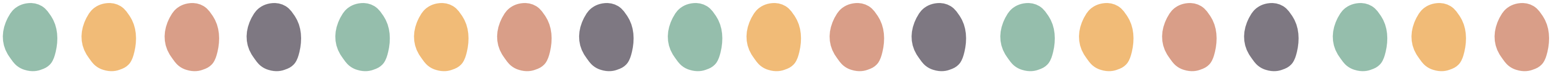


Y5- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2	
Unit	1	2	3	4	5		6	7	8	9	10	

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Autumn 1	Understand tenths as part of a whole, represent and calculate mentally (1 week)
Ready to progress	SNPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. SNPV-2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. SNPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. SNPV-4 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.
NCETM documents	TEACHING POINTS 1.2 AND 3 https://www.ncetm.org.uk/media/fhpcp0am/ncetm_mm_spl_y4_se23_teach.pdf#page=4
Small steps	- To identify tenths as part of a whole. - To describe and represent tenths as a decimal number. - To count in tenths in different ways. - To describe and write decimal numbers with tenths in different ways. - To compare and order decimal numbers with tenths.
Links	NCETM TO SLIDE 59-https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.ncetm.org.uk%2Fmedia%2Fv-r0fdypj%2Fcp-year-5-unit-1-decimal-fractions.pptx&wdOrigin=BROWSELINK OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks2/units/understand-tenths-as-part-of-a-whole-represent-and-calculate-mentally/lessons?sid-8685c9=JcIiQPfWAH&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/account/resources Mastery with greater depth https://www.ncetm.org.uk/media/lp0o2lgv/mastery_assessment_y5.pdf
Reasoning	Spot the Mistake 0.18, 0.19, 1.0 What mistake might someone make when continuing this pattern? Explain What Comes Next? 0.41, 0.42, 0.43 What comes next? How do you know? What Do You Notice? One tenth of £41 is £4.10 One hundredth of £41 is £0.41 One thousandth of £41 is...? What do you notice about the pattern in the place value? Continue the Pattern 0.09 + 0.01 = 0.10 0.08 + 0.02 = 0.10 0.07 + 0.03 = 0.10 Continue the pattern. What do you notice? Missing Symbol 0.7 ____ 0.67 0.35 ____ 0.4 Use < or >. Explain your reasoning. Do, Then Explain Circle the decimals that round to 1.2 to one decimal place: 1.23 1.18 1.24 1.15 Explain your reasoning. Top Tips What's your top tip for comparing decimals with tenths and hundredths? Give an example. Odd One Out Which is the odd one out? Why? 0.3 3/10 30/100 0.33



Understand tenths as part of a whole, represent and calculate mentally (1 week)

Problem solving



Click on me

- Glossary
- Equal - Equal means exactly the same amount or value.
 - Tenth - A tenth is the name we give to one part of ten equal parts.
 - One tenth the size - When a whole is divided into ten equal parts, we can say one of those parts is one tenth the size of the whole.
 - Tenths column - The tenths column places the number of tenths a given number has.
 - Decimal point - A decimal point is a small dot used in a number to separate the whole number from the fractional part.
 - Decimal number - A decimal number has a decimal point followed by digits that show the fractional part.
 - Compare - When you compare, you look for similarities and differences in an object or value.
 - Order - You can order numbers by putting them in a place based on a set rule.
 - Place value - The value of a digit in a number based on where it is placed is known as place value.
 - Ascending - Ascending order is when items are arranged from smallest to largest.
 - Descending - Descending order is when items are arranged from largest to smallest

Stem sentences

The whole is divided into ten equal parts and one is them is shaded; this is one tenth of the whole

The whole is divided into ten equal parts and _____ of them is/are shaded; this is _____ tenth(s) of the whole.

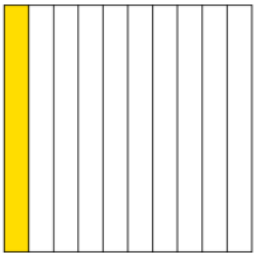
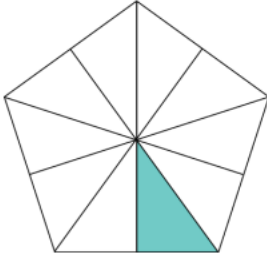
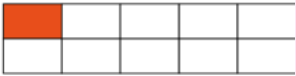
If a digit is moved one column to the left, the number represented becomes ten times bigger/ten times the size.
If a digit is moved one column to the right, the number represented becomes ten times smaller, we can also say it becomes one tenth the size.

