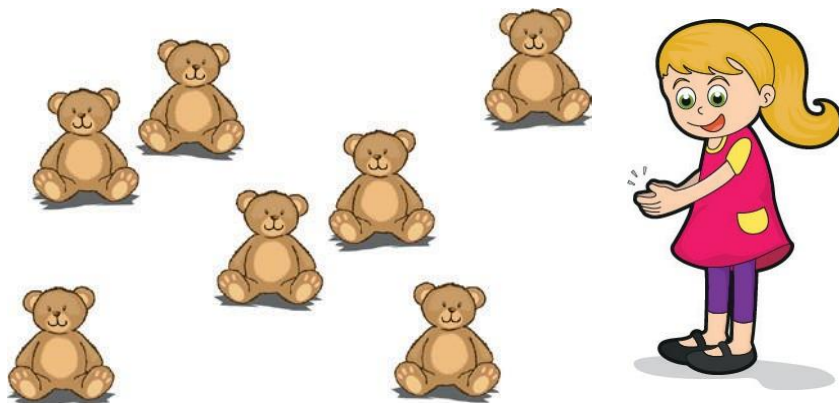


Overview of strategies and methods – Counting

Reception

How many in a set?



Seven hand claps

Estimate, and encourage estimation, within a range



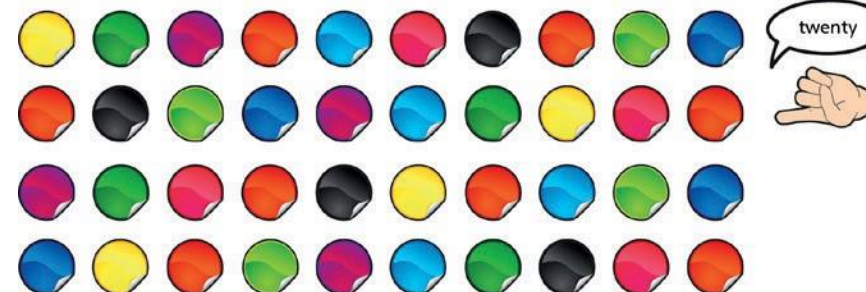
Year 1

How many in a set?

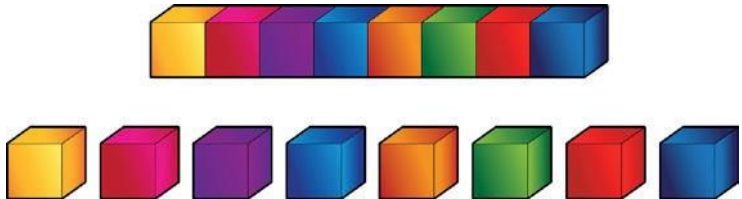
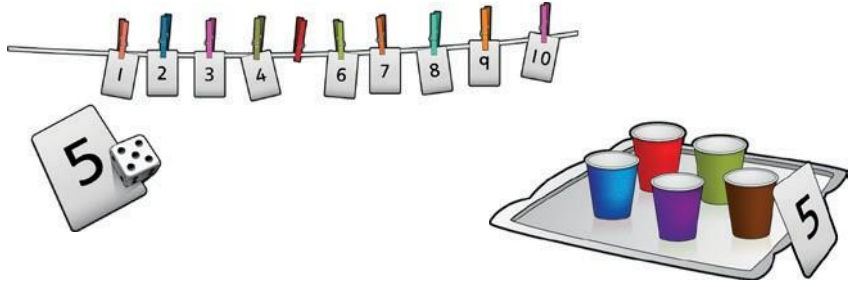

