoint slides or watch

https://whiterosemaths.com/homelearning/year-4/

Select Summer week 2, lesson 1.

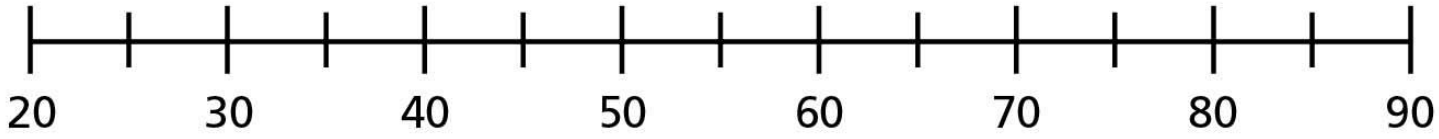
Then complete the worksheets in your book, the slides go through the questions on the worksheet.

Round decimals

1 Here are some number cards.

27	61	49	83

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



1

27	61	49	83

b) Use the numbers to complete the sentences.

☐ is closer to 50 than 40

☐ is closer to 30 than 20

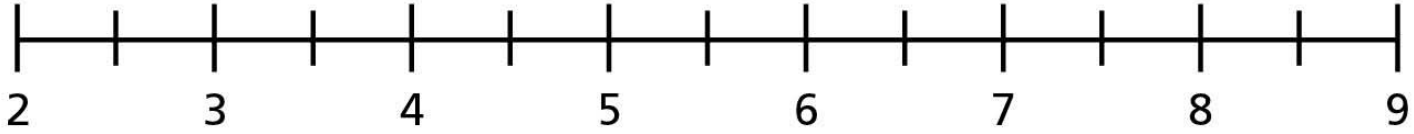
☐ is closer to 80 than 90

☐ is closer to 60 than 70

2 Here are some number cards.

2.7	6.1	4.9	8.3

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



2

2.7	6.1	4.9	8.3

b) Use the numbers to complete the sentences.

☐ is closer to 5 than 4

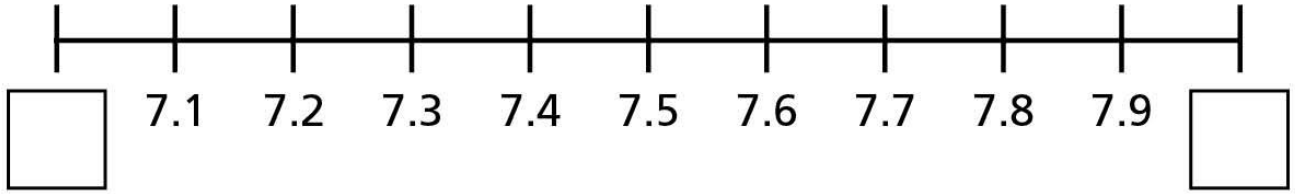
☐ is closer to 3 than 2

☐ is closer to 8 than 9

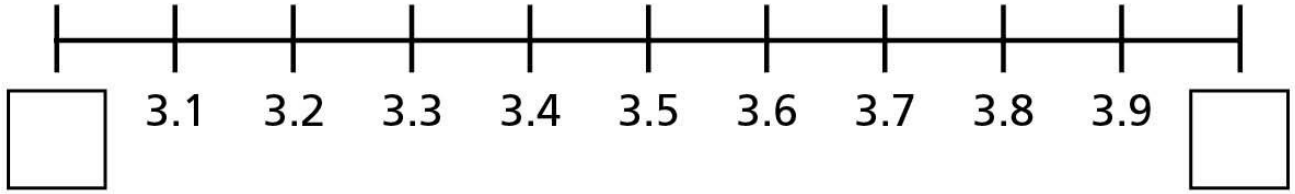
☐ is closer to 6 than 7

3 Fill in the integers on the number lines.

a)



b)



4 Which integers do the numbers lie between?

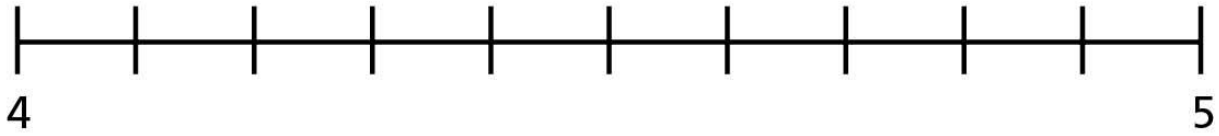
Fill in the boxes to make the statements correct.

