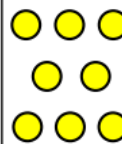
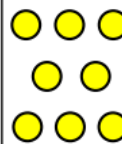
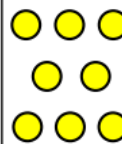

































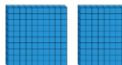
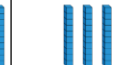

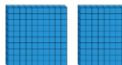
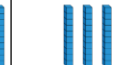

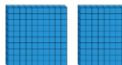
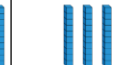










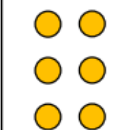
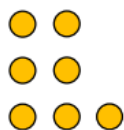
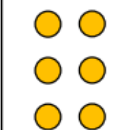
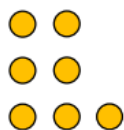
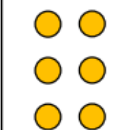
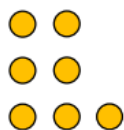
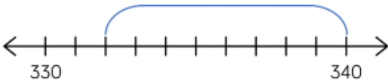
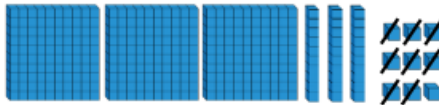
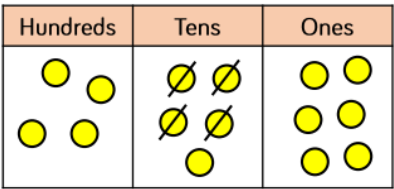
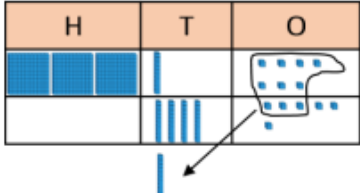


## Mathematics Curriculum Progression for Year 3

Term	Topic	Knowledge and Skills	Methods and Visual Representations	Vocabulary																				
1 & 2	Place Value	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	<table><tr><th>Hundreds</th><th>Tens</th><th>Ones</th></tr><tr><td></td><td></td><td></td></tr></table>	Hundreds	Tens	Ones				fifties, hundreds, factor of, relationship, Roman numerals  approximate, approximately, round, nearest, nearest ten, nearest hundred, round up, round down														
		Hundreds	Tens	Ones																				
																								
		Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	<table><tr><th colspan="4">Representation</th><th>Number</th></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>	Representation				Number																
		Representation				Number																		
																								
																								
																								
Compare and order numbers up to 1000	<table><tr><th>Hundreds</th><th>Tens</th><th>Ones</th></tr><tr><td></td><td></td><td></td></tr></table>	Hundreds	Tens	Ones																				
Hundreds	Tens	Ones																						
																								
Identify, represent and estimate numbers using different representations	<table><tr><th>Hundreds</th><th>Tens</th><th>Ones</th></tr><tr><td></td><td></td><td></td></tr></table>	Hundreds	Tens	Ones																				
Hundreds	Tens	Ones																						
																								
Read and write numbers up to 1000 in numerals	<table><tr><th>100s</th><th>10s</th><th>1s</th></tr><tr><td></td><td></td><td></td></tr></table>	100s	10s	1s																				
100s	10s	1s																						
																								
Read and write numbers up to 1000 in words																								
Solve number problems and practical problems involving these ideas																								

1 & 2	Addition and Subtraction	<p>Add and subtract numbers mentally, including a three-digit number and ones</p> <p>Add numbers with up to three digits using the formal method of columnar addition</p> <p>Add and subtract numbers mentally, including a three-digit number and tens</p> <p>Subtract numbers with up to three digits using the formal method of columnar subtraction</p> <p>Add and subtract numbers mentally, including a three-digit number and hundreds</p> <p>Estimate the answer to a calculation and use inverse operations to check answers</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p>	   	hundreds boundary
-------	--------------------------	--	---	-------------------

	3	1	7
+		4	6
	3	6	3

1

H	T					O		
100	10	10	10	10	10	10	1	1
	10	10	10	10	10		1	1

100

	1	6	3
+		5	2
	2	1	5






1

H	T	O	H	T	O
		.....			.....

H	T	O
		.....

