

**Unit 1**  
Counting, properties of numbers  
and number sequences

Three daily lessons

**Merseyside Consultants'  
Cluster Group**

**Year 2**  
Summer Term

This Unit Plan is designed to guide  
your teaching.

You will need to adapt it to meet the  
needs of your class.

**Unit Objectives**  
Year 2

- ?? Count on in steps of 3 to at least 30, from and back to zero.
- ?? Count on in steps of 4 to at least 40, from and back to zero.
- ?? Describe and extend number sequences.

**Resources needed to teach this unit:**

- ?? Bead Strings (teacher & pupil version)
- ?? Write-on number line
- ?? Multiples of 3 cards
- ?? Homework Sheet 1
- ?? Mini-motors, dinosaurs etc.
- ?? 'Post-it' notes
- ?? ITP – Number Grid
- ?? Resource Sheet 2.1
- ?? Pupils worksheet (Number Ladder)


**Link Objectives**

Year 1

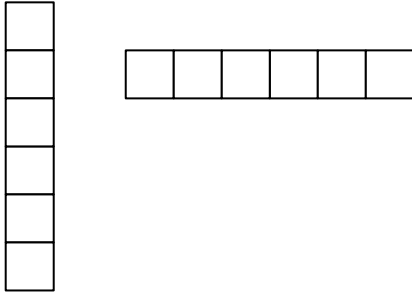
Year 3

- ?? Recognise odd and even numbers.
- ?? Count on in steps of 5 from zero to 20 or more and then back again.

- ?? Count on in steps of 2, 3, 4, 5, 10 and 100 from zero, and back again.
- ?? Describe and extend number sequences.

Planning Sheet	Day 1	Unit 1: Counting, properties of numbers and number sequences		Term: Summer	Year Group: 2																								
Oral and Mental		Main Teaching			Plenary																								
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions																									
		<p>?? <b>Count on in steps of 3 to at least 30, from and back to zero</b></p> <p>?? <b>Describe and extend number sequences</b></p> <p><b>Vocabulary:</b> Multiple Number sequence</p> <p><b>Resources:</b> Bead strings (teacher and pupil version). Write-on number line. Multiples of 3 cards. Homework sheet 1.</p>	<p><b>Whole class activity:</b></p> <p>Using a number line ask a volunteer to jump on from 0 in twos and record where they land with a marker pen.</p>  <p>0 1 2 3 4 5 6 7 8 .....</p> <p>Say the numbers together, then ask</p> <p><b>Q: What pattern have we made?</b> (Talk to 'maths partner' before taking suggestions)</p> <p>Repeat with steps of 3.</p> <p>Count round the class – pat, pat, clap – 1, 2, <b>3 (on clap)</b>, 4, 5, <b>6</b> ....continue to at least 30.</p> <p>Using a bead string horizontally, move beads 3 at a time, counting as you go – 3, 6, 9, 12 etc. Ask a volunteer to pick out the multiples of 3 and sequence them along a washing line. Read in unison from 0-30 and back again.</p> <p>Ask children to close eyes and remove several multiples of 3 from the washing line.</p> <p><b>Q: Can you see what numbers are missing?</b></p> <p><b>Explain how you know</b> (give children an opportunity to explain reasoning to their 'maths partner').</p> <p><b>Group activity:</b></p> <p>Give each pair a set of cards with the multiples of 3 on them. Children take turns to order the cards and turn up to 3 over whilst their partner looks away. Partner has to identify the numbers turned over. Children should play several times, shuffling the cards between each turn.</p> <p>Repeat ordering from 30-0.</p>	<p>Draw the following number ladders (leave blank until using the ladder itself).</p> <table border="1" data-bbox="1758 422 2094 710"> <tr> <td>9</td> <td></td> <td>18</td> <td>30</td> </tr> <tr> <td>12</td> <td></td> <td>15</td> <td>27</td> </tr> <tr> <td>15</td> <td></td> <td>12</td> <td>24</td> </tr> <tr> <td></td> <td>30</td> <td></td> <td></td> </tr> <tr> <td></td> <td>33</td> <td></td> <td></td> </tr> <tr> <td></td> <td>36</td> <td></td> <td></td> </tr> </table> <p>Put 9, 12, 15 in the first ladder and ask:</p> <p><b>Q: What comes next in this sequence? How do you know?</b></p> <p>Encourage the children to explain using vocabulary such as, multiple of 3, sequence etc. Repeat for all ladders.</p> <p>Give out Homework sheet 1.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>By the end of the lesson children should be able to:</b></p> <ul style="list-style-type: none"> <li><del>✓</del> Count in steps of 3 forwards and backwards from 0</li> <li><del>✓</del> Complete sequences</li> </ul> </div>		9		18	30	12		15	27	15		12	24		30				33				36		
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Planning Sheet	Day 2	Unit 1: Counting, properties of numbers and number sequences	Term: Summer	Year Group: 2
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions
		<p>?? <b>Count on in steps of 4 to at least 40, from and back to zero</b></p> <p>?? <b>Describe and extend number sequences</b></p> <p><b>Vocabulary:</b> Multiples sequences</p> <p><b>Resources:</b> Mini-motors, dinosaurs etc. 'Post-it' notes</p>	<p><b>Whole class activity:</b> Using a collection of objects with 4 legs or wheels etc. (mini-motors, dinosaurs or similar).</p> <p>Invite a volunteer to take a handful and arrange them in a line.</p> <p><b>Q: How many motors are there here?</b> <b>Q: How many wheels are there altogether?</b> <b>Q: How do you know?</b></p> <p>Spend one minute to allow children to discuss in pairs. Invite suggestions.</p> <p>(Encourage children to count other than in ones).</p> <p><b>Q: Did you need to count each wheel?</b> <b>Q: Is there a quicker way?</b></p> <p>Establish counting in 4's would be useful.</p> <p>Count around the circle in 4's, each child to say next 4 numbers (add actions, such as, knee, knee, click, click). Ask a volunteer to write down the last number said by each child (4, 8, 12 etc).</p> <p>Invite a volunteer to take a small number of cars and try counting together the number of wheels in 4's – repeat several times.</p> <p>Display multiples of 4, invite a volunteer to choose one and count back from that number in multiples of 4 to 0.</p> <p><b>Group activity:</b> Provide each pair with a collection with 4 as an attribute (at least 10 of each) e.g. squares (4 corners), bears (4 paws), animals (4 legs). Get children to take a handful for their partner to count in 4's and record final number on a post-it. Repeat several times and order the post-its from lowest to highest</p> <p><b>Challenge:</b> Order 'Post-it's from highest to lowest and identify missing multiples.</p>	<p>Using number cards (some multiples of 4 others not) hold up cards one at a time.</p> <p>Children respond with thumbs up (for multiples of 4) thumbs down (not a multiple of 4).</p> <p>Sort numbers by putting multiples of 4 inside a circle on the board and others outside the circle.</p> <p>Order the multiples of 4 used and use to practice counting on and back to 0.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>By the end of the lesson children should be able to:</b></p> <ul style="list-style-type: none"> <li><del>✍</del> Count on in 4's to at least 40 to and from 0.</li> <li><del>✍</del> Recognise and order multiples of 4.</li> </ul> </div>

