
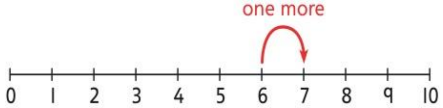
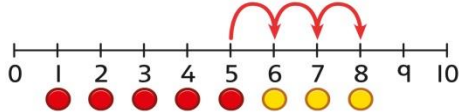

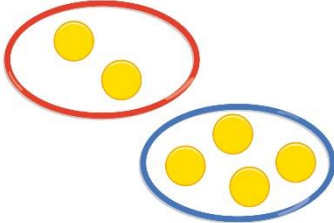
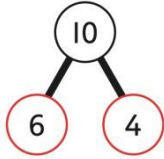


## Year 1

	Concrete	Pictorial	Abstract
<b>Year 1 Addition</b>	<p><b>Counting and adding more</b> Children add one more person or object to a group to find one more.</p>	<p><b>Counting and adding more</b> Children add one more cube or counter to a group to represent one more.</p>  <p><i>One more than 4 is 5.</i></p>	<p><b>Counting and adding more</b> Use a number line to understand how to link counting on with finding one more.</p>  <p><i>One more than 6 is 7. 7 is one more than 6.</i></p> <p>Learn to link counting on with adding more than one.</p>  <p><math>5 + 3 = 8</math></p>
	<p><b>Understanding part-part-whole relationship</b> Sort people and objects into parts and understand the relationship with the whole.</p>  <p><i>The parts are 2 and 4. The whole is 6.</i></p>	<p><b>Understanding part-part-whole relationship</b> Children draw to represent the parts and understand the relationship with the whole.</p>  <p><i>The parts are 1 and 5. The whole is 6.</i></p>	<p><b>Understanding part-part-whole relationship</b> Use a part-whole model to represent the numbers.</p>  <p><math>6 + 4 = 10</math></p> <p><math>6 + 4 = 10</math></p>

**Knowing and finding number bonds within 10**  
Break apart a group and put back together to find and form number bonds.

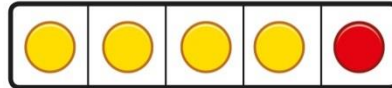


$$3 + 4 = 7$$

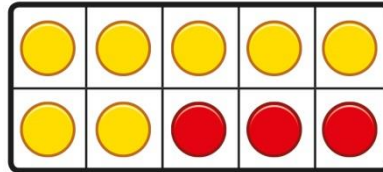


$$6 = 2 + 4$$

**Knowing and finding number bonds within 10**  
Use five and ten frames to represent key number bonds.

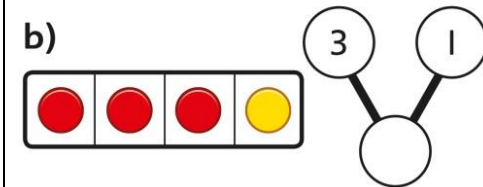
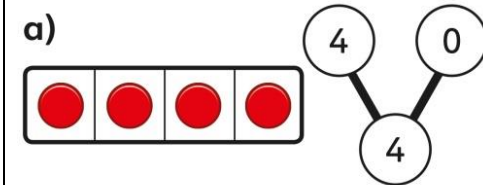


$$5 = 4 + 1$$



$$10 = 7 + 3$$

**Knowing and finding number bonds within 10**  
Use a part-whole model alongside other representations to find number bonds. Make sure to include examples where one of the parts is zero.



$$4 + 0 = 4$$

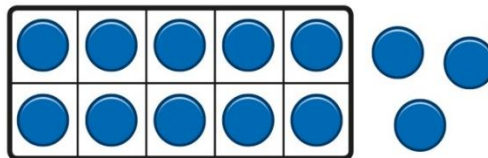
$$3 + 1 = 4$$

**Understanding teen numbers as a complete 10 and some more**  
Complete a group of 10 objects and count more.



*13 is 10 and 3 more.*

**Understanding teen numbers as a complete 10 and some more**  
Use a ten frame to support understanding of a complete 10 for teen numbers.

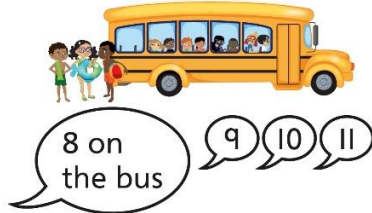


*13 is 10 and 3 more.*

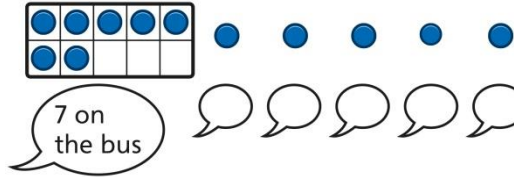
**Understanding teen numbers as a complete 10 and some more.**

*1 ten and 3 ones equal 13.*  
 $10 + 3 = 13$

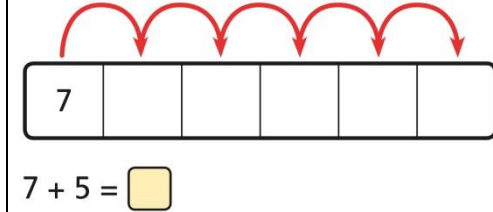
**Adding by counting on**  
Children use knowledge of counting to 20 to find a total by counting on using people or objects.



