



Year Four Distance Learning
Week 4
Maths

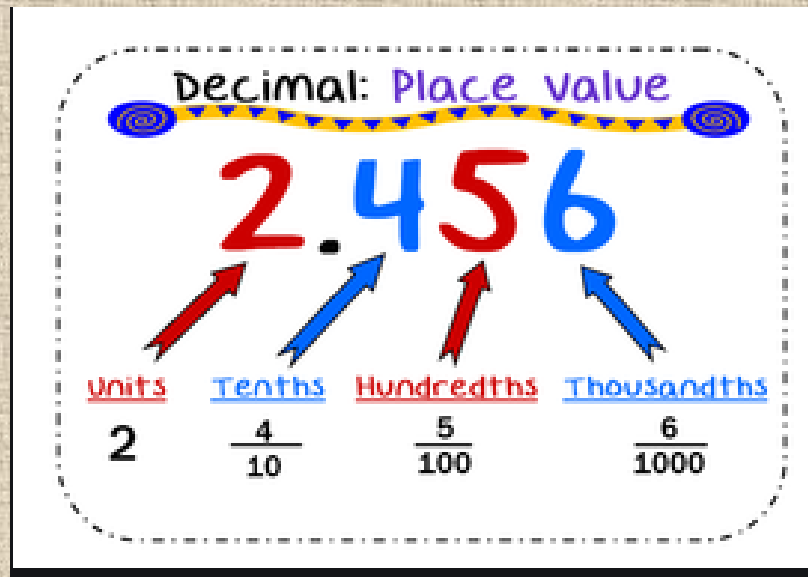
Monday : Decimals

- Our new topic this term is decimals. Draw a spider diagram in your books. What do you know about decimals?



Introduction

- Decimals are similar to fractions in that a decimal is part of a whole.



- Please have a look at the following slides and then complete the task in your books.
- Click on the following link:
- [Whiterosemaths.com/homelearning/year4](https://whiterosemaths.com/homelearning/year4)
- Click on Summer term week 1 lesson 2 (write decimals)