	2	<del>4</del>	<sup>1</sup> 5
-		2	8
	2	2	7

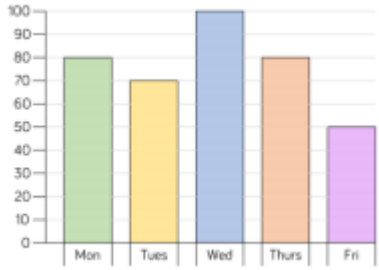
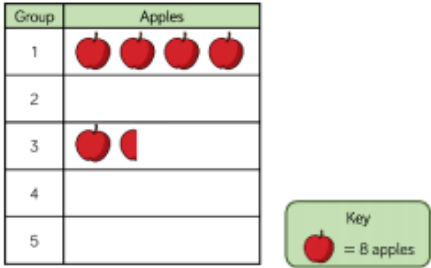
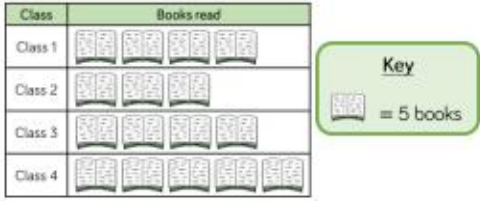


			<table><tr><th>T</th><th>O</th></tr><tr><td>10 10 10</td><td>1 1 1 1</td></tr><tr><td>10 10 10</td><td>1 1 1 1</td></tr></table> <table><tr><th></th><th>T</th><th>O</th></tr><tr><td></td><td>3</td><td>4</td></tr><tr><td>×</td><td></td><td>2</td></tr><tr><td></td><td>6</td><td>8</td></tr></table>	T	O	10 10 10	1 1 1 1	10 10 10	1 1 1 1		T	O		3	4	×		2		6	8	
T	O																					
10 10 10	1 1 1 1																					
10 10 10	1 1 1 1																					
	T	O																				
	3	4																				
×		2																				
	6	8																				
3 & 4	Measure: Money	Add and subtract amounts of money to give change, using both £ and p in practical contexts	  <table><tr><td colspan="2">?</td></tr><tr><td>£2 and 35p</td><td></td></tr></table>	?		£2 and 35p																
?																						
£2 and 35p																						

3 & 4 Statistics

Interpret and present data using bar charts, pictograms and tables

Solve one-step and two-step questions e.g. 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables



Sport	Tally	Total
Football		15
Tennis		
Rugby		
Cricket		
Basketball		

chart, bar chart, frequency table, Carroll diagram, Venn diagram, axes, axis, diagram

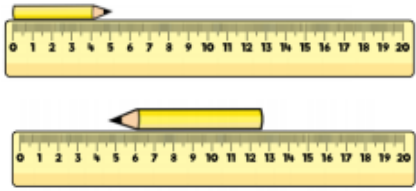
3 & 4

Measure:  
Length and  
Perimeter

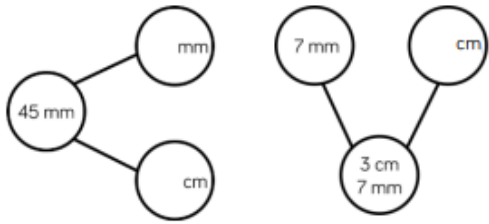
Measure, compare, add and subtract: lengths  
(m/cm/mm)  
  
Measure the perimeter of simple 2-D shapes

What unit of measurement would you use to measure these real life objects? Millimetres, centimetres or metres?

- |                   |                        |                   |
|-------------------|------------------------|-------------------|
| Fingernail        | Eraser                 | Pencil            |
| Height of a house | Length of a playground | Length of a table |



120 cm	
100 cm	20 cm
1 m	20 cm
1m 20 cm	



5 m	
1 m and 54 cm	?

division, approximately  
  
millimetre, kilometre, mile, distance  
apart, distance between, distance to,  
distance from, perimeter

			<div><div><div>6 cm</div><div>2 cm</div><div>6 cm</div><div>2 cm</div></div><div><div>3 cm</div></div></div>	
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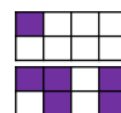
# 3 & 4 Fractions

Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10

Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators

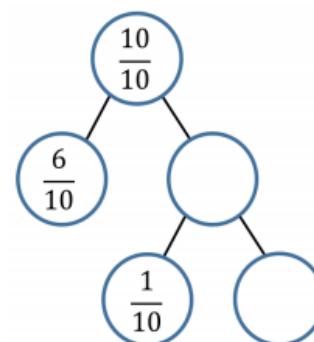
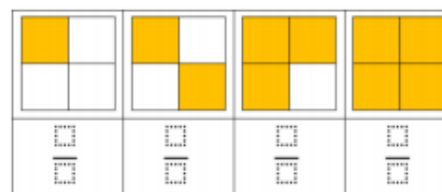
Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators

Solve fraction problems






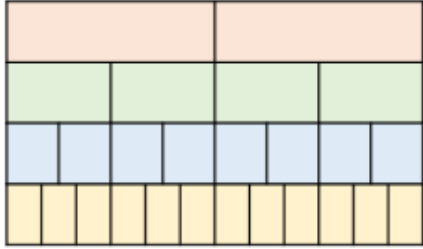
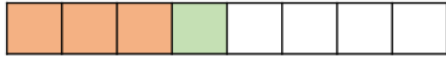


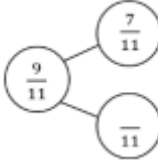


\_\_\_ out of \_\_\_ equal parts are shaded.

