Year 4

Mastery Overview
Spring

MathsHUBS
White Rose

Year 4

SOL Overview

As well as providing term by term overviews for the new National Curriculum, as a Maths Hub we are aiming to support primary schools by providing more detailed Schemes of Learning, which help teachers plan lessons on a day to day basis.

The following schemes provide exemplification for each of the objectives in our new term by term overviews, which are linked to the new National Curriculum. The schemes are broken down into fluency, reasoning and problem solving, which are the key aims of the curriculum. Each objective has with it examples of key questions, activities and resources that you can use in your classroom. These can be used in tandem with the mastery assessment materials that the NCETM have recently produced.

We hope you find them useful. If you have any comments about this document or have any ideas please do get in touch.

Thank you for your continued support with all the work we are doing.

The White Rose Maths Hub Team

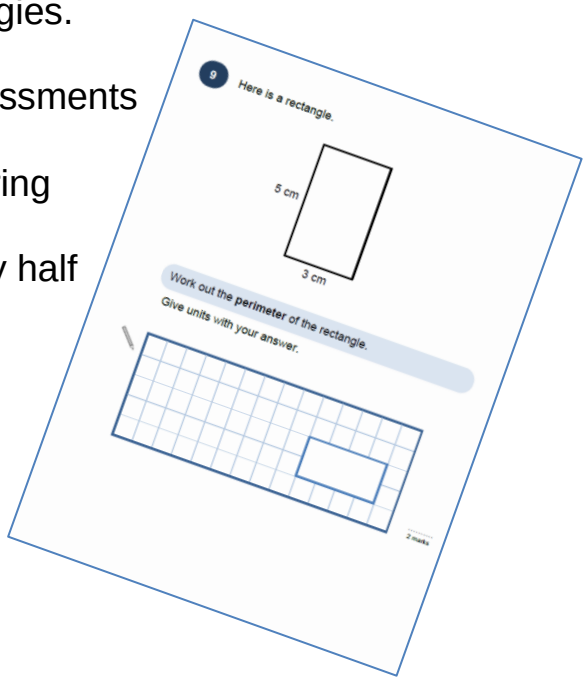
Assessment

Alongside these curriculum overviews, our aim is also to provide an assessment for each term's plan. Each assessment will be made up of two parts:

Part 1: Fluency based arithmetic practice
Part 2: Reasoning based questions

You can use these assessments to determine gaps in your students' knowledge and use them to plan support and intervention strategies.

The autumn term assessments are now available.
we aim to have the spring term assessments completed by February half term.



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Teaching for Mastery

These overviews are designed to support a mastery approach to teaching and learning and have been designed to support the aims and objectives of the new National Curriculum.

The overviews:

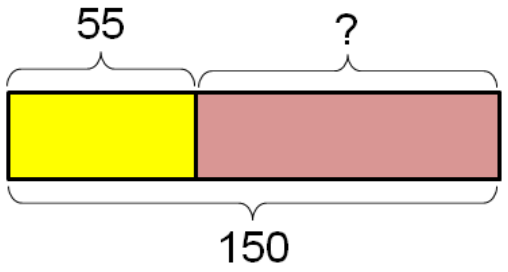
- have number at their heart. A large proportion of time is spent reinforcing number to build competency.
- ensure teachers stay in the required key stage and support the ideal of depth before breadth.
- ensure students have the opportunity to stay together as they work through the schemes as a whole group.
- provide plenty of time to build reasoning and problem solving elements into the curriculum.

Concrete – Pictorial – Abstract

As a hub we believe that all students, when introduced to a key new concept, should have the opportunity to build competency in this topic by taking this approach.

Concrete – students should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.

Pictorial – students should then build on this concrete approach by using pictorial representations. These representations can then be used to reason and solve problems.



An example of a bar modelling diagram used to solve problems.

Abstract – with the foundations firmly laid, students should be able to move to an abstract approach using numbers and key concepts with confidence.

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Frequently Asked Questions

We have bought one of the new Singapore textbooks. Can we use these curriculum plans?

Many schools are starting to make use of a mastery textbook used in Singapore and China, the schemes have been designed to work alongside these textbooks. There are some variations in sequencing, but this should not cause a large number of issues.