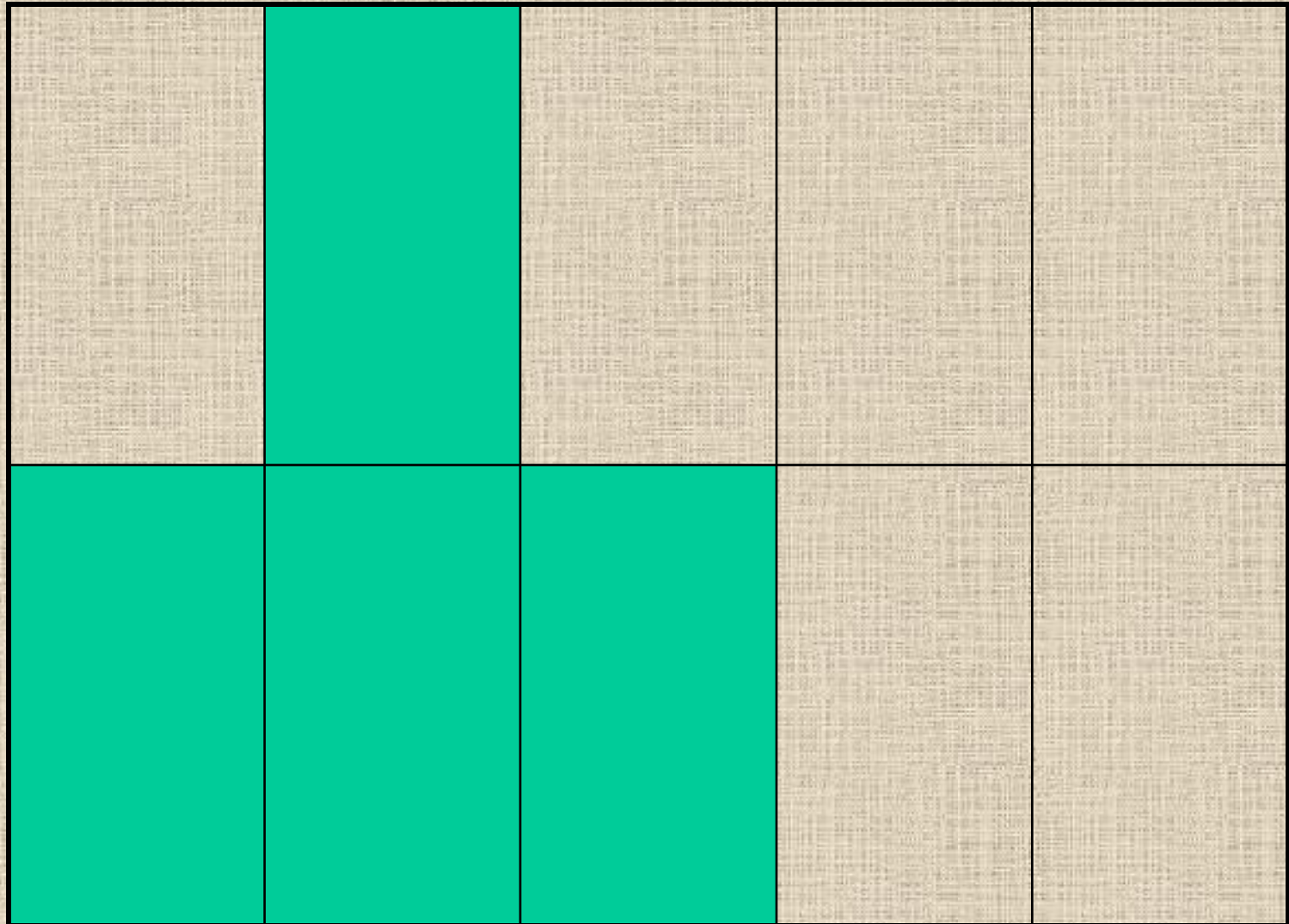
Decimal

means

ten

One tenth	Two tenths	Three tenths	Four tenths	Five tenths	Six tenths	Seven tenths	Eight tenths	Nine tenths	One
$\frac{1}{10}$	$\frac{2}{10}$	$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$	$\frac{7}{10}$	$\frac{8}{10}$	$\frac{9}{10}$	$\frac{10}{10}$
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0

How much is shaded - give the decimal.