One tenth can be written as 0.1 so _____ tenths can be written as 0._____

I say _____ -point- _____ but i think _____ and _____ tenth(s).

Representations

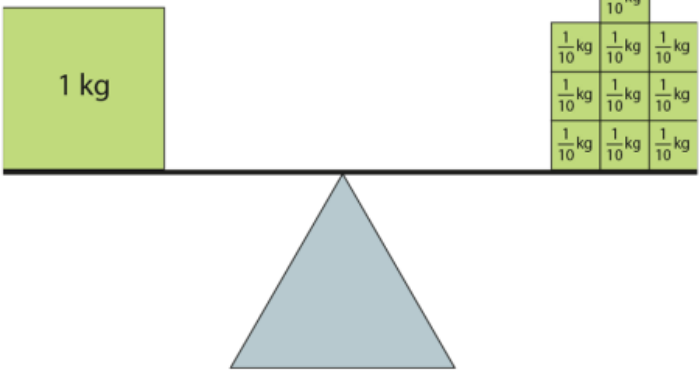
Shapes:



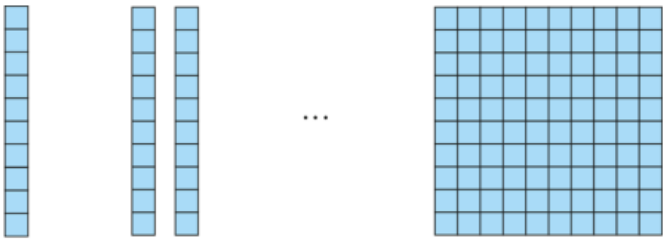
Bar model:

one whole									
one tenth	one tenth	one tenth	one tenth	one tenth	one tenth	one tenth	one tenth	one tenth	one tenth

Measures – mass:



Dienes:

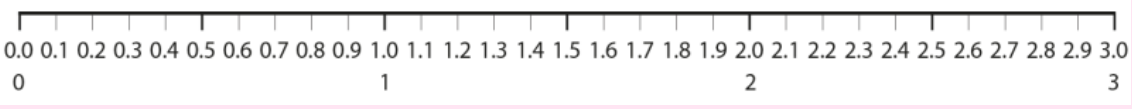


0.1 0.2 1

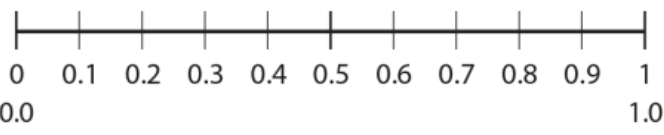
Introducing the decimal point:

1	0	0	0	.	0
	1	0	0	.	0
		1	0	.	0
			1	.	0
			0	.	1

Number line:



Number line:



Gattegno chart:

100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9

ten tenths one 1.0

nine tenths zero-point-nine 0.9

eight tenths zero-point-eight 0.8

seven tenths zero-point-seven 0.7

six tenths zero-point-six 0.6

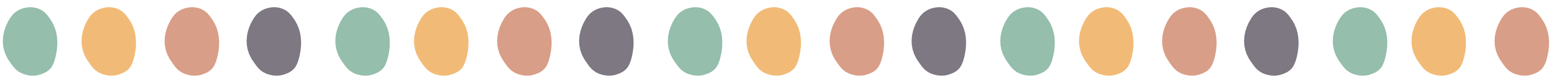
five tenths zero-point-five 0.5

four tenths zero-point-four 0.4

three tenths zero-point-three 0.3

two tenths zero-point-two 0.2

one tenth zero-point-one 0.1

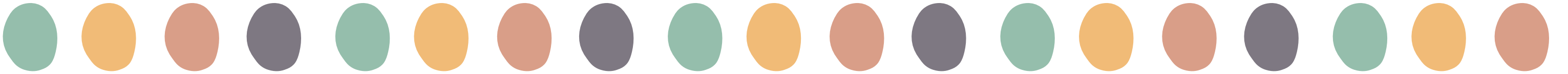


Y5- Overview

	Autumn 1		Autumn 2		Spring 1	Spring 2		Summer 1	Summer 2	
Unit	1	2	3	4	5	6	7	8	9	10