If we spend so much time on number work, how can we cover the rest of the curriculum?

Students who have an excellent grasp of number make better mathematicians. Spending longer on mastering key topics will build a student's confidence and help secure understanding. This should mean that less time will need to be spent on other topics.

In addition schools that have been using these schemes already have used other subjects and topic time to teach and consolidate other areas of the mathematics curriculum.

My students have completed the assessment but they have not done well.

This is your call as a school, however our recommendation is that you would spend some time with the whole group focussing on the areas of the curriculum that they do not appear to have grasped. If a couple of students have done well then these could be given rich tasks and deeper problems to build an even deeper understanding.

Can we really move straight to this curriculum plan if our students already have so many gaps in knowledge?

The simple answer is yes. You might have to pick the correct starting point for your groups. This might not be in the relevant year group and you may have to do some consolidation work before.

These schemes work incredibly well if they are introduced from Year 1 and continued into Year 2, then into Year 3 and so on.

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NCETM Mastery Booklets

In addition to the schemes attached the NCETM have developed a fantastic series of problems, tasks and activities that can be used to support 'Teaching for Mastery'. They have been written by experts in mathematics.

It will also give you a detailed idea of what it means to take a mastery approach across your school.

Information can be found on the link below.

https://www.ncetm.org.uk/resources/46689

WRMH Primary Network

over the past 12 months we have been working with a company called MyFlo to develop a free online platform where teachers from across our region (and wider) can share their own resources and lesson plans based on this new curriculum. All our overviews, schemes and assessment materials will be made available on the MyFlo network.

Everyone Can Succeed

As a Maths Hub we believe that all students can succeed in mathematics. We do not believe that there are individuals who can do maths and those that cannot. A positive teacher mindset and strong subject knowledge are key to student success in mathematics.

More Information

If you would like more information on 'Teaching for Mastery' you can contact the White Rose Maths Hub at mathshub@trinityacademyhalifax.org

We are offering courses on:

- Bar Modelling
- Teaching for Mastery
- Year group subject specialism intensive courses – become a Maths expert.

Our monthly newsletter also contains the latest initiatives we are involved with. We are looking to improve maths across our area and on a wider scale by working with other Maths Hubs across the country.

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Term by Term Objectives

Year 4

Year 4 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction			Number: Multiplication and Division				Measurement: Area	
Spring	Number: Fractions				Measurement : Time		Number: Decimals			Measurement: Money		
Summer	Measurement : Perimeter and Length	Geometry: Angles	Geometry: Shape and Symmetry		Geometry: Position and Direction		Statistics		Measurement: Area and Perimeter			

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Term by Term Objectives

Year 4

Year Group	Y4	Term	Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<u>Fractions</u> Recognise and show, using diagrams, families of common equivalent fractions. Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Add and subtract fractions with the same denominator.				<u>Time</u> Convert between different units of measure, e.g. hour to minute. Read, write & convert time between analogue and digital 12 and 24 hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	<u>Decimals</u> Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places.				<u>Measurement: Money</u> Solve simple measure and money problems involving fractions and decimals to two decimal places. Estimate, compare and calculate different measures, including money in pounds and pence.		Time at the beginning or end of the term for consolidation, gap filling, seasonal activities, assessments, etc.

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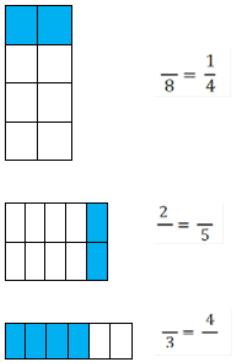
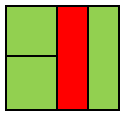
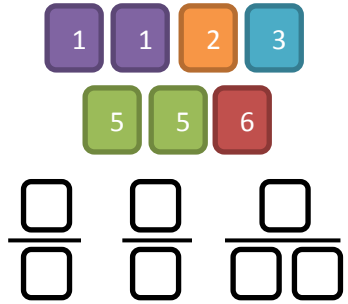
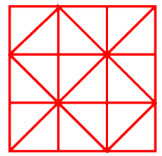
Term by Term Objectives