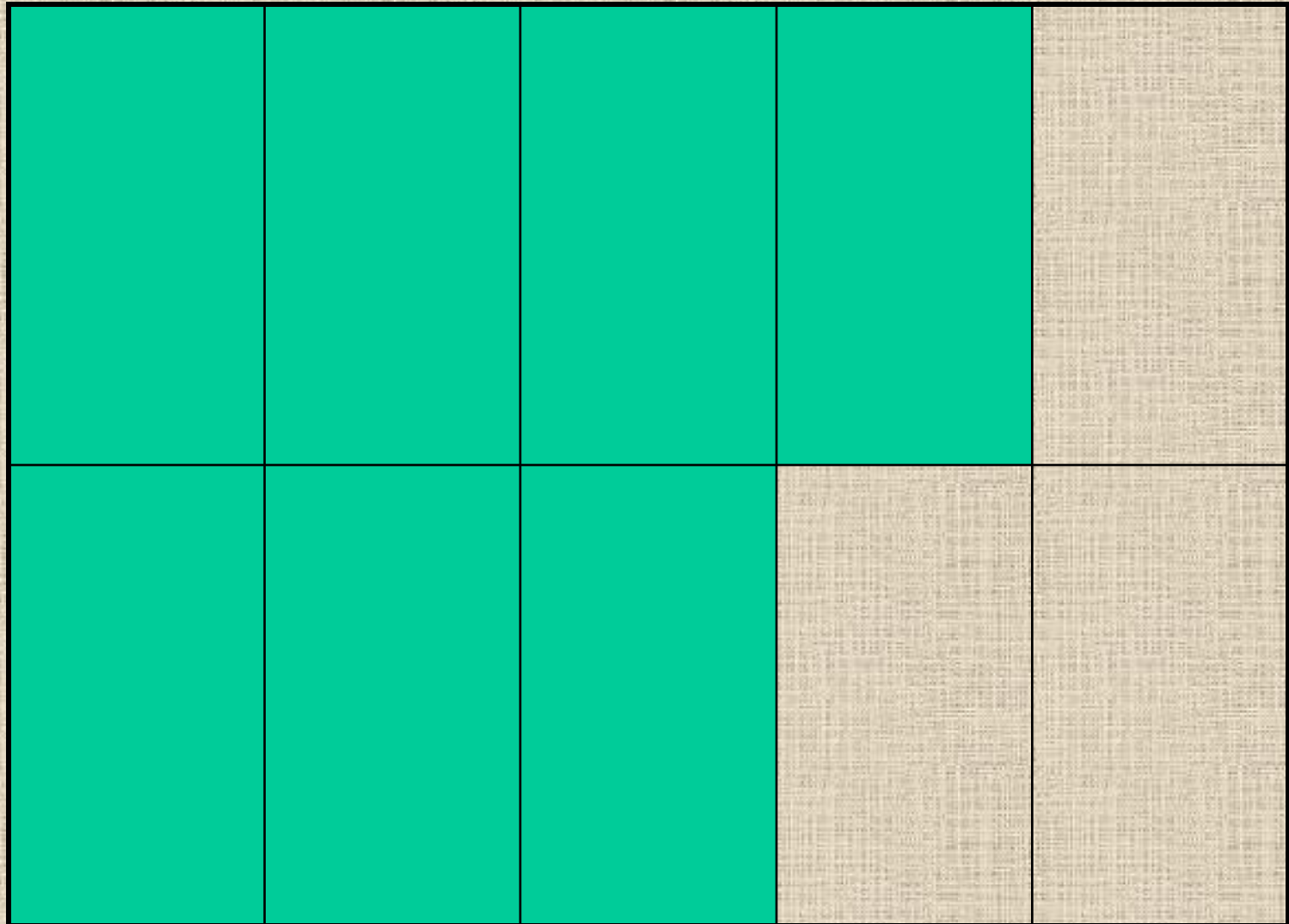
The answer is

0.4

or

$\frac{4}{10}$ ths

How much is shaded - give the decimal.