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Autumn 1	Compose and calculate with decimals including column addition and subtraction (1 week)
Ready to progress	5NPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. 5NPV-2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. 5NPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. 5NPV-4 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.
NCETM documents	TEACHING POINTS 4.5 and 6 https://www.ncetm.org.uk/media/fhpc0am/ncetm_mm_spl_y4_se23_teach.pdf#page=4
Small steps	- To explain that decimal numbers with tenths can be composed additively. - To explain that decimal numbers with tenths can be composed multiplicatively. - To use known facts and mental strategies to calculate with decimal numbers within and across a whole. - To use knowledge of column addition and subtraction to calculate with decimal numbers. - To use representations to round a decimal number with tenths to the nearest whole number.
Links	NCETM SLIDE 59 TO 90- https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.ncetm.org.uk%2Fmedia%2Fv-v0fdypj%2Fcp-year-5-unit-1-decimal-fractions.pptx&wdOrigin=BROWSELINK OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks2/units/compose-and-calculate-with-decimals-including-column-addition-and-subtraction/lessons?sid=2c62d7=blwJ8RSrZs&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/account/resources Mastery with greater depth https://www.ncetm.org.uk/media/lp0o2lgv/mastery_assessment_y5.pdf
Reasoning	Spot the Mistake 0.4 + 0.3 = 0.12 What is the mistake in this calculation? Can you explain why someone might make it? What Comes Next? 0.6, 1.2, 1.8, __ What comes next in this sequence? How do you know? What Do You Notice? 0.7 = 0.5 + 0.2 0.7 = 0.3 + 0.4 What do you notice about how 0.7 can be made additively? Continue the Pattern 0.2 × 1 = 0.2 0.2 × 2 = 0.4 0.2 × 3 = 0.6 Continue the pattern. What do you notice about the results? Missing Symbol 0.75 ____ 0.7 + 0.05 0.3 + 0.3 ____ 0.6 Fill in the missing symbol (< or >). Explain your thinking. Do, Then Explain Use mental strategies to solve: 0.8 + 0.4 = ? Now explain how you crossed a whole and how you knew the total. Top Tips What is your best strategy for subtracting decimal numbers like 2.1 - 0.7? Show how you use known number facts to help. Odd One Out Which is the odd one out? Why? 0.4 0.5 0.6 0.49



Compose and calculate with decimals including column addition and subtraction
(1 week)

Problem solving



Glossary

- **Decimal number** - A decimal number has a decimal point followed by digits that show the fractional part.
- **Partition / partitioning** - Partitioning is the act of splitting an object or value down into smaller parts..
- **Equation** - An equation is used to show that one number, calculation or expression is equal to another. For example: $3 + 4 = 7$
- **Expression** - An expression contains one or more values, where each value is separated by an operator. For example: $3 + 4$
- **Equation** - An equation is used to show that one number, calculation or expression is equal to another.
- **Factor** - Factors are numbers which divide exactly into another number.
- **Product** - The product is the result of two or more numbers multiplied together.
- **Number facts** - Simple calculations using two numbers are known as number facts. For example $2 + 4 = 6$
- **Bridging** - Bridging is a mental strategy which uses addition or subtraction to cross a number boundary.
- **Multiple** - A multiple is the result of multiplying a number by an integer. For example $2 \times 5 = 10$ so 10 is a multiple of 2 and 5.
- **Next** - Something that comes after something else.
- **Previous** - Something that comes before something else.
- **Rounding** - Rounding means making a number simpler but keeping its value close to what it was