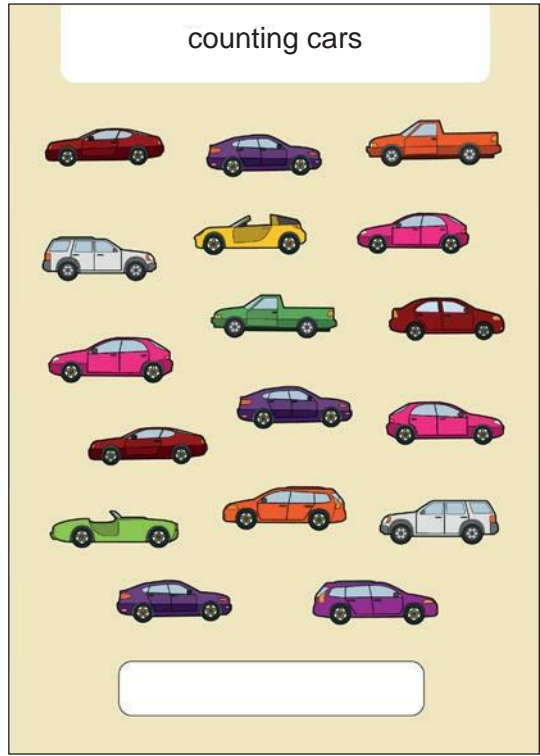
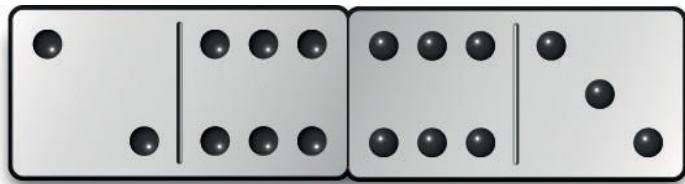
Estimate, and encourage estimation, within a range



Count a large set of objects in 2s, 5s or 10s



Overview of strategies and methods – Counting

	Reception	Year 1
Counting	<p>Count, matching one-to-one</p>  <p>Conservation of number Match numerals to a set of objects, sounds or images</p>  <p>Subitise</p>  <p><i>e.g. know there are 4 without counting</i></p>	<p>Match numerals to a set of objects, sounds or images</p>  <p>Subitise <i>e.g. know there are 6 without counting</i></p> 

Overview of strategies and methods – Counting

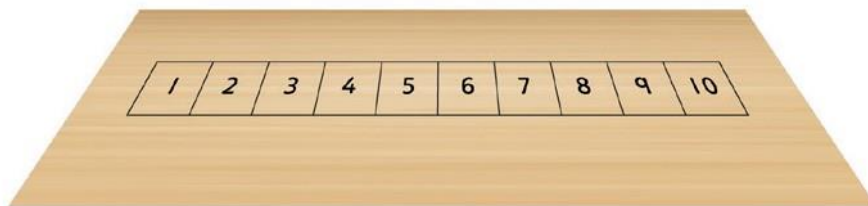
Reception

Numbers in a line or sequence

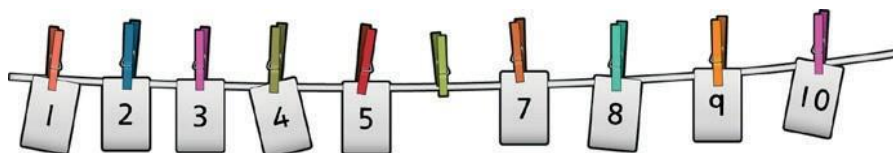
Recognise numerals



Count along a number line or track



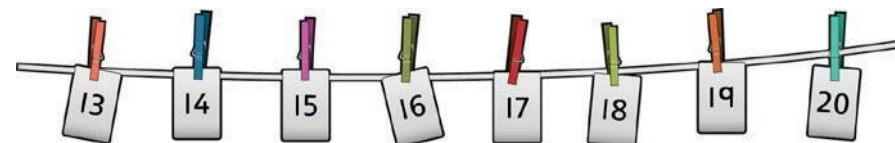
Spot missing numbers in the line



Year 1

Numbers in a line or sequence

Recognise numerals



Count along a 100-square, spotting missing numbers

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
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