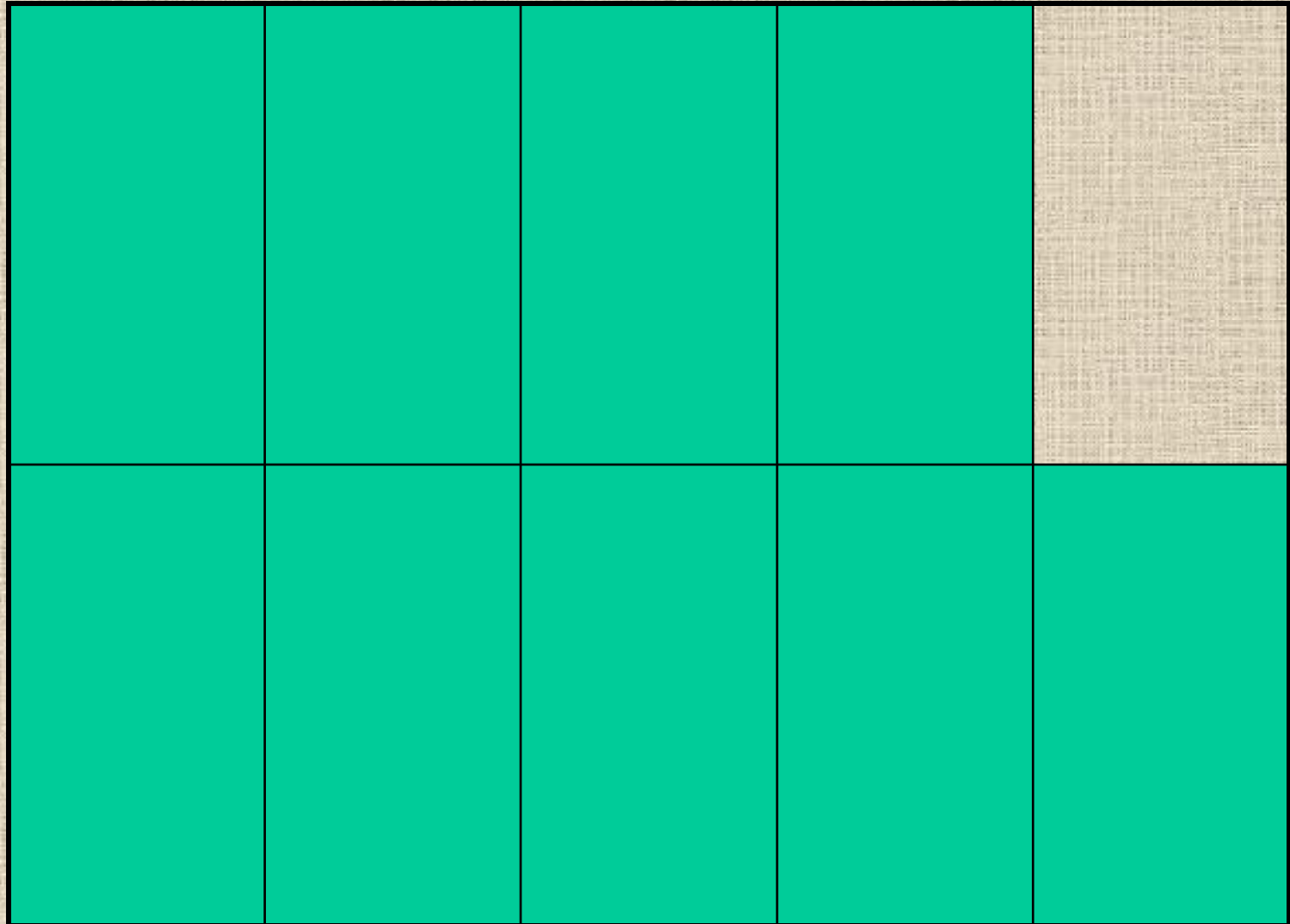
The answer is

0.7

or

$\frac{7}{10}$ ths

How much is shaded - give the decimal.



The answer is

0.9

or

$\frac{9}{10}$ ths

If something is divided into 100ths or $1/100^{\text{ths}}$ then the decimal looks like this -

$$1/100^{\text{th}} = 0.01$$

$$41/100^{\text{th}} = 0.41$$

Write the following as decimals:-

$7/10$ ths

Tenths and Hundredths Place Value Grid

Hundreds	Tens	Ones	•	Tenths	Hundredths

0.7

7 / 100th

0.07

5 / 10th

0.5

50 / 100th

0.5

4 / 10th

0.4

43 / 100th

0.43

Complete the following slides in your books

1 Make the number represented on each of the place value charts. Complete the sentences to describe each number.

a)

Ones	Tenths	Hundredths
1 1 1	0.1 0.1	0.01 0.01 0.01 0.01 0.01

There are ones,
 tenths and
 hundredths.

The number is

b)

Ones	Tenths	Hundredths
	0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01

There are ones,
 tenths and
 hundredths.

The number is

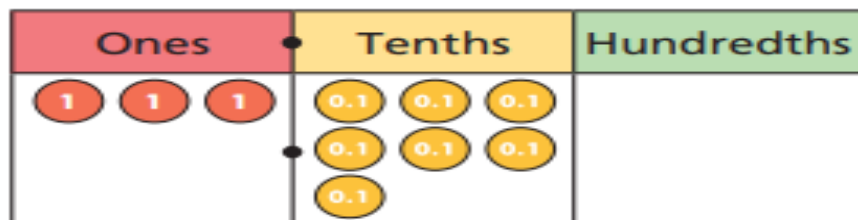
c)