**Adding by counting on**  
Children use counters to support and represent their counting on strategy.



**Adding by counting on**  
Children use number lines or number tracks to support their counting on strategy.



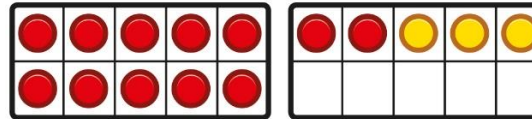
**Adding the 1s**  
Children use bead strings to recognise how to add the 1s to find the total efficiently.



$$2 + 3 = 5$$

$$12 + 3 = 15$$

**Adding the 1s**  
Children represent calculations using ten frames to add a teen and 1s.



$$2 + 3 = 5$$

$$12 + 3 = 15$$

**Adding the 1s**  
Children recognise that a teen is made from a 10 and some 1s and use their knowledge of addition within 10 to work efficiently.

$$3 + 5 = 8$$

$$\text{So, } 13 + 5 = 18$$

## Year 1 Subtraction

### Counting back and taking away

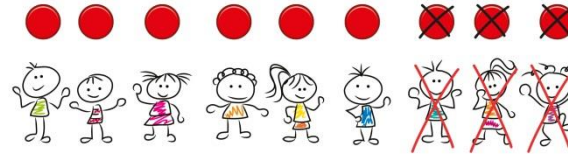
Children arrange objects and remove to find how many are left.



1 less than 6 is 5.  
6 subtract 1 is 5.

### Counting back and taking away

Children draw and cross out or use counters to represent objects from a problem.

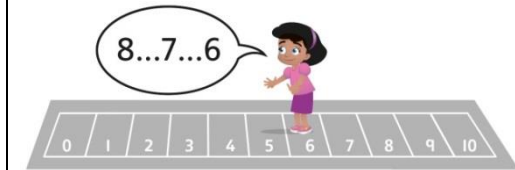


$$9 - \square = \square$$

There are  children left.

### Counting back and taking away

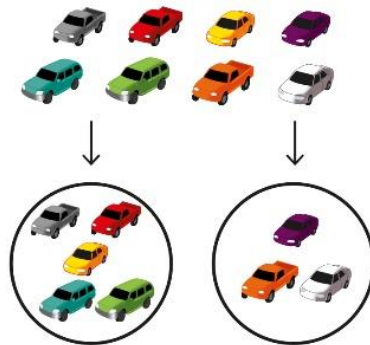
Children count back to take away and use a number line or number track to support the method.



$$9 - 3 = 6$$

### Finding a missing part, given a whole and a part

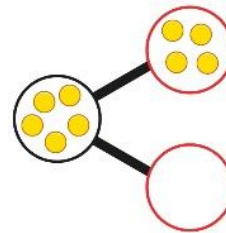
Children separate a whole into parts and understand how one part can be found by subtraction.



$$8 - 5 = ?$$

### Finding a missing part, given a whole and a part

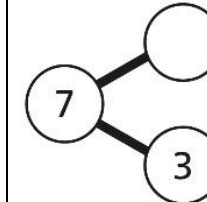
Children represent a whole and a part and understand how to find the missing part by subtraction.



$$5 - 4 = \square$$

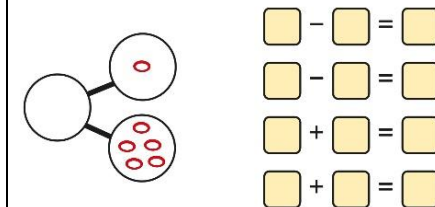
### Finding a missing part, given a whole and a part

Children use a part-whole model to support the subtraction to find a missing part.



$$7 - 3 = ?$$

Children develop an understanding of the relationship between addition and subtraction facts in a part-whole model.



$$\begin{array}{l} \square - \square = \square \\ \square - \square = \square \\ \square + \square = \square \\ \square + \square = \square \end{array}$$

### Finding the difference

Arrange two groups so that the difference between the groups can be worked out.



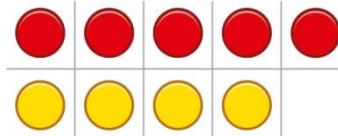
8 is 2 more than 6.

6 is 2 less than 8.

The difference between 8 and 6 is 2.

### Finding the difference

Represent objects using sketches or counters to support finding the difference.

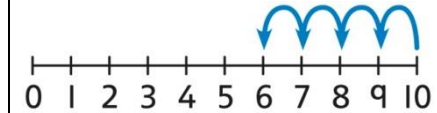


$$5 - 4 = 1$$

The difference between 5 and 4 is 1.

### Finding the difference

Children understand 'find the difference' as subtraction.



$$10 - 4 = 6$$

The difference between 10 and 6 is 4.

### Subtraction within 20

Understand when and how to subtract 1s efficiently.

Use a bead string to subtract 1s efficiently.