Year 4

	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Fractions	Recognise and show, using diagrams, families of common equivalent fractions.	• Complete the statements:  • ½ is equivalent to 2 quarters. Write and draw three more fractions that are equivalent to a half. • Draw diagrams to show fractions that are equivalent to $\frac{4}{8}$	• A pizza is cut into 8 slices. Zara says, "If I take half of the pizza, and my brother takes 4 slices, we will both have the same amount." Is she correct? Convince me by using a diagram. • Look at the three pictures. What's the same and what's different?   • Two paper strips are ripped. Which paper strip was originally the longest? Explain your answer.  	• Harry says, "$\frac{3}{4}$ is always the same as $\frac{6}{8}$" Jenny says, "$\frac{3}{4}$ is equivalent to $\frac{6}{8}$ but isn't always the same amount." Use diagrams to show and prove your answer. • Use the digit cards to fill in the boxes below.  • Print the square below several times on a sheet. Children investigate the different ways they can show $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{1}{6}$ 

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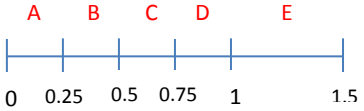
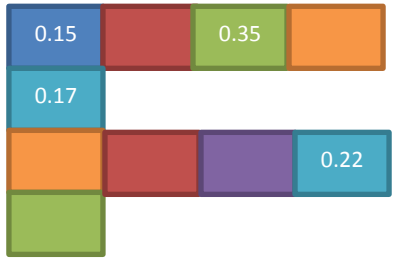
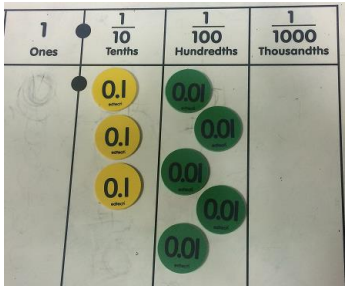
Term by Term Objectives

Year 4

	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Fractions	Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	• Use the number line to count from 0.05 to 0.12. How many steps did you take?  • Count up from 0 on the number line to find the value of the missing amounts.  • Continue the sequences: 2.45, 2.46, 2.47, ___, ___, ____ $\frac{25}{100}, \frac{26}{100}, \frac{27}{100}$, ___, ____, ____ 4.32, 4.31, 4.30, ___, ___, ___	• Convince me that 4.27 is halfway between 4.22 and 4.32. • Write down a fraction that could go in each section of the number line.  • Jasper says, "If I multiply ten by ten I get one hundred so if I multiply tenths by ten I get hundredths." Do you agree? Explain your answer; use a place value grid to help.	• Fill in the gaps to find the missing numbers.  • If the arrow is pointing to 4.56, what could the start and end numbers be? Can you find more than one option?  • Amber is counting up in hundredths, she has dropped three counters. Write down the number Amber could have made and the next four numbers she would have said. How many different ways can you solve the problem? 

