

## Year 3 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	
Phase 1	Number and Place Value		Addition and Subtraction				Multiplication and division			Measures		
Phase 2	Multiplication and division			Geometry		Fractions						
Phase 3	Measures		Fractions			Measures						
Phase 4 (EoY)	Statistics											

### Ongoing throughout the year:

**Time**

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

**Multiplication facts**

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables











**Counting**

Count from 0 in multiples of 50 and 100








## Year 3 Phase 3 Objectives

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
<p><u>Measures - time</u> Tell and write the time from an analogue clock, including using Roman numerals, 12-hour and 24-hour clocks.</p> <p>Estimate and read time with increasing accuracy to the nearest minute.</p> <p>Record and compare time in terms of seconds, minutes and hours.</p> <p>Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.</p> <p>Know the number of seconds in a minute and the number of days in each month, year and leap year.</p> <p>Compare durations of events [for example calculate the time taken by particular events or tasks]</p>		<p><u>Fractions</u> Recognise and show, using diagrams, equivalent fractions with small denominators.</p> <p>Add and subtract fractions with the same denominator within one whole.</p> <p>Compare and order unit fractions, and fractions with the same denominators.</p> <p>Solve problems that involve all of the above.</p>			<p><u>Measures</u> Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p>Continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm).</p>		
Phase 2 S & D sessions							

## Year 3 MTP – Phase 3

Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
<b>Measures – Time</b>	Tell and write the time from an analogue clock, including using Roman numerals, 12-hour and 24-hour clocks.	<ul style="list-style-type: none"> <li>What time is shown on the analogue clocks below?</li> </ul>  <ul style="list-style-type: none"> <li>Draw the times on the blank analogue clocks.</li> </ul> <p>a) Five past four     </p> <p>b) Twenty five to ten</p> <p>c) Half past seven</p> <ul style="list-style-type: none"> <li>Match the times on the digital clocks to the analogue clocks.</li> </ul> <p> </p> <p> </p> <p> </p>	<ul style="list-style-type: none"> <li>The clock only has one hand. What time could the clock show? Explain your choice carefully.</li> </ul>  <ul style="list-style-type: none"> <li>Kim is explaining how to tell the time on a 24 - hour clock.</li> </ul> <p>‘Look at the hour number and minus 12’</p> <p>Do you agree with Kim? Prove your answer by showing examples.</p> <ul style="list-style-type: none"> <li>Leila is telling the time from an analogue clock.</li> </ul> <p>‘The hour hand is pointing to XI the minute hand is pointing to XII’</p> <p>What time is it?</p>	<ul style="list-style-type: none"> <li>What is different about the clock below? Can you still use it to tell the time?</li> </ul>  <ul style="list-style-type: none"> <li>On a digital clock, there are certain times when the numbers are in consecutive order, in counting order, either forwards or backwards eg 1:23 or 5:43. How many times during a day does this happen?</li> <li>Fill in the gaps in the story with the digital time. Lucy gets up at quarter past eight in the morning _____. She has her breakfast at twenty to nine _____. Lucy goes shopping at quarter to eleven _____ and returns home at twenty past one in the afternoon _____.</li> </ul> <p>Can you write your own story about your day?</p>



Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
Measures – Time	Estimate and read time with increasing accuracy to the nearest minute.	<ul style="list-style-type: none"> <li>Write the time on the clocks to the nearest minute.                </li> <li>Draw the hands on the clock to show the time below.                <p style="text-align: center;"><b>23 minutes to 9</b></p> </li> <li>Fill in the gap.                <p style="text-align: center;">_____ minutes past 4</p> </li> </ul>	<ul style="list-style-type: none"> <li>Look at the clock face below. Can you explain why there are two sets of numbers on it? What do they mean?                </li> <li>Farah is telling the time. She says this clock says it is ten past one. Is Farah correct? Prove it.                </li> </ul>	<ul style="list-style-type: none"> <li>These clocks have been reflected in a mirror. Can you work out what time they show?                </li> <li>Simon gets up at half past nine. Can you order the times he sees on the clocks during the day until he goes to bed at 22:45?                </li> <li>At twelve o'clock both the minute hand and hour hand are pointing in exactly the same direction. At what other times during the day does this happen? Can you write down all the times and draw them on an analogue clock?             </li> </ul>




Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving										
Measures – Time	Record and compare time in terms of seconds, minutes and hours.	<ul style="list-style-type: none"> <li>Use a stopwatch to record the following events:               <ol style="list-style-type: none"> <li>Time taken to run all the way around the playground.</li> <li>Time taken to complete 10 mental maths questions.</li> <li>Time taken to do 20 star jumps.</li> </ol> <p>How long did each event take? Which took the longest? Would you record your time in seconds or minutes?</p> </li> <li>In 1913 the world record for the quickest mile run by a man was 4 minutes 14 seconds. The world record is currently 3 minutes 43 seconds. What is the difference in times? Can you find and compare other world records? How long do you think it would take you to run mile?</li> </ul>	<ul style="list-style-type: none"> <li>Dan takes 153 seconds to skip around the playground. Tilly takes 2 minutes 23 seconds. Who is the quickest? Explain how you know.</li> <li>Cut up the cards below and turn them over. Try to find a matching pair of an activity and the length of time you think it takes. Does everyone agree with the time it takes? How can you prove it?</li> </ul> <table border="1" data-bbox="1093 762 1451 1273"> <tr> <td>Time taken to count from 1 to 10</td> <td>10 seconds</td> </tr> <tr> <td>Time taken to brush your teeth</td> <td>90 minutes</td> </tr> <tr> <td>Time taken to run 100m</td> <td>3 minutes</td> </tr> <tr> <td>Time taken to travel to Spain.</td> <td>5 seconds</td> </tr> <tr> <td>Time taken to watch a football match.</td> <td>2 hours</td> </tr> </table>	Time taken to count from 1 to 10	10 seconds	Time taken to brush your teeth	90 minutes	Time taken to run 100m	3 minutes	Time taken to travel to Spain.	5 seconds	Time taken to watch a football match.	2 hours	<ul style="list-style-type: none"> <li>Saira goes to three different activities a week. They all start at 6 o'clock but are different distances away. Can you match the day and time she leaves with the activity she is going to?</li> </ul> <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="background-color: #4a7ebb; color: white; border-radius: 15px; padding: 10px; width: 150px; text-align: center;"> <p>Tuesday</p> <p>17:35</p> </div> <div style="background-color: #4db6ac; color: white; border-radius: 15px; padding: 10px; width: 150px; text-align: center;"> <p>Ballet</p> <p>42 minutes away</p> </div> <div style="background-color: #7b4397; color: white; border-radius: 15px; padding: 10px; width: 150px; text-align: center;"> <p>Wednesday</p> <p>17:18</p> </div> <div style="background-color: #4db6ac; color: white; border-radius: 15px; padding: 10px; width: 150px; text-align: center;"> <p>Football</p> <p>35 minutes away</p> </div> <div style="background-color: #92d050; color: white; border-radius: 15px; padding: 10px; width: 150px; text-align: center;"> <p>Thursday</p> <p>5:25pm</p> </div> <div style="background-color: #4db6ac; color: white; border-radius: 15px; padding: 10px; width: 150px; text-align: center;"> <p>Swimming</p> <p>25 minutes away</p> </div> </div> <p>One day, Saira is 13 minutes late for swimming. What time did she leave her house that day?</p> <p>Saira changes to a later ballet class that starts at 6:40. What time will she have to leave her house now?</p>
Time taken to count from 1 to 10	10 seconds													
Time taken to brush your teeth	90 minutes													
Time taken to run 100m	3 minutes													
Time taken to travel to Spain.	5 seconds													
Time taken to watch a football match.	2 hours													