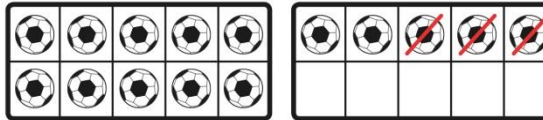


$$5 - 3 = 2$$

$$15 - 3 = 12$$

### Subtraction within 20

Understand when and how to subtract 1s efficiently.



$$5 - 3 = 2$$

$$15 - 3 = 12$$

### Subtraction within 20

Understand how to use knowledge of bonds within 10 to subtract efficiently.

$$5 - 3 = 2$$

$$15 - 3 = 12$$

### Subtracting 10s and 1s

For example:  $18 - 12$

Subtract 12 by first subtracting the 10, then the remaining 2.

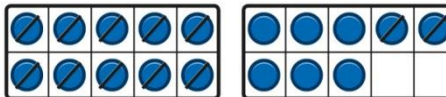


First subtract the 10, then take away 2.

### Subtracting 10s and 1s

For example:  $18 - 12$

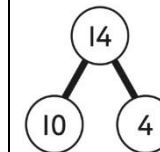
Use ten frames to represent the efficient method of subtracting 12.



First subtract the 10, then subtract 2.

### Subtracting 10s and 1s

Use a part-whole model to support the calculation.





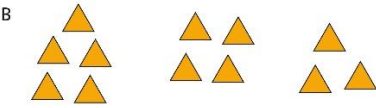

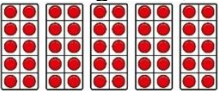
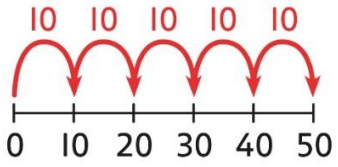




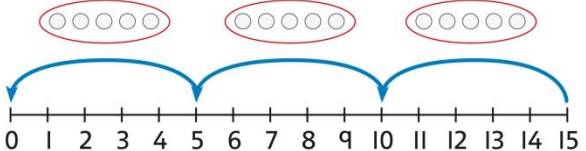
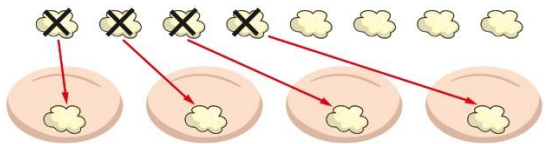
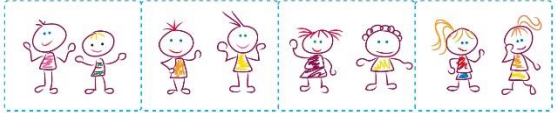
$$19 - 14$$

$$19 - 10 = 9$$

$$9 - 4 = 5$$

$$\text{So, } 19 - 14 = 5$$

<p><b>Year 1 Multiplication</b></p>	<p><b>Recognising and making equal groups</b> Children arrange objects in equal and unequal groups and understand how to recognise whether they are equal.</p> <p>A  B  C </p>	<p><b>Recognising and making equal groups</b> Children draw and represent equal and unequal groups.</p> <p>A  B </p>	<p><b>Describe equal groups using words</b></p> <p><i>Three equal groups of 4. Four equal groups of 3.</i></p>																																																		
	<p><b>Finding the total of equal groups by counting in 2s, 5s and 10s</b></p> <p></p> <p>There are 5 pens in each pack ... 5...10...15...20...25...30...35...40...</p>	<p><b>Finding the total of equal groups by counting in 2s, 5s and 10s</b> 100 squares and ten frames support counting in 2s, 5s and 10s.</p> <p></p> <table border="1" data-bbox="958 778 1220 917"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</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>28</td><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr> <tr><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td></tr> </table>	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	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	<p><b>Finding the total of equal groups by counting in 2s, 5s and 10s</b> Use a number line to support repeated addition through counting in 2s, 5s and 10s.</p> <p></p>
1	2	3	4	5	6	7	8	9	10																																												
11	12	13	14	15	16	17	18	19	20																																												
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31	32	33	34	35	36	37	38	39	40																																												
41	42	43	44	45	46	47	48	49	50																																												

<p><b>Year 1 Division</b></p>	<p><b>Grouping</b> Learn to make equal groups from a whole and find how many equal groups of a certain size can be made.</p> <p>Sort a whole set people and objects into equal groups.</p>  <p><i>There are 10 children altogether. There are 2 in each group. There are 5 groups.</i></p>	<p><b>Grouping</b> Represent a whole and work out how many equal groups.</p>  <p><i>There are 10 in total. There are 5 in each group. There are 2 groups.</i></p>	<p><b>Grouping</b> Children may relate this to counting back in steps of 2, 5 or 10.</p> 
	<p><b>Sharing</b> Share a set of objects into equal parts and work out how many are in each part.</p> 	<p><b>Sharing</b> Sketch or draw to represent sharing into equal parts. This may be related to fractions.</p> 	<p><b>Sharing</b> <i>10 shared into 2 equal groups gives 5 in each group.</i></p>