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Term by Term Objectives

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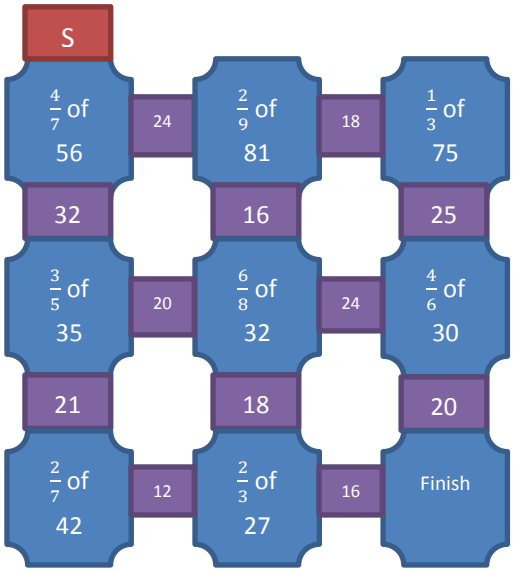
	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Fractions	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	• Find: $\frac{2}{5}$ of 45 $\frac{3}{8}$ of 24 • Emily buys a box of 24 chocolates. She eats $\frac{1}{4}$ of the chocolates and her Mum eats $\frac{1}{3}$. How many chocolates are left? • George and Grace have ordered lemonade. Grace has a small lemonade which is 250ml. George has a large lemonade which is $\frac{4}{10}$ more than a small. How many ml does George have? • If George only drinks half of his lemonade and Grace drinks three quarters of her lemonade, who drinks the most? Show your working.	• The school kitchen needs to buy potatoes for lunch. A large bag has 200 potatoes and a medium bag has $\frac{3}{5}$ of a large bag. The school cook says, "I need 150 potatoes so I will have to buy a large bag." Is she correct? Explain your reasoning. • **True or False** To find $\frac{3}{8}$ of a number, divide by 3 and multiply by 8. Convince me. • The two squares below are $\frac{2}{6}$ of a rectangle. Can you draw the rest of the rectangle? Can you do it more than one way? 	• These three squares are $\frac{1}{4}$ of a whole shape.  How many different shapes can you draw that could be the complete shape? • Jenny has 42 stickers. She gives $\frac{3}{7}$ of her stickers to Paul and $\frac{2}{6}$ of her stickers to Beth. How many stickers do they each have? • Work out the answer to each question to make it through the maze. 

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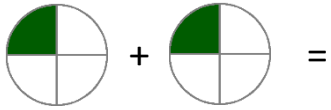
Term by Term Objectives

Year 4

	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Fractions	Add and subtract fractions with the same denominator.	• Calculate:  Use diagrams and bar modelling to solve the problems below. $\frac{3}{8}+\frac{2}{8}=$ $\frac{1}{6}+\frac{2}{6}=$ $\frac{7}{8}-\frac{2}{8}=$ $\frac{5}{7}-\frac{2}{7}=$ • Sarah eats $\frac{3}{8}$ of a bunch of grapes; Tom eats $\frac{2}{8}$ of a bunch of grapes. What fraction of the grapes have they eaten altogether? • Fill in the box: $\frac{5}{8}+\square=\frac{7}{8}$ $\frac{5}{6}-\square=\frac{1}{6}$	• The answer is $\frac{4}{9}$; what is the question? • **True or False** $\frac{5}{12}+\frac{3}{12}=\frac{8}{12}$ $\frac{5}{12}+\frac{3}{12}=\frac{8}{24}$ $\frac{5}{12}+\frac{3}{12}=\frac{4}{6}$ Explain your reasoning. • Describe the pattern: $\frac{7}{10}-\frac{1}{10}=\frac{6}{10}$ $\frac{6}{10}-\frac{1}{10}=\frac{5}{10}$ Can you continue the pattern?	• Caroline chooses two fractions and subtracts the smaller one from the bigger one. Her answer was $\frac{1}{6}$. What fractions could Caroline have chosen? How many ways can you find to do it? • Find three ways to complete each calculation. $\frac{\square}{\square}+\frac{\square}{\square}=\frac{8}{9}$ $\frac{\square}{\square}-\frac{\square}{\square}=\frac{8}{9}$ • Dan has 2 pieces of rope. One is $\frac{2}{8}$ of the whole rope and one is $\frac{2}{4}$. Dan adds $\frac{4}{8}$ to the first rope and $\frac{1}{4}$ to the second rope. Which rope is longer? Do you notice anything about the lengths of the ropes? $\frac{2}{8}$  $\frac{2}{4}$ 

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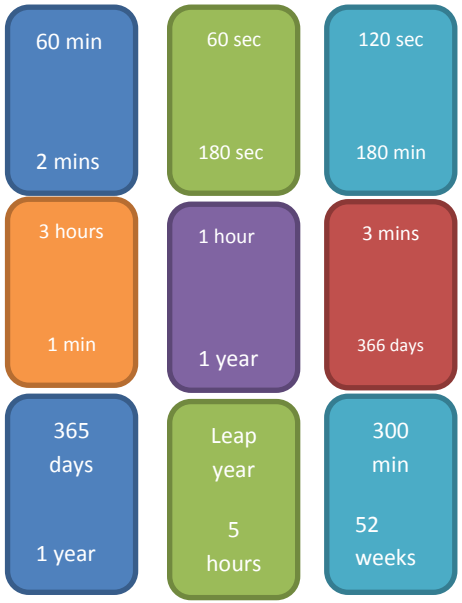
Term by Term Objectives