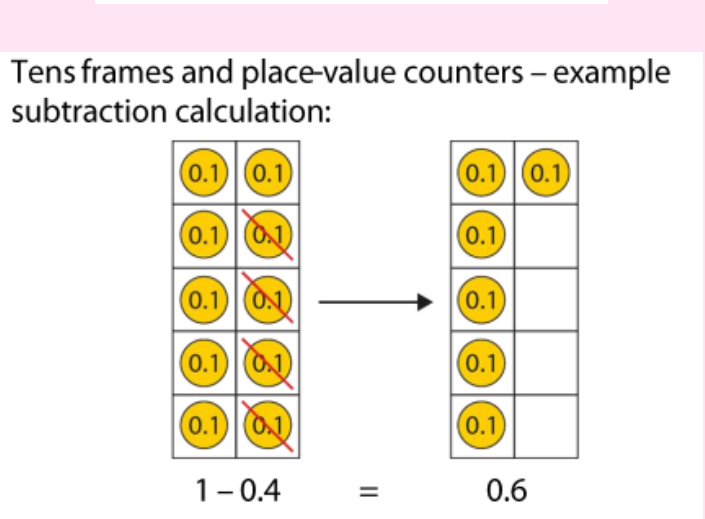
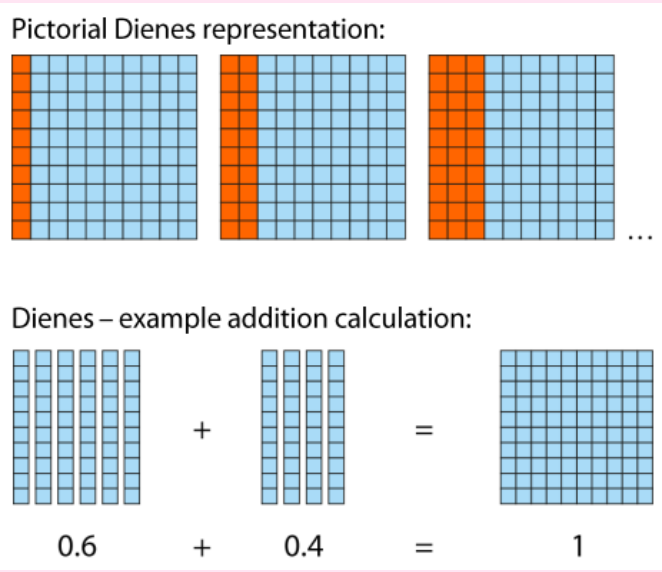
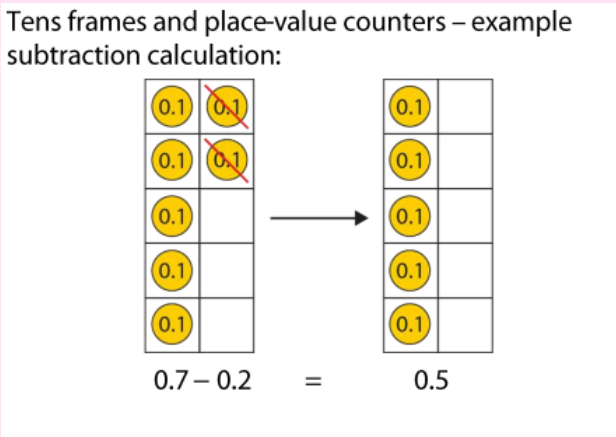
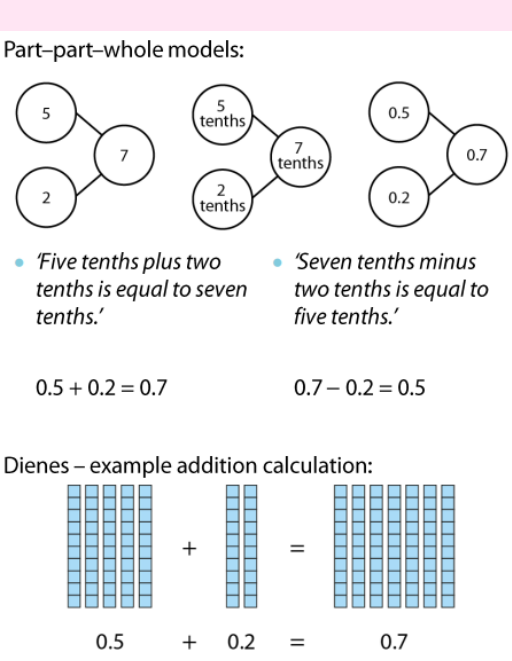
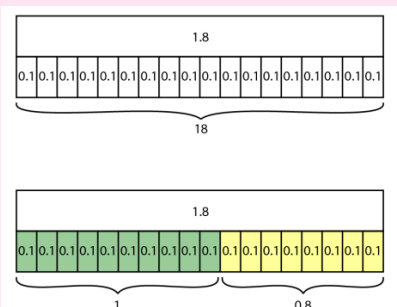
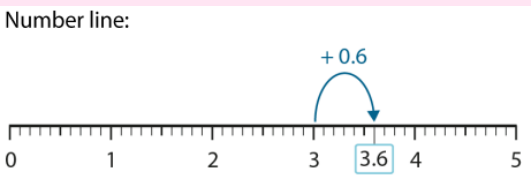
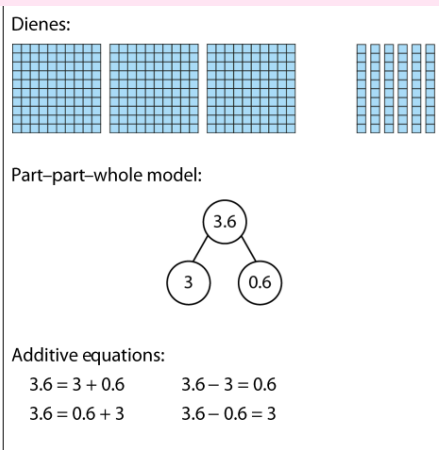
Stem sentences