a) $\square < 1.4 < \square$

b) $\square < 34.8 < \square$

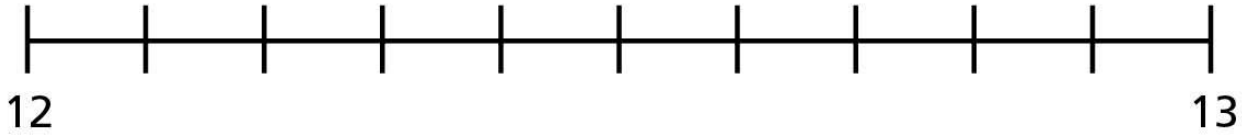
c) $\square < 0.7 < \square$

5 **a)** Label 4.3 on the number line.



Is it closer to 4 or 5?

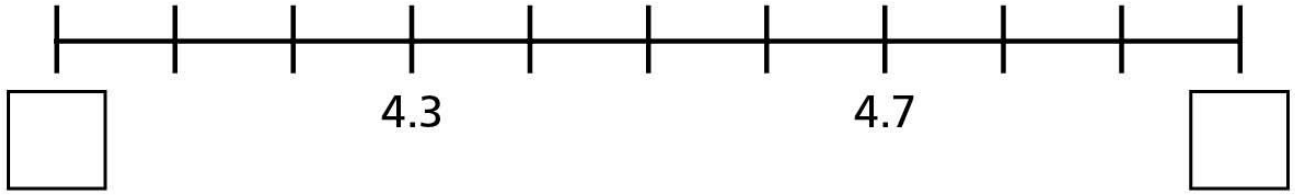
b) Label 12.8 on the number line.



Is it closer to 12 or 13?

6 Complete the number lines and sentences.

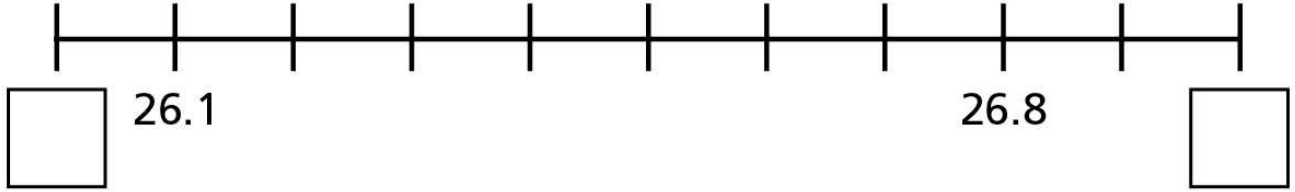
a)



☐ is closer to ☐ than ☐

☐ is closer to ☐ than ☐

b)



☐ is closer to ☐ than ☐

☐ is closer to ☐ than ☐

7 Which numbers **round up** to the nearest whole number?

Circle your answers.

4.1 **2.8** **0.7** **12.3** **0.5** **99.3**

8 Round each decimal to the nearest whole number.

a) 1.8 ☐

b) 4.2 ☐

c) 0.9 ☐

d) 1.5 ☐

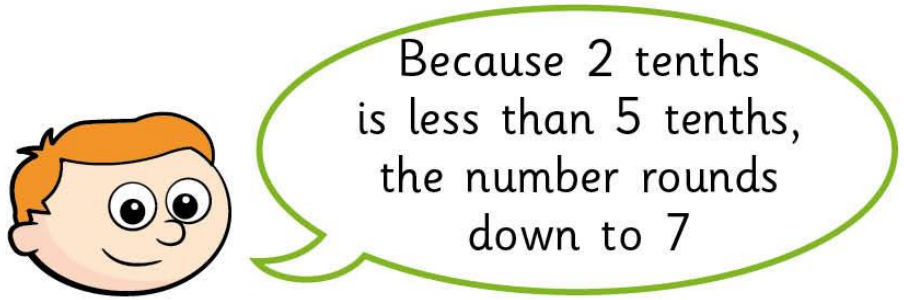
e) 13.7 ☐

f) 20.1 ☐

g) 0.4 ☐

h) 99.8 ☐

9 Ron is rounding 8.2 to the nearest whole number.



Do you agree with Ron? _____

Explain your answer.

10 Tommy is thinking of a number that has one decimal place.

When he rounds his number to the nearest whole, the answer is 32

What number could Tommy be thinking of?