Year 4

	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Measurement - Time	Convert between different units of measure e.g. hour to minute.	• Fill in the gaps: 1 hour = __ minutes 1 minute = __ seconds 2 hours = __ minutes __ minutes = 180 seconds • Katie goes swimming for 1 hour and 42 minutes. How many minutes was she swimming for? • Kelsey is 7 and a half years old. How many months old is she?	• James says, " To convert hours to minutes, I multiply the number of hours by 60" Is he correct? Can you explain why? • Mark is doing a sponsored silence. Mark says, "If I am silent for five hours at 10p per minute I will raise 50 pounds." Is he correct? Prove it. • **True or False** 4 minutes is shorter than 250 seconds. Show your working.	• Five friends are running a race. Their times are below. Can you work out in what order they finished? Emily: 1 minute 32 seconds Simon: 95 seconds Lucy: 1 minute 28 seconds Tony: 89 seconds Carrie: 100 seconds What was the difference between the fastest time and the slowest time? • Match the cards together to make a loop where correct answers are next to each other. 

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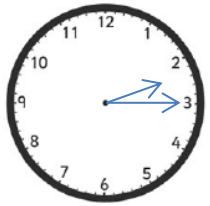
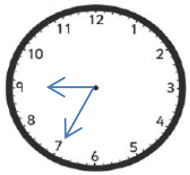
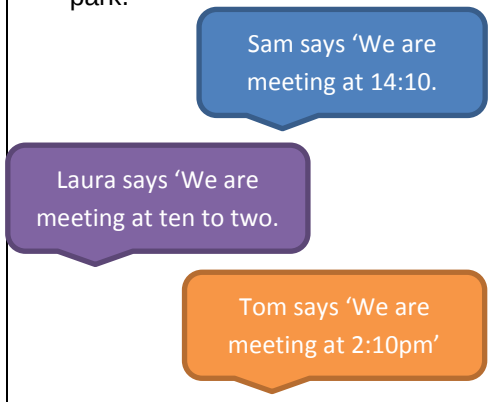
Term by Term Objectives

Year 4

Measurement - Time

National Curriculum Statement	All students		
	Fluency	**Reasoning**	**Problem Solving**
Read, write & convert time between analogue and digital 12 and 24 hour clocks.	• Read and write the following times in a) 24 hour clock b) 12 hour clock c) analogue e.g. Quarter past 2 in the afternoon: a) 14:15 b) 2:15pm c)  • Work out the problems and then draw the hands in the correct position on the analogue clocks. Paul sets off to London at 11:05am, the journey took 3 hours and 50 minutes. Draw the time he arrived on the clock. Clare finishes school at 15:25, she had her tea 1 hour and 40 minutes later. Draw the time she ate tea on the clock.	• Sam says ' To change any time after midday from 12 hour to 24 hour clock just add 12 to the minutes'. Is he correct? Can you explain his thinking? • Laura is writing the time 21:35 on the analogue clock below.  • Can you make her time even more accurate? Explain your reasoning. • Three children are meeting in the park.  • Will all the children meet at the same time? Convince me.	• Can you match the analogue clocks to the digital time even though one of the hands is missing?  • On a 24 hour digital clock, over 24 hours, how many times does the number 4 appear?  • Does the number 4 appear more or less on a 12 hour digital clock or a 24 hour digital clock? • Can you match the time dominoes together so that the adjoining times are the same? 