_____ tenths plus/minus _____ tenths is equal to _____ tenths.
_____ tenths plus _____ tenths is equal to ten tenths, which is equal to one.
One is equal to ten tenths; ten tenths minus _____ tenths is equal to _____ tenths.

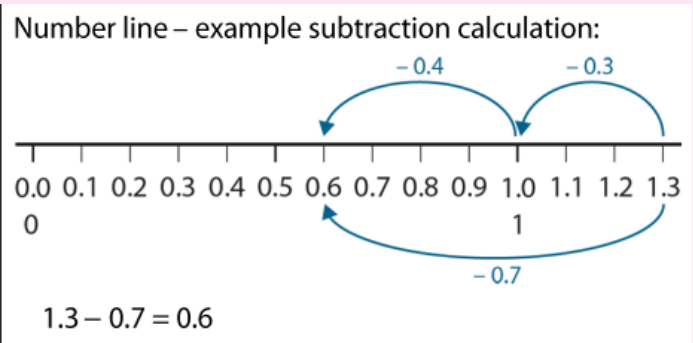
_____ is between _____ and _____
_____ is the previous whole number
_____ is the next whole number

_____ is the closest whole number.

If there are five tenths or more round up the the next whole number; if there are fewer than five tenths round down to the previous whole number.



Representations



Combining known strategies with unitising in tenths:

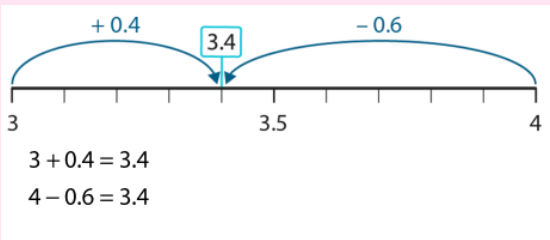
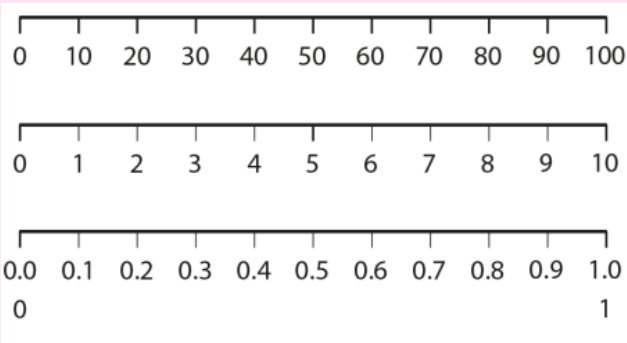
$45 + 32 = 77$

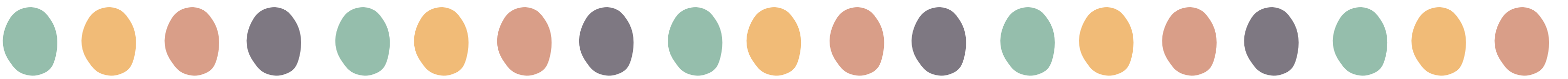
$45 + 32 = 77$

$4.5 + 3.2 = 45 \text{ tenths} + 32 \text{ tenths}$
 $= 77 \text{ tenths}$
 $= 7.7$

Applying known strategies – partitioning numbers with tenths:

$4.5 + 3.2 = 7.7$



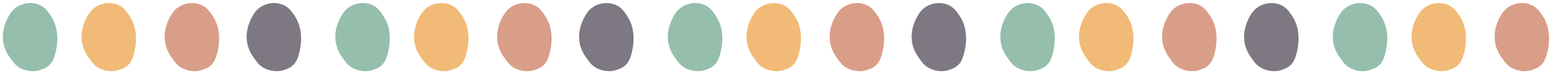


Y5- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2	
Unit	1	2	3	4	5		6	7	8	9	10	

