

5NPV-4 WALT Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.

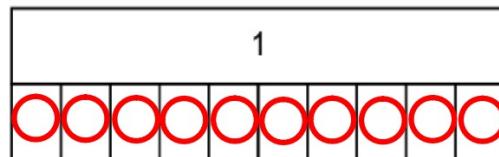
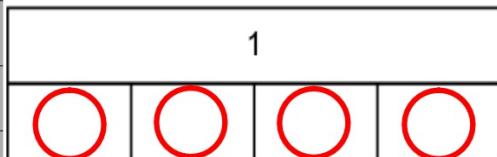
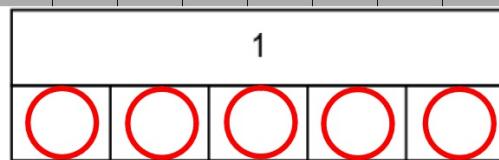
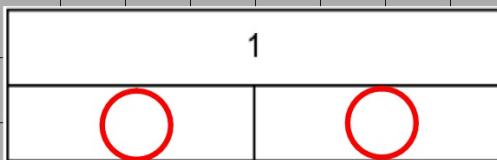
Vocab bank:

2hp per word when used in reasoning!  
scale, number line, bar model, equal parts, units, intervals, up, down, pattern, count, decimal, tenths, hundredths.

5NPV-4 WALT Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.

### Mega challenge 3 MINS!

Using the bar models below, divide 1 into 2, 4, 5 or 10 equal parts (draw them in your book).



Fill in the missing numbers.

	7.5	7		6		
--	-----	---	--	---	--	--

		4.4	4.6			5.2
--	--	-----	-----	--	--	-----

2.5		3			3.75
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Vocab bank:  
2hp per word when reasoning!  
scale, number line, model, equal parts, intervals, up, down, count, decimal, to hundredths.

In marking answers, if you get one wrong, please only put a dot/X. DO NOT write the correct answer.

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If you got the mega challenge correct, start working independently on the REASONING AND PROBLEM SOLVING QUESTIONS. Please reason every question!

LI 5NPV-4 WALT Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.  
Reasoning —Please reason ALL of your answers

**Spot the Pattern**

Continue the sequences:

0.47, 0.48, 0.49, <input type="text"/>	<input type="text"/> , <input type="text"/>
0.76, 0.86, 0.96, <input type="text"/>	<input type="text"/> , <input type="text"/> , 4.2
0.13, 0.12, 0.11, <input type="text"/>	0.6, <input type="text"/> , 0.61, <input type="text"/>

12. Here is a part of a number line divided into 4 equal parts.

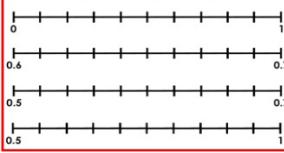


In which section (a, b, c or d) does each of these numbers belong? Explain your answers.

4.3    4.03    4.09    4.76    4.41    4.69

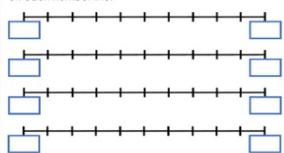
**Small Difference Questions**

Show the position 0.64 on each number line:

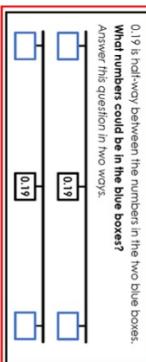


**Different Ways**

Choose different start and end numbers. Position 0.472 on each number line:



0.19 is half-way between the numbers in the two blue boxes?  
What numbers could be in the blue boxes?  
Answer this question in two ways.



**Multi-Skill**  
I think of a number with three decimal places.  
To the nearest tenth, my number is 0.7  
To the nearest hundredth, my number is 0.75  
What could my number be? Give all possible answers.

**Explain the Mistake**

0.808 is larger than 0.81  
because it has more digits

**Vocab bank:**

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scale, number line, bar model, equal parts, units, intervals, up, down, pattern, count, decimal, tenths, hundredths.

5NPV-4 WALT Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.