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Term by Term Objectives

Year 4

	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Measurement - Time	Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.	• Match the times; fill in the missing times in the empty boxes. 11:30pm 6:30pm 2:30pm 11:30am 8:30am 18:30 14:30 23:30 08:30 05:30 • A full day at school is 8 hours and 35 minutes. How long is this in minutes? • Sarah is 7 years and 2 months old. Harry is 85 months old. Who is the oldest? Show your working.	• Hannah is travelling from Halifax to London by car; it takes 4 hours 11 minutes. Sam is travelling from Halifax to London by train; it takes 214 minutes. Who will have the quicker journey? Explain your answer. • Phil says, "6420 seconds is longer than 107 minutes." Do you agree? Explain your reasoning. • James says, "In a year with 365 days, there is one month that has an exact number of weeks." Which month has an exact number of weeks? Does it have an exact number every year?	• Tara is going to Blackpool for a day. She has 4 hours 30 minutes there and can choose 3 activities to do while she is there. Which activities could she choose to do? How much time would they fill? How many combinations of activities can you find? Donkey rides: 30 minutes Theme Park: 110 minutes Blackpool Tower: 1 hour 20 minutes Swimming pool: 1 hour 45 minutes Amusements: 1 hour 10 minutes Sea life Centre: 125 minutes • It is the 6th of November. Can you work out when Jan, Tim and Saira's birthdays are using the clues below? Jan: "It is my birthday in 3 weeks and 2 days." Tim: "It is my birthday in 96 hours." Saira: "It was my birthday 2 weeks and 72 hours ago."

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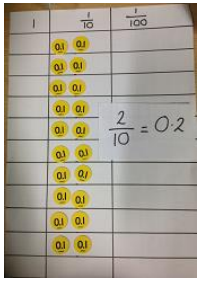
Term by Term Objectives

Year 4

Decimals

National Curriculum Statement	All students		
	Fluency	**Reasoning**	**Problem Solving**
Recognise and write decimal equivalents of any number of tenths or hundredths.	• Complete the table: 	Fraction	Decimal
---	---
$\frac{6}{10}$	
	0.2
$\frac{37}{100}$	
	0.68 | • Match the fraction to the correct decimal. $\frac{6}{10}$ $\frac{6}{100}$ $\frac{53}{100}$ 6.1 0.06 0.6 0.53 5.3 • Here is a tens frame with 3 squares shaded, what fraction does this represent? Place 0.1 place value counters on top of the shaded squares to find the decimal equivalent. 	• Give the children 2 ones in place value counters.  Explain that we are going to try and divide them by 10. Show we need to exchange our 2 ones for 20 tenths. Now when we share between 10 groups we have 0.2. This proves that 2/10 = 0.2. Can the children use this to prove that 5/10= 0.5, 4/10=0.4 etc. • Helen, Adam and Sam are talking about which fractions are equivalent to 0.4. Adam: '$\frac{4}{10}$ is equivalent to 0.4' Helen: '$\frac{40}{100}$ is equivalent to 0.4' Sam: '$\frac{1}{4}$ is equivalent to 0.4' Who is correct? Justify your answer.	• Use the five digit cards to complete the statement below. 0 0 1 6 6 $\frac{\square\square}{\square\square} = \square \cdot \square$ • Fill in the missing numbers below so the fractions and decimals are equivalent in each row of the table. One has been done for you. | Fraction	Decimal
---	---
$\frac{35}{100}$	0.35
$\frac{\_4}{100}$	0.2_
$\frac{\quad}{10}$	_. 4
$\frac{50}{\quad}$	0. _

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Term by Term Objectives

Year 4

Decimals

National Curriculum Statement	All students		
	Fluency	**Reasoning**	**Problem Solving**
Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$	• Fill in the table: 	Fraction	Decimal
---	---
$\frac{1}{2}$	
$\frac{1}{4}$	
$\frac{3}{4}$	| • Match the fraction to the correct decimal. ¾ ½ ¼ 0.34 0.3 0.75 0.5 0.4 0.25 • Write the fraction that matches to each decimal. 0.25 = 0.5 = 0.75 =	• Using place value counters, show that 1 divided into 2 equal parts is 0.5. Can you show that 1 divided into 4 equal parts is the same as 0.25? • Explain how you know 0.5 = $\frac{1}{2}$ • Harry has written the decimal equivalents to a half and a quarter. Can you explain to him what he has done wrong? What could you use to show him? Harry: $\frac{1}{2}$ = 1.2 $\frac{1}{4}$ = 1.4	• Use the number cards 0 - 5 below to complete the number sentence. $\frac{\square}{\square} = \square \cdot \square$ Which number did you have left over? • Complete the number sentence below using the number cards 0 – 5: $\frac{\square}{\square} = \square \cdot \square\square$ Which number did you have left over? Was it the same number as before? Which extra number would you need to make a number sentence that used your left over number?