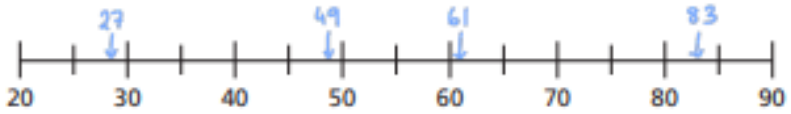
Are there any other answers?

Round decimals

1 Here are some number cards.

27	61	49	83

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



b) Use the numbers to complete the sentences.

49 is closer to 50 than 40

27 is closer to 30 than 20

83 is closer to 80 than 90

61 is closer to 60 than 70

2 Here are some number cards.

2.7	6.1	4.9	8.3

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

b) Use the numbers to complete the sentences.

4.9 is closer to 5 than 4

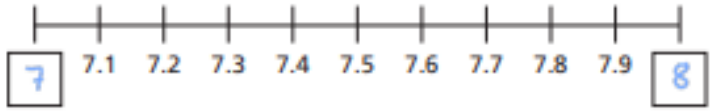
2.7 is closer to 3 than 2

8.3 is closer to 8 than 9

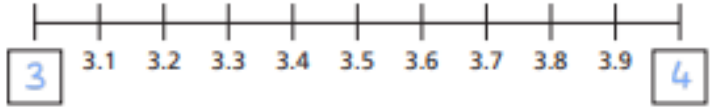
6.1 is closer to 6 than 7

3 Fill in the integers on the number lines.

a)



b)



4 Which integers do the numbers lie between?

Fill in the boxes to make the statements correct.

a) 1 < 1.4 < 2

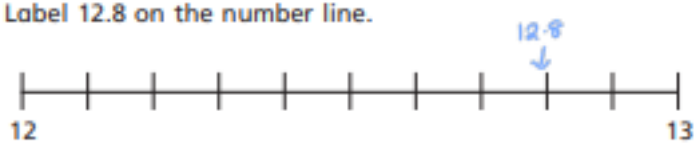
b) 34 < 34.8 < 35

c) 0 < 0.7 < 1

5 a) Label 4.3 on the number line.

Is it closer to 4 or 5? 4

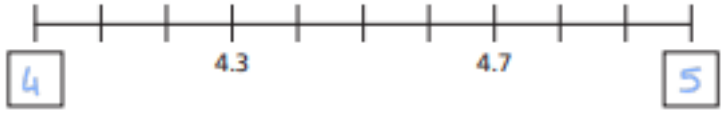
b) Label 12.8 on the number line.



Is it closer to 12 or 13? 13

6 Complete the number lines and sentences.

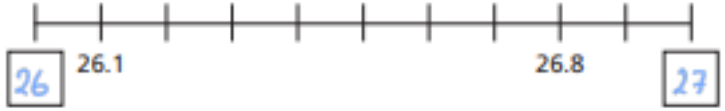
a)



4.3 is closer to 4 than 5

4.7 is closer to 5 than 4

b)



26.1 is closer to 26 than 27

26.8 is closer to 27 than 26

7 Which numbers **round up** to the nearest whole number?

Circle your answers.

4.1 2.8 0.7 12.3 0.5 99.3

8 Round each decimal to the nearest whole number.

a) 1.8 2

b) 4.2 4

c) 0.9 1

d) 1.5 2

e) 13.7 14

f) 20.1 20

g) 0.4 0

h) 99.8 100

9 Ron is rounding 8.2 to the nearest whole number.

Because 2 tenths is less than 5 tenths, the number rounds down to 7

Do you agree with Ron? No

Explain your answer.

10 Tommy is thinking of a number that has one decimal place.

When he rounds his number to the nearest whole, the answer is 32

What number could Tommy be thinking of? e.g. 32.1

Are there any other answers?

Challenge question

YR4 PROGRESSION IN MASTERY LESSON PACK - ROUNDING DECIMALS

PROBLEM SOLVING TASKS

PROBLEM SOLVING 1

Alfie rolls two 1-6 dice to create a one place decimal number.

Then, he rounds the decimal to the nearest whole number.

If both of the digits are odd, what combinations of decimals could he have?

What would they round to the nearest whole number?

Problem Solving 1

1 and 1, 1 and 3 round to 1

1 and 5 rounds to 2

3 and 1, 3 and 3 rounds to 3

3 and 5 rounds to 4

5 and 1, 5 and 3 round to 5

5 and 5 rounds to 6