Planning Sheet	Day 3	Unit 1: Counting, properties of numbers and number sequences	Term: Summer	Year Group: 2
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/Focus Questions
		<p>?? <b>Count on in steps of 3 and 4, from and back to zero</b></p> <p>?? <b>Describe and extend number sequences</b></p> <p><b>Vocabulary:</b> Sequences Multiple</p> <p><b>Resources:</b> ITP – Number Grid Large laminated number ladder – Resource Sheet 2.1 Pupils worksheet (Number ladder)</p>	<p><b>Whole class activity:</b></p> <p>Using ITP or 100 square highlight any 3 consecutive multiples of 3 e.g. 9, 12, 15 ... invite a volunteer to highlight the next three and explain their thinking. (Look for responses such as, "It's counting in 3's" "Multiples of 3" "There are 2 squares between each number" etc.)</p> <p>Repeat for other sequences involving multiples of 3 or 4.</p> <p>Using laminated number ladder (horizontally or vertically) add consecutive multiples of 2, 3, 4 or 5. Challenge children to describe and extend the sequence.</p> <p>Ask: <b>Q. Can you describe the pattern? Is it getting higher or lower? What comes after / before this number?</b></p> <p>Repeat several times, including multiples of 3 and 4.</p>  <p><b>Group activity:</b></p> <p>Children to work individually or in pairs on worksheet with similar ladders, completing each sequence. (Resource Sheet 2.1)</p>	<p>Invite a volunteer to highlight the multiples of 3 on 'Number Grid' ITP (or on a 100 square).</p> <p>Invite a second volunteer to highlight the multiples of 4.</p> <p>Ask: <b>Q. What do you notice? Why do you think some numbers are highlighted twice? What can you tell me about those numbers?</b></p> <p>(Give children time to discuss each point before moving on to the next question. Can children see that some numbers are multiples of 3 and 4?).</p> <p>Invite children to give three consecutive multiples of 3 or 4. Can a second child continue the sequence?</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>By the end of the lesson children should be able to:</b></p> <ul style="list-style-type: none"> <li><del>///</del> Count on in steps of 3 and 4 to and back to zero?</li> <li><del>///</del> Describe a number sequence.</li> <li><del>///</del> Extend a number sequence.</li> </ul> </div>

# Resource Sheet 2.1

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Homework Sheet 1

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12

21
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24