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Autumn 1	Understand hundredths as parts of a whole and represent (1 week)
Ready to progress	5NPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. 5NPV-2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. 5NPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. 5NPV-4 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.
NCETM documents	TEACHING POINTS 1,2, 3 and 4 https://www.ncetm.org.uk/media/4cafhhxl/ncetm_mm_spl_y4_se24_teach.pdf#page=17
Small steps	- To identify hundredths as part of a whole. - To describe and represent hundredths as a decimal number. - To describe and write decimal numbers with hundredths in different ways. - To compare and order decimal numbers with hundredths. - To explain that decimal numbers with hundredths can be partitioned in different ways.
Links	NCETM SLIDE 90 to 157- https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.ncetm.org.uk%2Fmedia%2Fv-r0fdypj%2Fcp-year-5-unit-1-decimal-fractions.pptx&wdOrigin=BROWSELINK OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks2/units/understand-hundredths-as-parts-of-a-whole-and-represent/lessons?sid-96168e=Qbb3GHLlPx&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/account/resources Mastery with greater depth https://www.ncetm.org.uk/media/lp0o2lgn/mastery_assessment_y5.pdf
Reasoning	Convince Me Convince me that 0.56 can be split into 0.50 and 0.06. How can you show this with addition? Always, Sometimes, Never Is it always, sometimes, or never true that when you compare two decimal numbers with hundredths, the number with more tenths is always greater? How Close Can You Get? Can you find a number between 0.70 and 0.80 that, when rounded to one decimal place, gives 0.8? Other Possibilities Can you show or write 0.45 in two other forms using fractions or percentages? What different ways can you represent it?



Understand hundredths as parts of a whole and represent
(1 week)

Problem solving



Glossary

- Equal - Exactly the same amount or value.
- Hundredth - One part of one hundred equal parts.
- Tenth - One part of ten equal parts.
- Hundredth - The name we give to one part of one hundred equal parts.
- One hundredth the size - When a whole is divided into one hundred equal parts, we can say one of those parts is one hundredth the size of the whole.
- Hundredths column - The hundredths column places the number of hundredths a given number has.
- Hundredth - One part of one hundred equal parts.
- Decimal number - A decimal number has a decimal point followed by digits that show the fractional part.
- Fraction - Shows us how many equal parts in a whole.
- Multiple - The result of multiplying a number by an integer.
- Compare - When you compare, you look for similarities and differences in an object or value.
- Place value - The value of a digit in a number based on where it is placed.
- Order - Putting numbers or objects in position based on a set rule.
- Ascending - When items are arranged from smallest to largest.
- Descending - When items are arranged from largest to smallest.
- Partitioning - The act of splitting an object or value down into smaller parts

Stem sentences

The whole is divided into one hundred equal parts and one is them is shaded; this is one hundredth of the whole

When one tenth is divided into ten equal parts, each part is one hundredth of the whole' ten hundredths is equal to one tenth.

The whole is divided into one hundred qual parts; parts is _____ hundredths.

If a digit is moved one column to the left, the number represented becomes ten times bigger/ten times the size.
If a digit is moved one column to the right, the number represented becomes ten times smaller, we can also say it becomes one tenth the size.

_____ is ten times bigger than _____
_____ is ten times smaller than/one tenth the size of _____
_____ is one hundred times bigger than _____
_____ is one hundred times smaller than/one hundredth the size of _____

One hundredth can be written as 0.01 so _____ hundredths can be written as 0._____-

I say _____-point- _____ but i think _____ and say _____-- hundredth(s).

Representations

Bars:

'This is the whole.'

'The whole is divided into one hundred equal parts and one of them is shaded; each part is one hundredth of the whole; one hundred hundredths is equal to one whole.'