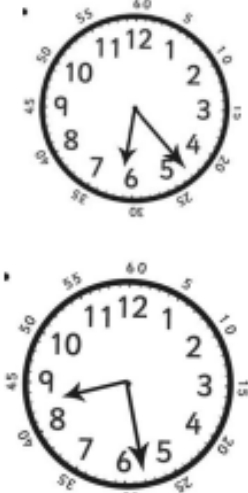


Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
Measures – Time	Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.	<ul style="list-style-type: none"> <li>Sort the times below into am and pm. 5 o'clock in the morning. 3 o'clock in the afternoon. 08:45 16:43</li> </ul> <p>Can you write one more time to join each group?</p> <ul style="list-style-type: none"> <li>Use the vocabulary cards below to fill in the gaps about Sita's day.</li> </ul> <p>Sita's alarm went off at seven _____ in the _____. She set off to school at eight _____. She arrived at 8:35 _____. After her _____ lessons, she had lunch at _____. In the _____ she learnt about the Victorians. School finished at 3:25 _____. Sita went to bed at seven _____ but woke up five hours later at _____ when it was very dark.</p> <p>noon    a.m.    p.m. morning    afternoon o'clock    midnight</p>	<ul style="list-style-type: none"> <li>Caroline says: "Any time that it is dark is pm and any time that it is light is am."</li> </ul> <p>Do you agree? Explain your thinking.</p> <ul style="list-style-type: none"> <li>Can you complete the sentence below in 2 different ways? 12 o'clock in the _____ can also be called _____.</li> </ul> <p>Explain the difference in the two sentences.</p>	<ul style="list-style-type: none"> <li>Match the words to their meanings.</li> </ul> <p>o'clock    Time between midnight and noon morning    Time from noon to evening am    12 o'clock at night afternoon    Post meridiem-after noon pm    Middle of the day midnight    Ante meridiem-before middy noon    Used to specify the hour</p>








Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving																																																																																																																																																																																																	
Measures – Time	<p>Know the number of seconds in a minute and the number of days in each month, year and leap year.</p>	<ul style="list-style-type: none"> <li>Cut up the cards below and play a matching game with a friend. When you get a pair you keep it. The player with the most pairs wins!</li> </ul> <table border="1" data-bbox="636 432 945 708"> <tr> <td>1 hour</td> <td>60 minutes</td> <td>60 seconds</td> <td>1 minute</td> </tr> <tr> <td>7 days</td> <td>1 week</td> <td>1 month</td> <td>about 4 weeks</td> </tr> <tr> <td>12 months</td> <td>1 year</td> <td>24 hours</td> <td>1 day</td> </tr> </table> <ul style="list-style-type: none"> <li>Fill in the missing numbers in the rhyme.</li> </ul> <p>___ days have September, April, June and November. All the rest have ____, except for February alone. Which has ___ each year and ___ in a leap year.</p> <ul style="list-style-type: none"> <li>Can you use the picture below to tell me how many days are in each month?</li> </ul> 	1 hour	60 minutes	60 seconds	1 minute	7 days	1 week	1 month	about 4 weeks	12 months	1 year	24 hours	1 day	<ul style="list-style-type: none"> <li>Rehan says 'When I add the number of days in 2 different months up, it always makes an odd number.' Do you agree? Explain your reasoning.</li> <li>Daniel says "The number of days in the last two years add up to make an odd number. I now know that next year is not a leap year." Is Daniel correct? Can he be sure?</li> <li><b>True or False</b> To check if a year is a leap year, I only need to check the number of days in one month.  Explain your answer.</li> </ul>	<ul style="list-style-type: none"> <li>The months of February to May have fallen out of my calendar. Can you work out which calendar pages below match to which month?</li> </ul> <table border="1" data-bbox="1532 443 2002 676"> <thead> <tr> <th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th><th>S</th> <th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th><th>S</th> </tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td> <td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>2</td> </tr> <tr> <td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td> <td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> <tr> <td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td> <td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> <tr> <td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td> <td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td> </tr> <tr> <td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td> <td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td> <td>31</td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table> <table border="1" data-bbox="1532 692 2002 900"> <thead> <tr> <th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th><th>S</th> <th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th><th>S</th> </tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td> <td>5</td><td>6</td><td></td><td></td><td></td><td></td><td>1</td><td>2</td> </tr> <tr> <td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td> <td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> <tr> <td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td> <td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> <tr> <td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td> <td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td> </tr> <tr> <td>28</td><td>29</td><td>30</td><td></td><td></td><td></td> <td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td></td><td></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Dan is thinking of a month. He gives two clues to help his friends guess.             <ol style="list-style-type: none"> <li>When I add the number of days in my month and the month before it equals 62 days.</li> <li>When I add the number of days in my month and next month it equals 60.</li> </ol> <p>What month is Dan thinking of?</p> </li> </ul>	M	T	W	T	F	S	S	M	T	W	T	F	S	S				1	2	3	4							1	2	5	6	7	8	9	10	11	3	4	5	6	7	8	9	12	13	14	15	16	17	18	10	11	12	13	14	15	16	19	20	21	22	23	24	25	17	18	19	20	21	22	23	26	27	28	29	30	31	24	25	26	27	28	29	30							31							M	T	W	T	F	S	S	M	T	W	T	F	S	S				1	2	3	4	5	6					1	2	7	8	9	10	11	12	13	3	4	5	6	7	8	9	14	15	16	17	18	19	20	10	11	12	13	14	15	16	21	22	23	24	25	26	27	17	18	19	20	21	22	23	28	29	30				24	25	26	27	28		
1 hour	60 minutes	60 seconds	1 minute																																																																																																																																																																																																		
7 days	1 week	1 month	about 4 weeks																																																																																																																																																																																																		
12 months	1 year	24 hours	1 day																																																																																																																																																																																																		
M	T	W	T	F	S	S	M	T	W	T	F	S	S																																																																																																																																																																																								
			1	2	3	4							1	2																																																																																																																																																																																							
5	6	7	8	9	10	11	3	4	5	6	7	8	9																																																																																																																																																																																								
12	13	14	15	16	17	18	10	11	12	13	14	15	16																																																																																																																																																																																								
19	20	21	22	23	24	25	17	18	19	20	21	22	23																																																																																																																																																																																								
26	27	28	29	30	31	24	25	26	27	28	29	30																																																																																																																																																																																									
						31																																																																																																																																																																																															
M	T	W	T	F	S	S	M	T	W	T	F	S	S																																																																																																																																																																																								
			1	2	3	4	5	6					1	2																																																																																																																																																																																							
7	8	9	10	11	12	13	3	4	5	6	7	8	9																																																																																																																																																																																								
14	15	16	17	18	19	20	10	11	12	13	14	15	16																																																																																																																																																																																								
21	22	23	24	25	26	27	17	18	19	20	21	22	23																																																																																																																																																																																								
28	29	30				24	25	26	27	28																																																																																																																																																																																											





Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
Measures – Time	Compare durations of events [for example calculate the time taken by particular events or tasks]	<ul style="list-style-type: none"> <li>A TV programme starts at 5:20 and finishes at 6:05. How long does the programme last for?</li> <li>Kieran is learning his times tables. On Monday it takes him 1 minute and 12 seconds to complete 10 questions. By Friday he can complete 10 questions in 42 seconds. How much quicker is he by Friday?</li> <li>Look at the two clocks below. How much time has passed between the first and the second clock?</li> </ul> 	<ul style="list-style-type: none"> <li>Henry measures the time it takes for three of his friends to do 30 star jumps. He wants to find out who is the quickest. Henry says:           <div data-bbox="1099 486 1447 715" style="border: 1px solid blue; border-radius: 15px; background-color: #4a7ebb; color: white; padding: 10px; text-align: center; margin: 10px 0;">             The person with the highest time is the winner because the highest score always wins!           </div> </li> </ul> <p>Is Henry correct? Explain your reasoning.</p> <ul style="list-style-type: none"> <li>Order the times below from shortest time to longest time.           <ul style="list-style-type: none"> <li>83 seconds</li> <li>1 minute 12 seconds</li> <li>56 seconds</li> <li>2 minutes 2 seconds</li> <li>1 minute 87 seconds</li> <li>143 seconds</li> </ul> </li> </ul> <p>Explain your reasoning.</p>	<ul style="list-style-type: none"> <li>Ashrita Furman is famous for holding the most world records at the same time, 131! Below is a list of world records he has broken travelling one mile on different equipment.</li> </ul> <p>Estimate and order the records from the one you think is quickest to the one you think took the longest. (Remove information in brackets until after activity)</p> <ol style="list-style-type: none"> <li><b>Pool Cue balancing on finger (6min 55s)</b></li> <li>On a Space Hopper (13 min)</li> <li>Sack Race (16min 41s)</li> <li>Pogo stick whilst juggling (23min 28s)</li> <li>Hula hooping whilst balancing a milk bottle on head (13min 37s)</li> <li>Pushing an orange with your nose. (22min 41s)</li> <li>Playing tiddlywinks (23min 22s)</li> </ol> <p>How long do you think it would take you? See how long it takes you to complete some of the challenges over 100min.</p>







Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
<p><b>Fractions</b></p>	<p>Recognise and show, using diagrams, equivalent fractions with small denominators.</p>	<ul style="list-style-type: none"> <li>Complete the statements:           <math display="block">\frac{1}{2} = \frac{\quad}{6}</math> <math display="block">\frac{1}{2} = \frac{\quad}{4} = \frac{\quad}{8}</math> </li> <li>Draw diagrams to show fractions that are equivalent to           <math display="block">\frac{1}{2}, \frac{1}{3}, \frac{2}{5}</math> </li> <li>Match the diagram to the equivalent fraction.           <div style="display: flex; flex-direction: column; align-items: center; gap: 10px;"> <div style="display: flex; gap: 10px;">  <div style="border: 1px solid black; padding: 5px; text-align: center;"><math>\frac{2}{8}</math></div> </div> <div style="display: flex; gap: 10px;">  <div style="border: 1px solid black; padding: 5px; text-align: center;"><math>\frac{4}{10}</math></div> </div> <div style="display: flex; gap: 10px;">  <div style="border: 1px solid black; padding: 5px; text-align: center;"><math>\frac{3}{4}</math></div> </div> </div> </li> </ul>	<ul style="list-style-type: none"> <li>What's the same? What's different?           <math display="block">\frac{1}{4}, \frac{2}{8}, \frac{3}{12}</math> </li> <li>Here is a diagram that has some sections shaded.           <div style="text-align: center;">  </div> <p>Ailish says, "I am thinking of an equivalent fraction to this where the numerator is 5." Is this possible? Explain why.</p> </li> <li>Explain how this diagram shows both <math>\frac{2}{3}</math> and <math>\frac{4}{6}</math> <div style="text-align: center;">  </div> </li> </ul>	<ul style="list-style-type: none"> <li>Can you work out the missing values?           <math display="block">\frac{1}{2} = \frac{4 - \star}{\star \times 2}</math> <math display="block">\frac{3}{\star} = \frac{5 + 1}{3 + 5}</math> <p>Can you create your own for a friend to complete?</p> </li> <li>Play pairs. Create a set of cards that have different diagrams and fractions on. Children turn 2 over in their go. If they are equal fractions then they keep the pair. If not, they turn them back over and it is the other players turn. The player who has the most pairs at the end wins.</li> </ul>




Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
<b>Fractions</b>	<p>Add and subtract fractions with the same denominator within one whole.</p>	<ul style="list-style-type: none"> <li>Complete the statements:           <math display="block">\frac{1}{5} + \frac{3}{5} =</math> <math display="block">\frac{6}{8} - \frac{3}{8} =</math> <math display="block">\frac{2}{10} + \frac{3}{10} + \frac{4}{10} =</math> </li> <li>Write these statements using numbers:           <p>1 sixth + 3 sixths = <input type="text"/> Sixths</p> <p>5 eighths - 3 eighths = <input type="text"/> Eighths</p> </li> <li>Find the sum of:           <math display="block">\frac{2}{12}, \frac{4}{12} \text{ and } \frac{5}{12}</math> </li> </ul>	<ul style="list-style-type: none"> <li>Explain why only the numerator changes in this calculation           <math display="block">\frac{2}{5} + \frac{9}{5} =</math> </li> <li>Rick is stuck on the calculation           <math display="block">\frac{11}{6} - \frac{3}{6} =</math> <p>His friend, Susie, draws him the following model to help.</p>  <p>Susie says, "Now take <math>\frac{3}{6}</math> away". Rick is confused because he thinks the diagram shows <math>\frac{11}{12}</math>.</p> <p>Explain the diagram to Rick and work out the answer.</p> </li> </ul>	<ul style="list-style-type: none"> <li>Use some of the cards below to make a fraction sentence. Can you make more than 1?           <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin: 10px 0;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">7</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">-</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">3</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">4</div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin: 10px 0;"> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">+</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">7</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">=</div> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px;">1</div> </div> </li> <li>How many fraction addition and subtractions can you make from this model?           <div style="text-align: center; margin: 10px 0;">  </div> <p>Do your additions and subtractions always have to be 1 part add 1 part or subtract only 1 part? Can there be more than 2 parts?</p> </li> </ul>