Practise counting in multiples of 0.1 from 0, or from any multiple of this number, both forwards and backwards

0, 0.1, \_\_, \_\_, \_\_, \_\_, \_\_, 0.6, \_\_, \_\_, \_\_, \_\_,  
\_\_, 1.2, \_\_, \_\_, \_\_, \_\_, \_\_.

5.7, 5.8, \_\_, \_\_, \_\_, \_\_, 6.3, \_\_, \_\_, \_\_,  
\_\_, \_\_, \_\_, \_\_, 7.2, \_\_, \_\_.

8.9, 8.8, 8.7, \_\_, \_\_, \_\_, \_\_, \_\_, \_\_,  
\_\_, \_\_, \_\_, \_\_, \_\_.

5NPV-4 WALT Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.

Practise counting in multiples of 0.2 from 0, or from any multiple of this number, both forwards and backwards.

0, 0.2, \_\_, \_\_, \_\_, \_\_, \_\_, 1.2, \_\_, \_\_, \_\_, \_\_,  
\_\_, 2.4, \_\_, \_\_, \_\_, \_\_, \_\_.

6.4, 6.2, \_\_, \_\_, \_\_, \_\_, 5.2, \_\_, \_\_, \_\_,  
\_\_, \_\_, \_\_, \_\_, 3.6, \_\_, \_\_.

Vocab bank:

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scale, number line, bar model, equal parts, unit intervals, up, down, pattern, count, decimal, tenths, hundredths.

5NPV-4 WALT Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.

Practise counting in multiples of 0.25 from 0, or from any multiple of this number, both forwards and backwards.

0, 0.25, \_\_, \_\_, \_\_, \_\_, \_\_, 1.5, \_\_, \_\_, \_\_, \_\_,  
\_\_, 3, \_\_, \_\_, \_\_, \_\_, \_\_.

7.75, 7.5, \_\_, \_\_, \_\_, \_\_, \_\_, 6.25, \_\_, \_\_, \_\_,  
\_\_, \_\_, \_\_, \_\_, 4.25, \_\_, \_\_.

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Practise counting in multiples of 0.5 from 0, or from any multiple of this number, both forwards and backwards.

0, 0.5, \_\_, \_\_, \_\_, \_\_, \_\_, 3, \_\_, \_\_, \_\_, \_\_,  
\_\_, 6, \_\_, \_\_, \_\_, \_\_, \_\_.

12.5, 12, \_\_, \_\_, \_\_, \_\_, \_\_, 9.5, \_\_, \_\_, \_\_,  
\_\_, \_\_, \_\_, \_\_, 5.5, \_\_, \_\_.

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## **Number bonds to 1**

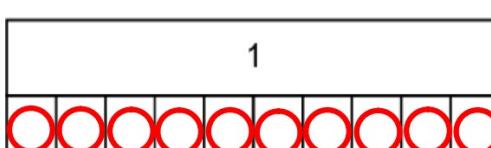
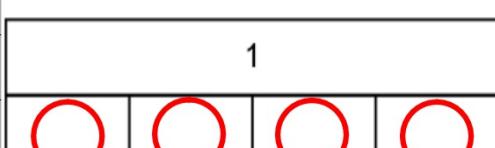
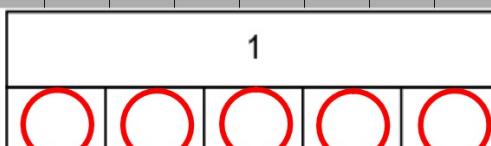
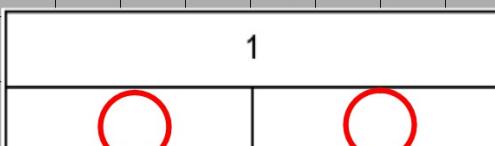
**Say a multiple of 0.1, 0.2, 0.25, 0.5 or 0.75 up to 1, throw a beanbag/ball to a child as you say your number. The child should say the number bond to 1.**

**e.g. 0.4 and 0.6, 0.25 and 0.75**

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### Mega challenge 2 3 MINS!