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) 6.31 _____

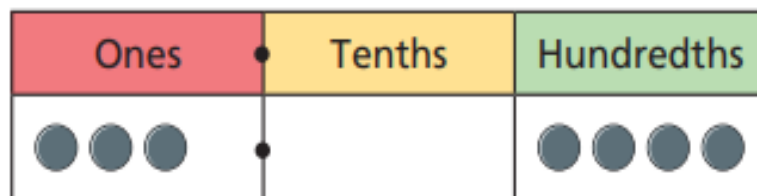
b) 12.09 _____

c) 0.07 _____

d) 56.82 _____

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)

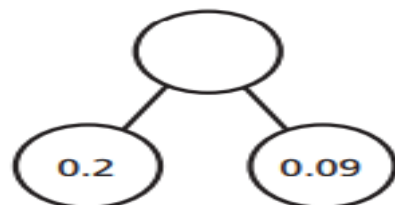
T	O	Tths	Hths
	2		

f)

T	O	Tths	Hths
3			5

5 Complete the part-whole models.

a)



c)



b)

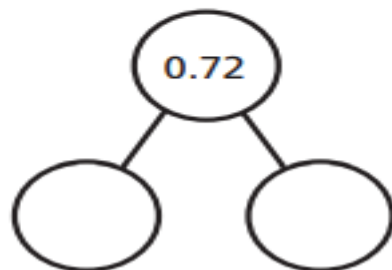


d)



6 Here is a part-whole model.

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



$$\square + \square = 0.72$$

$$\square + \square = 0.72$$

$$\square + \square = 0.72$$

Terrific Tuesday

- Click on the following link. Then select week 1, lesson 2 (Tenths as decimals)

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

1 Shade the bar models to represent the amounts.

a) 7 tenths



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



c) 0.3

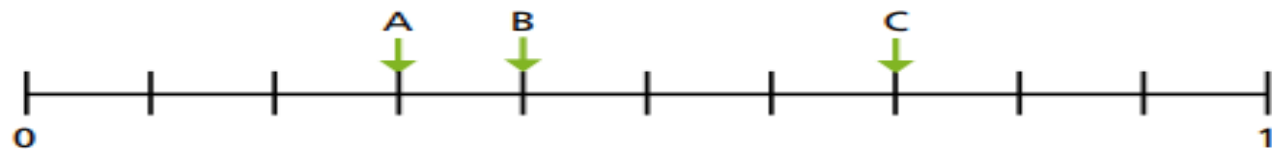


2 Complete the table to show the fractions and decimals the bar models represent.

Bar model	Fraction	Decimal

Work out the values of A, B and C.

Give your answers as fractions and decimals.



A or

B or

C or

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



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

Do you agree with Ron? _____

Explain your answer.

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.

My number has
5 hundredths.



Annie

My number is twice
as much as Dora's.



Rosie

My number has 2
zero place holders.



Jack

My number is
more than Jack's.



Dora

My number is
less than Jack's.



Whitney

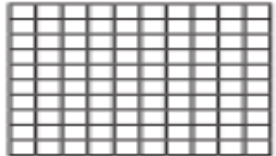
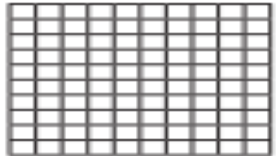
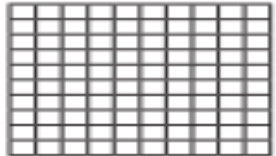
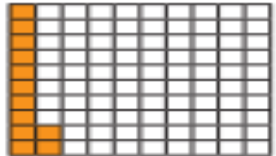
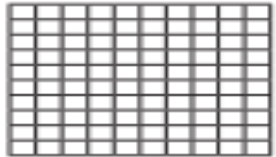

Wednesday

Complete the following slides which include reasoning and problem solving questions in your books.

Remember to use stem sentences to explain your answer when appropriate.

- Click on the following link.
- <https://whiterosemaths.com/homelearning/year-4/>
- Select week 2; lesson 3 (Hundredths as decimals)

Complete the table.

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

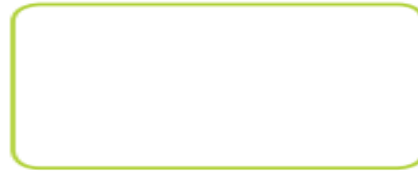
2

Draw decimal place value counters to represent the numbers.