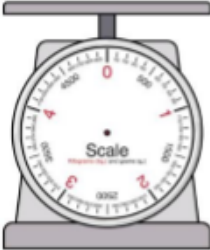


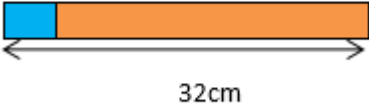




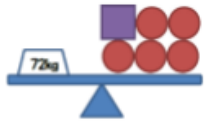



Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
<b>Fractions</b>	Compare and order unit fractions, and fractions with the same denominators.	<ul style="list-style-type: none"> <li>Order from smallest to largest               <math display="block">\frac{3}{9}, \frac{1}{9}, \frac{8}{9}, \frac{5}{9}, \frac{9}{9}</math> </li> <li>Use &lt;, &gt; or = to complete the statements below               <math display="block">\frac{4}{9} \quad \bullet \quad \frac{2}{9}</math> <math display="block">\frac{1}{7} \quad \bullet \quad \frac{1}{5}</math> <math display="block">\frac{2+2}{8} \quad \bullet \quad \frac{3+1}{8}</math> </li> <li>Which is greater? 1 ninth or 1 tenth</li> </ul>	<ul style="list-style-type: none"> <li>Gifty thinks <math>\frac{1}{8}</math> is greater than <math>\frac{1}{4}</math> because 8 is greater than 4. Do you agree? Convince me.</li> <li>Rob thinks <math>\frac{1}{4}</math> is always the same but his teacher has asked him to find a quarter of both these amounts.               <p>a) </p> <p>b) </p> </li> </ul> <p>Explain to Rob why it is not the same and create a rule with a partner.</p>	<ul style="list-style-type: none"> <li>Using equal sized strips of paper ask children to fold them into different amounts (e.g. quarters, sixths etc) and shade one part and write the fraction on each of them. Ask them to order them and explain to each other what they can see. Create a rule as a class: the bigger the denominator, the smaller the fraction.</li> <li>Using equal sized strips of paper ask children to fold them into equal parts and shade one part. With another piece of paper do the same amount of equal parts but shade 2 of them and so on. Ask them to order them and explain to each other what they can see. Create a rule as a class: when the denominator is the same, the bigger the numerator, the bigger the fraction.</li> </ul>



Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
<b>Fractions</b>	Solve problems that involve all of the above.	<ul style="list-style-type: none"> <li>• Use different concrete objects and pictorial representations to make <math>\frac{3}{6}</math></li>   <li>• Phil baked a chocolate and banana loaf. He ate <math>\frac{3}{6}</math> of it. Rich ate <math>\frac{2}{6}</math> of it. What amount of loaf was left?</li>   <li>• Fill in the missing boxes   <math display="block">\frac{1}{5} + \frac{2}{5} + \frac{2}{5} = \square</math> <math display="block">\frac{4}{7} - \frac{\square}{7} = \frac{5}{7} - \frac{5}{7}</math> <math display="block">\frac{1}{4} + \frac{2}{3} + \frac{\square}{\square} + \frac{1}{3} = 2</math> </li> </ul>	<ul style="list-style-type: none"> <li>• Raja has a number card.   <div style="border: 2px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center; font-size: 24px;">40</div>             He says, "Three eighths of my number is 20." Is he correct? Explain why.         </li>   <li>• Kate has a number card.   <div style="border: 2px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center; font-size: 24px;">?</div>             She says, "Three quarters of my number is 18." Her friend, Sally, says, "Six eighths of the same number is also 18."             What is the number on the card? Who is correct? Sally or Kate.         </li> </ul>	<ul style="list-style-type: none"> <li>• Three pandas shared 1 bamboo stick. They split it into equal parts and each had an odd number of parts. What are the possible fraction amounts that each panda had? Can you use a strategy or a method?</li> </ul> <div style="text-align: center; margin-top: 10px;">  </div>



Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
Measures	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).	<ul style="list-style-type: none"> <li>Use <math>&lt;</math>, <math>&gt;</math> or <math>=</math> to complete the statements below               <ul style="list-style-type: none"> <li>750g  0.8kg</li> <li>500ml  Half a litre</li> <li>17mm  2cm – 5mm</li> </ul> </li> <li>Penny bought 3 tins of beans from the shop. They each weighed 418g each. The bag weighed 5 grams. How heavy was the bag?</li> <li>A pack of strawberries weighing 226g and 2 jars of coffee, each weighing 480g, are put on the scale.               <div style="text-align: center;">  </div> <p>Draw an arrow to show the weight of the 3 items.</p> </li> </ul>	<ul style="list-style-type: none"> <li>Adam makes 2.5 litres of lemonade for a charity event. He pours it into 600ml glasses to sell. He thinks he can sell 7 glasses. Is he correct? Prove it.</li> <li>Here is a blue strip of paper.               <div style="text-align: center;">  </div> <p>An orange strip is 7 times longer.</p> <div style="text-align: center;">  </div> <p>The strips are joined end to end.</p> <div style="text-align: center;">  </div> <p>How long is the blue strip?</p> <p>How long is the orange strip?</p> <p>Show your working.</p> </li> </ul>	<ul style="list-style-type: none"> <li>In groups, children turn over a flashcard to reveal a length (e.g. 20cm). They use Play Do to create a stick of the length given. They do this through estimate then check by measuring. What is the difference between the smallest and largest Play Do stick?</li> <li>Using only 3 objects each time, try to get as close to 2kg as possible. Explain why you chose those objects. Work out how much more or how much less is needed to make it 2kg.</li> <li>Erik is making buns for 12 people. He follows this recipe for 6 people.               <ul style="list-style-type: none"> <li>65g caster sugar</li> <li>70g butter</li> <li>60g self-raising flour</li> <li>1 egg</li> </ul> <p>Sugar, butter and flour are all sold in 200g packs. Work out how much he will have left over of each.</p> <p>Does he have enough to make 6 more buns? 4 buns? 2 buns?</p> <div style="text-align: right;">  </div> </li> </ul>

Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
Measures	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	<ul style="list-style-type: none"> <li>Fill in the missing boxes  <math>0.5l + 250ml = 1500ml - \square</math>  <math>0.25l \times \square = 2l + 500ml</math></li> <li><math>3m - \square + 750cm = 2m</math>  <math>3.5kg + \square - 1.5kg = 3.5kg</math>  <math>0.2l + 0.8l - \square = 0.9l</math></li> <li>Adam, Danny and JoJo have 7kg worth of marbles to share. Adam receives double the amount Danny receives. Danny receives double the amount JoJo receives. How many kg of marbles do they each receive?</li> </ul>	<ul style="list-style-type: none"> <li><b>What's the pattern?</b> <ul style="list-style-type: none"> <li><math>2kg - \square + 250g = 1kg</math></li> <li><math>3kg - \square + 1.25kg = 1kg</math></li> <li><math>4kg - \square + 2.25kg = 1kg</math></li> </ul> </li> <li><b>What's the rule?</b>            There is 480ml in a container.            How much needs to be added to make 1l?            How much needs to be added to make 2l?            How much needs to be added to make 10l?         </li> <li>Here is a balance.              Here is another balance.              Work out the value of   </li> </ul>	<ul style="list-style-type: none"> <li>Simon runs 4 times further than Emma. Kelly runs 3.6m further than Simon. Kelly ran 48.6m. How far did Emma run?  </li> <li>Here are three blocks.              Each red block is 8cm long.            A green block is 6cm long.            How long is a blue block?         </li> </ul>



Domain	NC Objectives	Example tasks fluency	Example tasks reasoning	Example tasks problem solving
Measures	Continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1kg and 200g) and simple equivalents of mixed units (for example, 5m =500cm).	Complete practically	Complete practically	Complete practically