Dienes:

one one hundredth

1,000s	100s	10s	1s	tenths	hundredths
●					
	●				
		●			
			●		
				●	
					●
ten times smaller → one tenth the size	ten times smaller → one tenth the size	ten times smaller → one tenth the size	ten times smaller → one tenth the size	ten times smaller → one tenth the size	

introducing the decimal point:

1	0	0	0	0	0
	1	0	0	0	0
		1	0	0	0
			1	0	0
			0	1	0
				0	1

Gattegno chart:

1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

Place-value counters:

Part-part-part-whole model:

Additive equations:

1.43 = 1 + 0.4 + 0.03

1.43 = 1 + 0.43 1.43 = 1.4 + 0.03
1.43 - 0.43 = 1 1.43 - 0.03 = 1.4
1.43 - 1 = 0.43 1.43 - 1.4 = 0.03

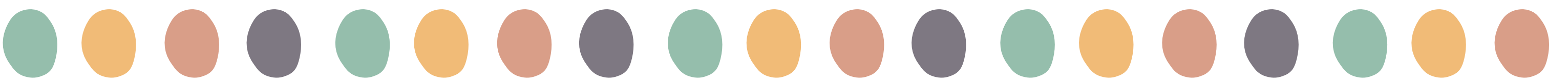
1.43 = 1.03 + 0.4
1.43 - 0.4 = 1.03
1.43 - 1.03 = 0.4

Gattegno chart:

Dienes - multiplicative expression:

Place-value counters - combining additive and multiplicative reasoning:

0.43 = 4 x 0.1 + 3 x 0.01



Y5- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2	
Unit	1	2	3	4	5		6	7	8	9	10	

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Autumn 1	Use knowledge of decimals to solve problems in different contexts: length (2 weeks)
Ready to progress	SNPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. SNPV-2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and non-standard partitioning. SNPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. SNPV-4 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.
NCETM documents	TEACHING POINTS 5, 6, and 7 https://www.ncetm.org.uk/media/4cafhhxl/ncetm_mm_sply4_se24_teach.pdf#page=17
Small steps	- To use knowledge of decimal place value to convert between and compare metres and centimetres. - To explain that different lengths can be composed additively and multiplicatively. - To use knowledge of decimal place value to solve problems in different contexts. - To use knowledge of place value to calculate with decimal numbers up to and bridging one tenth. - To use knowledge of column addition and subtraction to calculate with decimals: tenths and hundredths. - To round a decimal number with hundredths to the nearest tenth. - To round a decimal number with hundredths to the nearest whole number. - To read and write numbers with up to 3 decimal places. - To compare and order numbers with up to 3 decimal places. - To solve problems with numbers with up to 3 decimal places.
Links	NCETM SLIDE 157 to the end- https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.ncetm.org.uk%2Fmedia%2Fv0fdypj%2Fcp-year-5-unit-1-decimal-fractions.pptx&wdOrigin=BROWSELINK OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks2/units/use-knowledge-of-decimals-to-solve-problems-in-different-contexts-length/lessons?sid-e9a736=KuSpOGNb96&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/account/resources Mastery with greater depth https://www.ncetm.org.uk/media/lp0o2lgr/mastery_assessment_y5.pdf
Reasoning	 Spot the Mistake 0.18, 0.19, 1.0 What mistake might someone make when continuing this pattern? Explain.  What Comes Next? 0.41, 0.42, 0.43 What comes next? How do you know?  What Do You Notice? One tenth of £41 is £4.10 One hundredth of £41 is £0.41 One thousandth of £41 is...? What do you notice about the pattern in the place value?  Continue the Pattern 0.09 + 0.01 = 0.10 0.08 + 0.02 = 0.10 0.07 + 0.03 = 0.10 Continue the pattern. What do you notice?  Missing Symbol 0.7 ____ 0.67 0.35 ____ 0.4 Use < or >. Explain your reasoning.  Do, Then Explain Circle the decimals that round to 1.2 to one decimal place: 1.23 1.18 1.24 1.15 Explain your reasoning.  Top Tips What's your top tip for comparing decimals with tenths and hundredths? Give an example.  Odd One Out Which is the odd one out? Why? 0.3 3/10 30/100 0.33

Use knowledge of decimals to solve problems in different contexts: length
(2 weeks)

Problem solving



[Click on me](#)