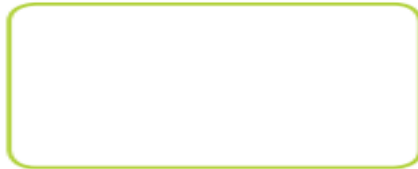
a) 0.03



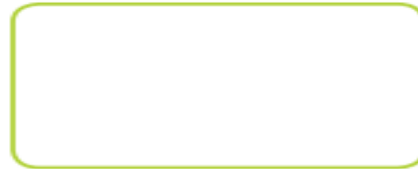
c) 0.63



b) 0.6



d) 0.36



3

The counters represent tenths and hundredths.

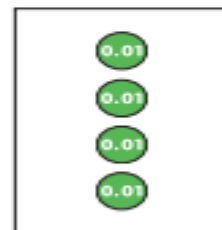
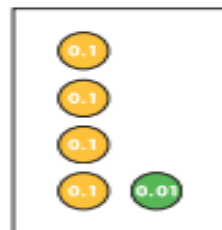
a) Match the decimals to the groups of counters.

0.04

0.4

0.14

0.41



b) Write each decimal as a fraction.

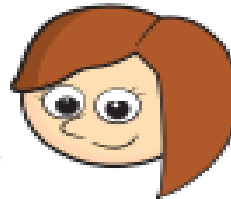
$0.04 = \square$

$0.4 = \square$

$0.14 = \square$

$0.41 = \square$

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



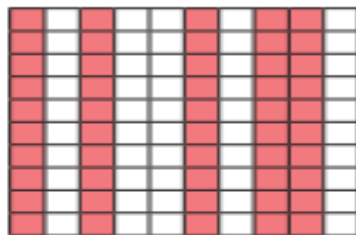
Is Rosie correct? _____

Explain your answer.

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.

Thursday

Problem solving

Reasoning and problem solving tenths and hundredths

Who is correct?

5 hundredths is equivalent to 50 tenths.



Dora

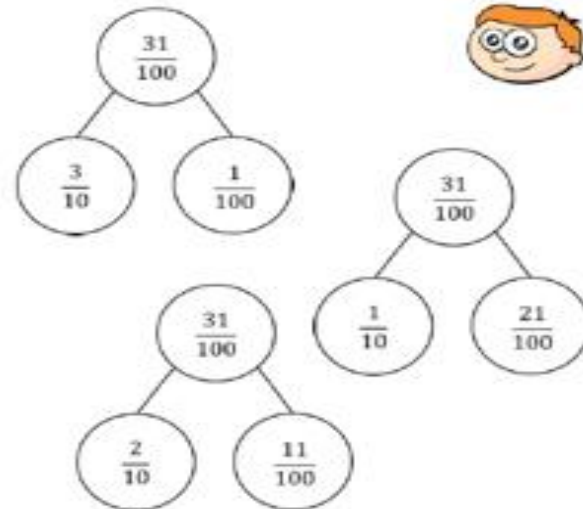
50 hundredths is equivalent to 5 tenths.



Amir

Explain why.

Ron says he can partition tenths and hundredths in more than one way.



Use Ron's method to partition 42 hundredths in more than one way.

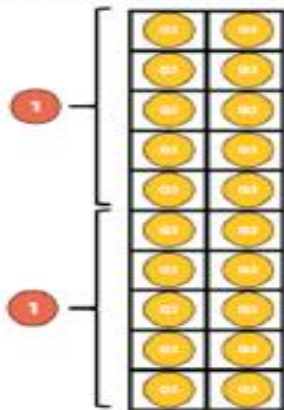
six tens

six tenths

What is the same? What's different?
Show me.

Remember to draw the two numbers pictorially.

Eva uses counters to make a 1-digit number.



Tens	Ones	Tenths	Hundredths
	● ●		

To divide the number by 10, we move the counters one column to the right.

What is the value of the counters now?