Using the bar models below, divide 1 into 2, 4, 5 or 10 equal parts (draw them in your book).



Fill in the missing numbers.

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		4.4	4.6			5.1
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L1 5NPV-4 WALT Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts—Fluency—Please reason 2 questions of your choice

Please count in multiples of 0.2

$$2.2 \underline{\hspace{1cm}} 2.8 \underline{\hspace{1cm}} 3.4 \underline{\hspace{1cm}} 4.2 \\ 4.2 \underline{\hspace{1cm}} 3.6 \underline{\hspace{1cm}} 3 \underline{\hspace{1cm}}$$

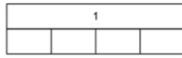
Please count in multiples of 0.25

$$1.25 \underline{\hspace{1cm}} 2 \underline{\hspace{1cm}} 2.75 \underline{\hspace{1cm}} \\ 6.75 \underline{\hspace{1cm}} 5 \underline{\hspace{1cm}} 5.25 \underline{\hspace{1cm}}$$

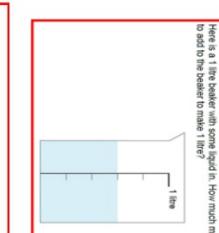
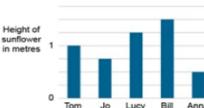
Please count in multiples of 0.5

$$5.5 \underline{\hspace{1cm}} 7 \underline{\hspace{1cm}} 8.5 \underline{\hspace{1cm}} \\ 10.5 \underline{\hspace{1cm}} 9 \underline{\hspace{1cm}} 7.5 \underline{\hspace{1cm}}$$

1. Fill in the missing parts, and write as many different equations as you can think of to represent the bar model.



3. 5 children have been growing sunflowers. The bar chart shows how tall each child's sunflower has grown. How tall is each flower?



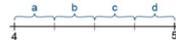
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Continue the sequences:

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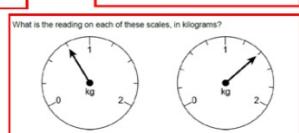
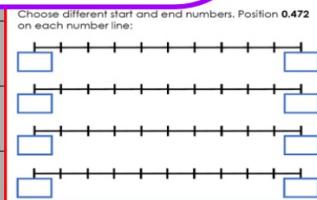
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**What numbers could be in the blue boxes?**  
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**Multi-Skill**  
 I think of a number with three decimal places.  
 To the nearest tenth, my number is 0.7.  
 To the nearest hundredth, my number is 0.75.  
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### Explain the Mistake

0.808 is larger than 0.81  
**because it has more digits**



5NPV-5 WALT Convert between units of measure,  
including using common decimals and fractions.

Vocab bank:

2hp per word when used in reasoning!  
*convert, units of measure,  
common decimals, fractions,  
equivalent to, ratio table,  
corresponds, parts.*

5NPV-5 WALT Convert between units of measure, including using common decimals and fractions.

Mega challenge



3 MINS!

$$1\text{km} = \boxed{\phantom{0}}\text{m}$$

$$1\text{m} = \boxed{\phantom{0}}\text{cm}$$

$$1\text{cm} = \boxed{\phantom{0}}\text{mm}$$

$$1 \text{ litre} = \boxed{\phantom{0}}\text{ml}$$

$$1\text{kg} = \boxed{\phantom{0}}\text{g}$$

$$\text{£}1 = \boxed{\phantom{0}}\text{p}$$

Complete the ratio tables:

1m	100cm
$\frac{3}{4}\text{m}$	$\boxed{\phantom{0}}\text{cm}$

100p	£1
$\boxed{\phantom{0}}\text{p}$	£0.52

1,000ml	1 litre
3,700ml	$\boxed{\phantom{0}}\text{litres}$

5NPV-5 WALT Convert between units of measure,  
including using common decimals and fractions.

If you got the mega challenge correct, start working independently on the  
REASONING AND PROBLEM SOLVING QUESTIONS. Please reason every question!