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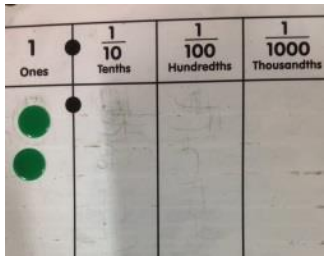
	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Decimals	Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths.	• Use a place value flip chart to make a two digit number. Multiply the number by 10, which direction did the digits move? Start with the same 2 digit number. Divide the number by 10, which direction did the digits move this time? What number have you got? Repeat multiplying and dividing by 100. • Complete the table below: Starting number / ÷ 10 / ÷ 100 34 57 60 7 • Junaid is dividing 2 by 10. Draw where his counters will end up and write the answer.  	• I divide a number by 100 and the answer is 0.5. What number did I start with? • **True or False** A two digit number divided by 10 always gives an answer with one decimal place. E.g. 52 ÷ 10 = 5.2 Prove it. • Jessie and Tao are dividing numbers by 10 and 100. They start with the same 1 digit number. Jessie divides by 10 and says, “My number has 0 ones and 4 tenths”. Tao divides by 100 and says, “My number has 0 ones, 0 tenths and 4 hundredths.” What number did they start with? Prove it.	• Kainat has multiplied a number by 100. Her answer is between 40 and 45. What number could she have multiplied? How many possibilities can you find? • Use the number cards below to fill in the missing digits. □ 0 ÷10 = □ □ .4 x 10 = 3 □ □ 8 □ ÷100 = □ . 86 5. □ 2 x 100 = □ 7 You can use the cards more than once. 9 7 3 2 1 8 4 9 5 6

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Term by Term Objectives

Year 4

Decimals

National Curriculum Statement	All students		
	Fluency	**Reasoning**	**Problem Solving**
Round decimals with one decimal place to the nearest whole number.	• Round the following numbers to the nearest whole number: 3.2 = 4.7 = 25.5 = • Write all the decimals with one decimal place that round to 32 to the nearest whole number. • Sort the numbers below into the table rounding each of them to the nearest whole number. 23.1 23.2 24.4 23.5 23.4 24.3 23.9 22.8 22.5 Rounds to 23 | Rounds to 24	• Which decimals below round to 4 when rounded to the nearest whole number? 4.2, 3.8, 4.5, 3.5, 4.7 Explain your reasoning. • Two numbers with one decimal place both round to 23. The numbers add up to 46. What could the two numbers be? Explain your thinking. • Write a list of five instructions of how to round decimals with one decimal place to the nearest whole number.	• Roll two dice. Using the numbers make two numbers with one decimal place. Round the numbers to the nearest whole number. How many combinations of the two dice can you find that would round to the same whole number?  • Using the digit cards below, how many numbers can you make with one decimal place that would round to 45. You can only use each card once per number. 3 4 4 5 6 Can you make more or less numbers that round to 46? If you were given this number card: 7 How many numbers could you make that round to 47?

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Term by Term Objectives

Year 4

Decimals

National Curriculum Statement	All students		
	Fluency	**Reasoning**	**Problem Solving**
Compare numbers with the same number of decimal places up to two decimal places.	• Fill in < and > in the boxes below: 3.56 ☐ 3.62 7.21 ☐ 7.12 3.45 ☐ 3.42 • Order the decimals below from smallest to largest. 3.51 3.48 3.52 3.57 3.42 3.43 • Laura has £3.45, Hamid has £4.35. Who has the most money?	• Serena says, "When I am comparing numbers with 2 decimal places, the number with the largest number of hundredths is the largest number." Is she correct? Explain your thinking. • The numbers below are ordered from smallest to largest. Circle the mistake. 4.52, 4.63, 4.62, 4.65, 4.68 Can you replace the mistake with a number that would fit in the sequence? • Put a digit in each box to order the decimals in ascending order. 2 ● 4 ☐ 2 ● ☐ 6 ☐ ● 5 3 3 ● 0 ☐ 3 ● ☐ 9	• How many different numbers with 2 decimal places can you make using the grid below and four counters? One has been done for you. 10s | 1s | 0.1s | 0.01s 10.12 Can you order your numbers in descending order? • Three children have numbers with two decimal places. They each give a clue to their number. Can you work out which clue matches to which child? Billie: 3.15 | Shaukat: 4.14 | Nita: 3.13 My number has a one in the tenths column. My number has the same amount of ones and hundredths. My number is the largest number.