Use this method to solve:

$$3 \div 10 = \square$$

$$7 \div 10 = \square$$

$$\square = 4 \div 10$$



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

Ones	Tenths
5	

When dividing by 10, we move the digits one place to the _____.

$$5 \div 10 = \square$$

Use this method to solve:

$$8 \div 10 = \square$$

$$\square = 9 \div 10$$

$$0.2 = \square \div 10$$

Dexter says,



When I divide a 2-digit number by 10, my answer will always have digits in the ones and tenths columns.

Show that Dexter is incorrect.

Remember to use examples to demonstrate the answer to the question.

Dora says,



17 hundredths is the same as 1,700

Is she correct?

Explain your answer.



Fabulous Friday!

Have a look at the following slides. Can you write five decimal numbers in ascending order?

Practise your times tables and complete the relevant test for you.

Which is bigger?

0.6

or

0.09

0.6 is
bigger

Which is bigger?

1.06

or

1.30

1.3 is
bigger

RHC challenges

- Complete the ultimate times table challenge. How long did it take you? Can you beat your original time?
- Write an explanation to a year 2 child explaining what decimals are. Can you explain what a tenth or a hundredth is? Remember to use vocabulary that a year 2 child would understand.

- Write 5 word problems using your decimal knowledge. Make sure your answers include pictorial representations. Can you prove your answers using the inverse operation?