Vocab bank:

2hp per word when used in reasoning!  
convert, units of measure,  
common decimals, fractions,  
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corresponds, parts.

5NPV-5 WALT Convert between units of measure, including using common decimals and fractions.

Using Chesswood Cards, make some new recall cards for these unit conversions:

Vocab bank:  
2hp per word when used in reasoning!  
convert, units of measure, common decimals, fractions, equivalent to, ratio table, corresponds, parts.

$$1\text{km} = 1,000\text{m}$$

$$1\text{m} = 100\text{cm}$$

$$1\text{cm} = 10\text{mm}$$

$$1 \text{ litre} = 1,000\text{ml}$$

$$1\text{kg} = 1,000\text{g}$$

$$\text{£1} = 100\text{p}$$

Front

Back

1km

1,000m

Recall on own and then with a partner for 5 mins.

5NPV-5 WALT Convert between units of measure, including using common decimals and fractions.

Once I know that

$$\text{£1} = 100\text{p}$$

I can work out

$$\text{£4} = \boxed{\quad}$$

Once I know that

$$1\text{kg} = 1,000\text{g}$$

I can work out

$$8,000\text{g} = \boxed{\quad}$$

Vocab bank:

2hp per word when used in re  
convert, units of me  
common decimals, fra  
equivalent to, ratio .  
corresponds, part

5NPV-5 WALT Convert between units of measure, including using common decimals and fractions.

Convert from and to fraction and decimal-fraction quantities of larger units, within 1:

Distance in km expressed as a fraction	Distance in km expressed as a decimal fraction	Distance in metres
$\frac{1}{5}$ km	0.2km	200m
$\frac{1}{4}$ km	0.25km	250m
$\frac{1}{2}$ km	0.5km	500m
$\frac{3}{4}$ km	0.75m	750m
$\frac{1}{10}$ km	0.1km	100m
all other multiples of $\frac{1}{10}$ km, for example, $\frac{7}{10}$ km	0.7km	700m

How would you work out how many metres are in  $3/4$  of a km?

Teacher note:

5NPV-5 WALT Convert between units of measure, including using common decimals and fractions.

Convert 3,700 millilitres to litres.

You should not need to think about dividing by 1,000 and moving the digits 3 places.

Instead you should be able to use single unit conversion rates and use your understanding of place value.

Vocab bank:

2hp per word when used in re convert, units of me common decimals, fra equivalent to, ratio , corresponds, part

## 5NPV-5 WALT Convert between units of measure, including using common decimals and fractions.

### Language focus

“1,000ml is 1 litre.”

“So 3,000ml is 3 litres, and 3,700ml is 3.7 litres.”

### Language focus

“1m is 100cm.”

“So  $\frac{3}{4}$ m is 75cm.”

### Language focus

“100p is £1.”

“So 50p is £0.50, and 52p is £0.52.”

### Vocab bank:

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For pounds and pence, and metres and centimetres, you should be able to carry out conversions that correspond to 100 parts, for example,  $52p = \text{£}0.52$ , and  $43\text{cm} = 0.43\text{m}$ .

5NPV-5 WALT Convert between units of measure, including using common decimals and fractions.

Ratio tables can be used to help you.

1m	100cm	100p	£1	1,000ml	1 litre
$\frac{3}{4}$ m	75cm	52p	£0.52	3,700ml	3.7 litres

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Mega challenge 2  3 MINS!

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Complete the ratio tables:

1m	100cm
$\frac{3}{4}\text{m}$	$\boxed{\phantom{0}}\text{cm}$

1,000ml	1 litre
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6NPV-1 WALT Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size.

Vocab bank:

2hp per word when used in reasoning!

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Mega challenge



3 MINS!

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# Mega challenge 2



3 MINS!

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**6NPV-1 WALT** Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size.

6NPV-2 WALT Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning.

Vocab bank:

2hp per word when used in reasoning!

...

6NPV-2 WALT Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning.

Mega challenge



3 MINS!

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Mega challenge 2



3 MINS!

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6NPV-4 WALT Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.

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Mega challenge 2



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