Glossary

- Metre - A metre is a measure of length that can be abbreviated as m.
- Centimetre - A centimetre is a measure of length that can be abbreviated as cm.
- Convert - To exchange a unit for an equivalent unit.
- Common - Something is common when it is frequently used or it occurs regularly.
- Compose - Larger numbers can be composed of smaller numbers.
- Partition - The act of splitting an object or value down into smaller parts.
- Interval - The space between two values or points.
- Hundredth - The name we give to one part of one hundred equal parts.
- Tenth - The name we give to one part of ten equal parts.
- Regroup / regrouping - The process of unitising and exchanging between place values.
- Multiple - A multiple is the result of multiplying a number by an integer. For example $2 \times 5 = 10$ so 10 is a multiple of 2 and 5.
- Previous - Something that comes before something else is known as the previous thing.
- Next - Something that comes after something else is known as the next thing.
- Rounding - Rounding means making a number simpler but keeping its value close to what it was.
- Thousandth - One thousandth is one part in one thousand equal parts.
- One thousandth the size - When a whole is divided into one thousand equal parts, we can say one of those parts is one thousandth the size of the whole.
- Thousandths column - The thousandths column places the number of thousandths a given number has.
- Millimetre - A millimetre is a measure of length that can be abbreviated as mm.
- Place value - The value of a digit in a number based on where it is placed is known as place value.
- Order - You can order numbers by putting them in a place based on a set rule.
- Represent - A representation is a way of showing a mathematical idea. Concrete objects, pictures and symbols can all be used to represent mathematics.
- Operation - A mathematical process such as addition, subtraction, multiplication or division can be described as an operation.
- Efficient - An efficient strategy is a way of solving a problem that is accurate and can be done more quickly than others.

Stem sentences

One centimetre is one hundredth of a meter, so we can one centimetre as zero-point-zero-one.
Ten centimetres is one tenth of a metre, so we can write ten centrimetres as zero-point-one.

_____ hundredths plus/minus _____ hundredths is equal to _____ hundredths.

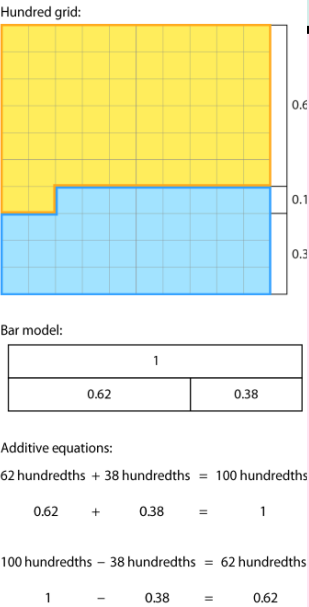
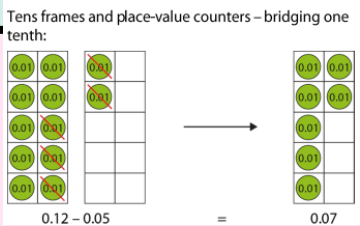
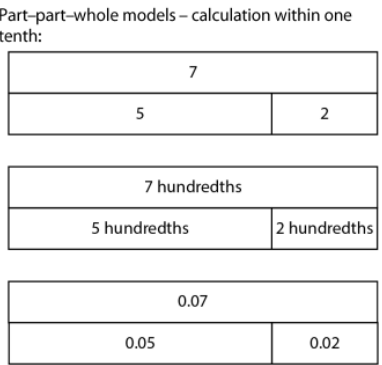
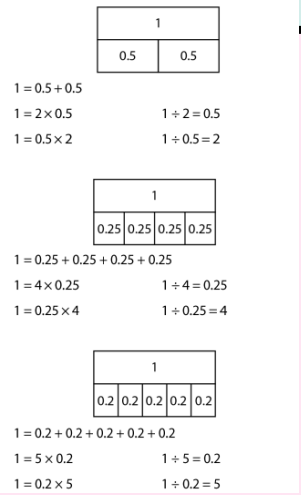
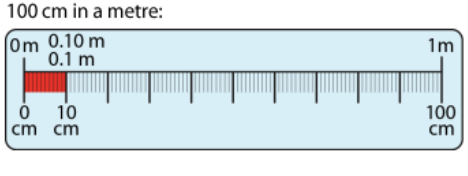
_____ hundredths plus _____ hundredths is equal to ten hundredths, which is equal to one tenth.
One tenth is equal to ten hundredths; ten hundredths minus _____ hundredths is equal to _____ hundredths.

Ten hundredth is equal to one tenth.
Ten tenths is equal to one.

One tenth is equal to ten hundredths.
One to equal to ten tenths.

_____ is between _____ and _____
_____ is the previous tenth
_____ is the next tenth

If there are five hundredths or more round up to the next tenth; if there are fewer than five hundredths round down to the previous tenth.



Representations

$$\begin{array}{r} 2.34 \\ - 0.72 \\ \hline . \end{array}$$

$$\begin{array}{r} 5.03 \\ - 2.48 \\ \hline . \end{array}$$