$2 \times \underline{\quad} = 8$	$40 = \underline{\quad} \times 10$	$12 \times \underline{\quad} = 144$	$11 \times 7 = \underline{\quad}$	$\underline{\quad} \times 3 = 21$	$48 = 12 \times \underline{\quad}$
$\underline{\quad} \times 1 = 3$	$\underline{\quad} \times 4 = 24$	$\underline{\quad} \times 5 = 30$	$35 = \underline{\quad} \times 5$	$8 \times \underline{\quad} = 72$	$8 \times \underline{\quad} = 24$
$\underline{\quad} = 5 \times 2$	$3 \times \underline{\quad} = 21$	$4 \times \underline{\quad} = 44$	$\underline{\quad} \times 8 = 40$	$5 \times 4 = \underline{\quad}$	$120 = \underline{\quad} \times 10$
$4 \times \underline{\quad} = 16$	$8 \times 11 = \underline{\quad}$	$48 = 6 \times \underline{\quad}$	$9 \times \underline{\quad} = 36$	$11 \times \underline{\quad} = 121$	$\underline{\quad} \times 4 = 16$
$10 \times \underline{\quad} = 60$	$7 \times \underline{\quad} = 35$	$9 \times \underline{\quad} = 90$	$1 \times \underline{\quad} = 8$	$18 = 3 \times \underline{\quad}$	$9 \times \underline{\quad} = 18$
$\underline{\quad} \times 4 = 8$	$\underline{\quad} \times 9 = 18$	$\underline{\quad} \times 6 = 12$	$12 \times 6 = \underline{\quad}$	$\underline{\quad} \times 6 = 48$	$30 = \underline{\quad} \times 5$
$16 = 8 \times \underline{\quad}$	$8 \times \underline{\quad} = 80$	$7 \times 7 = \underline{\quad}$	$\underline{\quad} \times 9 = 63$	$\underline{\quad} \times 9 = 27$	$9 \times \underline{\quad} = 36$
$5 \times 3 = \underline{\quad}$	$\underline{\quad} \times 2 = 12$	$\underline{\quad} \times 1 = 8$	$\underline{\quad} \times 10 = 30$	$24 = 4 \times \underline{\quad}$	$2 \times \underline{\quad} = 14$
$\underline{\quad} \times 3 = 30$	$20 = \underline{\quad} \times 5$	$\underline{\quad} \times 9 = 81$	$9 \times \underline{\quad} = 54$	$\underline{\quad} \times 7 = 49$	$8 \times 5 = \underline{\quad}$
$\underline{\quad} \times 1 = 12$	$12 \times \underline{\quad} = 72$	$36 = 12 \times \underline{\quad}$	$\underline{\quad} \times 4 = 12$	$12 \times \underline{\quad} = 144$	$3 \times \underline{\quad} = 12$
$3 \times \underline{\quad} = 18$	$\underline{\quad} = 3 \times 3$	$10 \times 12 = \underline{\quad}$	$8 \times \underline{\quad} = 64$	$6 \times \underline{\quad} = 18$	$\underline{\quad} \times 6 = 36$
$\underline{\quad} \times 4 = 44$	$8 \times \underline{\quad} = 32$	$8 \times \underline{\quad} = 56$	$\underline{\quad} = 2 \times 7$	$8 \times \underline{\quad} = 56$	$\underline{\quad} \times 9 = 99$
$7 \times \underline{\quad} = 14$	$\underline{\quad} \times 4 = 16$	$\underline{\quad} \times 10 = 30$	$12 \times \underline{\quad} = 132$	$4 \times 10 = \underline{\quad}$	$28 = 4 \times \underline{\quad}$
$8 \times 3 = \underline{\quad}$	$\underline{\quad} \times 7 = 70$	$5 \times \underline{\quad} = 40$	$25 = \underline{\quad} \times 5$	$\underline{\quad} \times 2 = 16$	$9 \times 3 = \underline{\quad}$
$20 = 4 \times \underline{\quad}$	$5 \times \underline{\quad} = 25$	$\underline{\quad} \times 2 = 4$	$\underline{\quad} \times 8 = 16$	$\underline{\quad} \times 4 = 28$	$5 \times \underline{\quad} = 25$
$11 \times \underline{\quad} = 99$	$\underline{\quad} \times 3 = 33$	$9 \times 5 = \underline{\quad}$	$24 = 8 \times \underline{\quad}$	$9 \times \underline{\quad} = 45$	$7 \times \underline{\quad} = 21$
$\underline{\quad} \times 3 = 12$	$\underline{\quad} \times 4 = 36$	$3 \times \underline{\quad} = 12$	$77 = 11 \times \underline{\quad}$	$\underline{\quad} \times 6 = 72$	$\underline{\quad} \times 4 = 24$
$9 \times \underline{\quad} = 18$	$\underline{\quad} = 7 \times 1$	$8 \times \underline{\quad} = 32$	$\underline{\quad} \times 6 = 18$	$3 \times 3 = \underline{\quad}$	$12 \times \underline{\quad} = 24$
$5 \times 10 = \underline{\quad}$	$\underline{\quad} \times 11 = 66$	$\underline{\quad} \times 9 = 45$	$\underline{\quad} = 11 \times 8$	$8 \times \underline{\quad} = 48$	$\underline{\quad} \times 5 = 45$
$\underline{\quad} \times 2 = 6$	$\underline{\quad} \times 6 = 36$	$48 = \underline{\quad} \times 4$	$12 \times \underline{\quad} = 144$	$5 \times \underline{\quad} = 60$	$7 \times \underline{\quad} = 49$
$\underline{\quad} \times 3 = 21$	$10 \times \underline{\quad} = 50$	$5 \times \underline{\quad} = 10$	$15 = \underline{\quad} \times 3$	$4 \times \underline{\quad} = 12$	$\underline{\quad} \times 8 = 96$
$8 \times \underline{\quad} = 40$	$18 = \underline{\quad} \times 3$	$9 \times 1 = \underline{\quad}$	$2 \times \underline{\quad} = 12$	$7 \times \underline{\quad} = 42$	$3 \times \underline{\quad} = 24$
$11 \times 2 = \underline{\quad}$	$9 \times \underline{\quad} = 27$	$\underline{\quad} \times 7 = 14$	$9 \times \underline{\quad} = 27$	$66 = \underline{\quad} \times 6$	$5 \times \underline{\quad} = 15$
$\underline{\quad} \times 12 = 60$	$10 \times 10 = \underline{\quad}$	$12 \times \underline{\quad} = 84$	$\underline{\quad} \times 2 = 16$	$32 = 8 \times \underline{\quad}$	$\underline{\quad} \times 12 = 144$

Well done!



- You should feel very proud of all the work that you have achieved!
- Miss Westcott, Miss Derrett and I hope that you have been outside, enjoyed the fresh air and completed some exercise.

- Stay safe and well.