$\frac{5}{10}$  of the shape is shaded.



sixths, sevenths, eighths, ninths, tenths

5 & 6	Fractions	<p>Recognise and show, using diagrams, equivalent fractions with small denominators</p> <p>Add fractions with the same denominator within one whole e.g. <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math></p> <p>Subtract fractions with the same denominator within one whole e.g. <math>\frac{6}{7} - \frac{1}{7} = \frac{5}{7}</math></p> <p>Compare and order unit fractions, and fractions with the same denominators</p> <p>Solve fraction problems</p>	       <p>We can use this model to calculate <math>\frac{3}{8} + \frac{1}{8} = \frac{4}{8}</math></p>   	<p>sixths, sevenths, eighths, ninths, tenths</p>
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5 & 6  
Measure:  
Time

Tell the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks

Write the time using an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks

Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight

Know the number of seconds in a minute and the number of days in each month, year and leap year

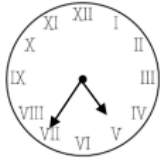
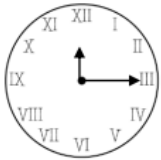
Compare durations of events e.g. to calculate the time taken by particular events or tasks

3<sup>rd</sup> March 2<sup>nd</sup> March January 31<sup>st</sup> 1<sup>st</sup> December

Earliest Latest

Morning	Afternoon	Evening	Night

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			



5:30 p.m.

9:45 a.m.

7:31 a.m.

10:13 p.m.


12:24 a.m.

8:55 p.m.

century, calendar, earliest, latest, a.m., p.m., Roman numerals, 12-hour clock time, 24-hour clock time


	Arrives	Leaves
London	5:50 a.m.	6:00 a.m.
Edinburgh	8:00 a.m.	8:20 a.m.
Manchester	2:33 p.m.	2:45 p.m.
Leeds	7:31 p.m.	7:35 p.m.

9 o'clock in the morning




19 : 15

Half past 3 in the afternoon



09 : 00

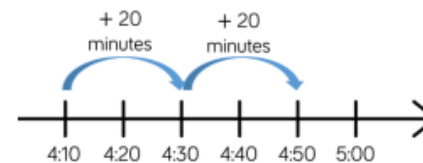
Quarter past 7 in the evening


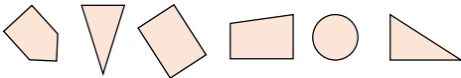



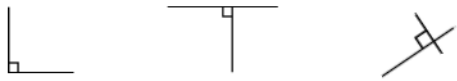



15 : 30

TV Programme	Start Time	Finish Time	Duration
Pals	06:30	07:30	
Dennis the explorer	15:15	18:15	
The football show	12:00	14:00	
An adventure	10:40	12:40	

Destination	Train departs	Train arrives
London	08:45	11:35
Leeds	10:05	10:33
Manchester	13:10	14:20

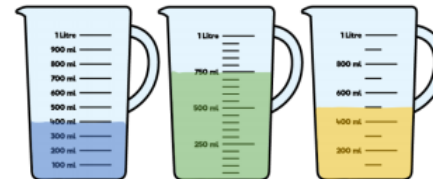
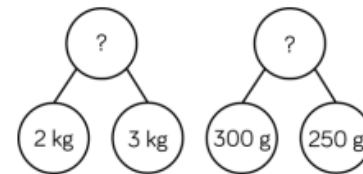
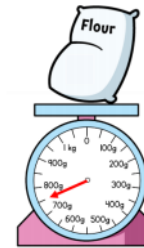
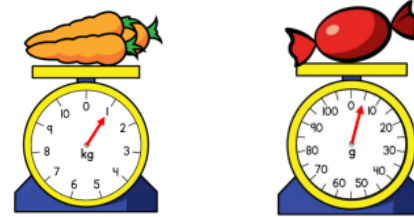


5 & 6	Properties of Shape	<p>Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p> <p>Recognise angles as a property of shape or a description of a turn</p> <p>Identify right angles and identify whether other angles are greater or less than a right angle</p> <p>Recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn</p> <p>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines</p>	   <p>This line measures 9 cm and 9 mm</p> <p>a horizontal line of symmetry, a vertical line of symmetry</p>    	<p>perimeter</p> <p>pentagonal, hexagonal, octagonal, quadrilateral, right-angled, parallel, perpendicular</p> <p>hemisphere, prism, triangular prism</p>
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5 & 6

Measure:  
Mass and  
Capacity

Measure, compare, add and subtract: mass  
(kg/g); volume/capacity (l/ml)



l	ml
6 l	800 ml

division, approximately