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Term by Term Objectives

Year 4

	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Money	Solve simple measure and money problems involving fractions and decimals to two decimal places.	• A box of chocolates costs £1.25. Hannah and Thomas want to buy 4 boxes of chocolates. If Hannah pays £2.45, how much must Thomas pay?  • Emma has five pounds. She spends a quarter of her money. How much does she have left?  • In the sale I bought some clothes for half price. Jumper £14 Scarf £7 Hat £2.50 T-shirt £6.50 How much would the clothes have been full price? How much did I spend altogether? How much did I save?	• A class is planning a trip to a theme park. Adult tickets cost £8. Children's tickets cost £4. How many tickets could they buy for £100. How many different ways can you find to do this? • Hazel buys a teddy bear for £6.00, a board game for £4.00, a cd for £5.50 and a box of chocolates for £2.50. She has some discount vouchers. She can either get £10.00 off **or** half price on her items. Which voucher would save her more? Explain your thinking. • Yasmin is choosing a new mobile phone. One phone costs £5.50 per month. The other costs £65.50 for a year. Which is the better deal over a year?	• Kim bought a chocolate bar and a drink. The cost of them both together is in one of the boxes below. £1.85 | 75p | £1.56 £1.74 | £2.25 | £1.00 £1.80 | 80p | £2.10 £1.44 | £3.06 | £1.50 £1.20 | £1.25 | £1.60 £1.45 | 90p | £1.27 Using these five clues can you work out which price in the boxes is correct? 1. You need more than three coins to make this amount. 2. There would be change when using the most valuable coin to buy them. 3. The chocolate bar cost more than 50p 4. You could pay without using any copper coins 5. The chocolate bar cost exactly half the amount of the drink.

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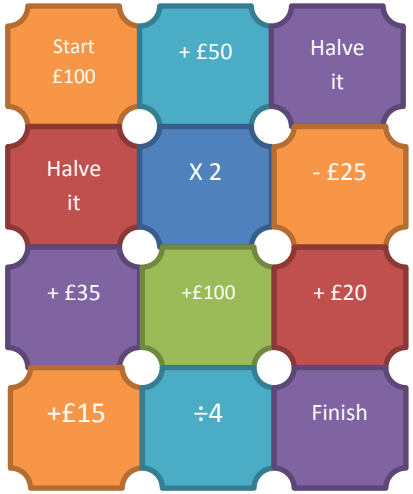
Term by Term Objectives

Year 4

	National Curriculum Statement	All students		
		Fluency	**Reasoning**	**Problem Solving**
Money	Estimate, compare and calculate different measures, including money in pounds and pence.	• Order the following amounts placing < or > between them. £25.62, 2657p, 2567p. • Robbie buys a toy car for 99p, a yoyo for £1.05, three sweets for 30p each and a chocolate bar for 47p. Does he have enough money to pay with a £5 note? • Martina buys a jacket for 2165p and a t shirt for £9.99. Hamid buys a coat for £32.00. Who spends the most?	• Which would you rather have, three quarters of £2.40 or one quarter of £6? Explain your reasoning. • Which would you rather have, five 50p coins or 12 20p coins? Explain why. • 1 chocolate bar costs the same as 4 sweets. 4 sweets cost the same as 2 stickers. 1 sticker costs 30p. How much does the chocolate bar cost?	• Choose a route through the money maze. You can only go on each square once. Can you find the route that makes the highest amount of money? Which route makes the lowest amount of money?  • Lola and Jamal are sharing some coins. Lola gets half the amount of Jamal. Which coins could they each get? 

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Year 4

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