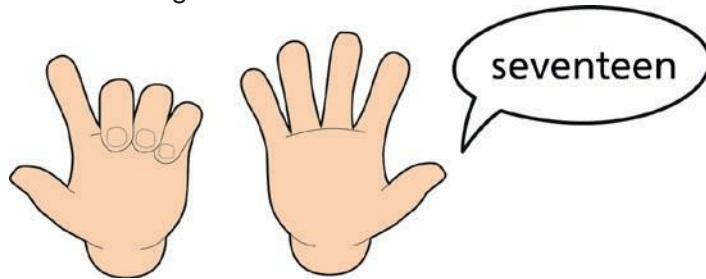
Overview of strategies and methods – Counting

Counting

Reception

Chant numbers in order to 10 and 20

Match the units to fingers



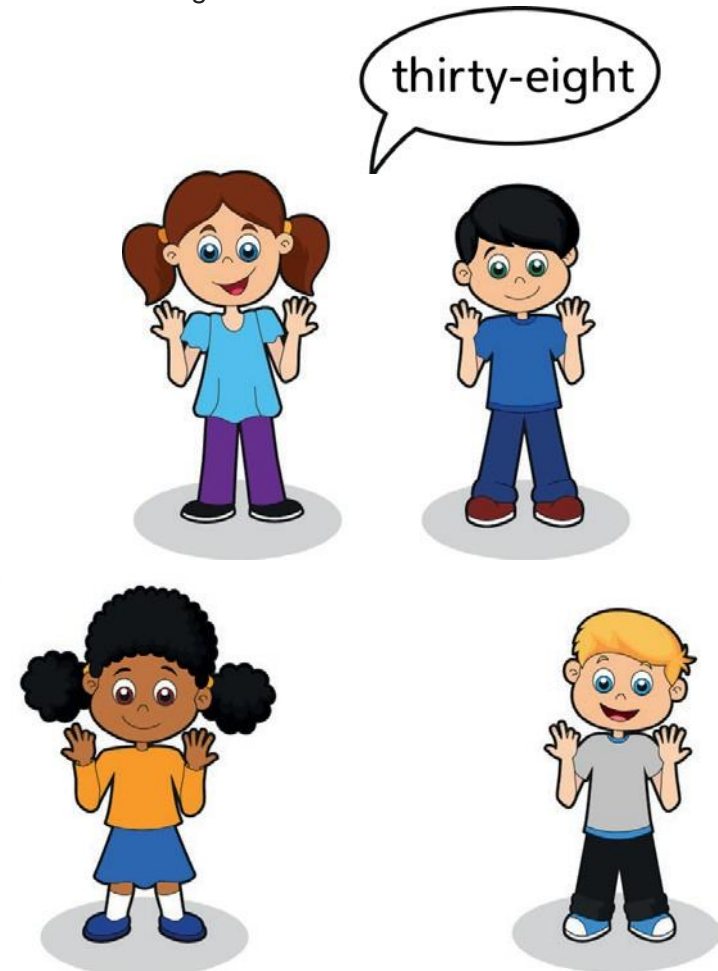
Chant numbers in order to 100

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
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

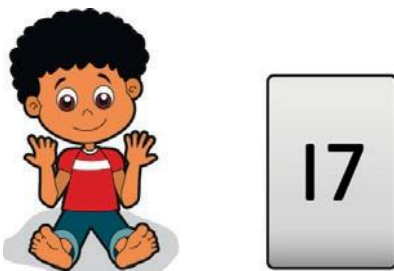
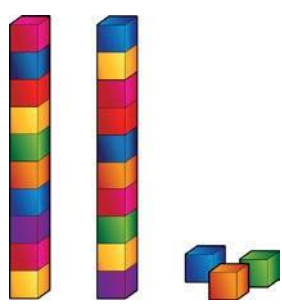
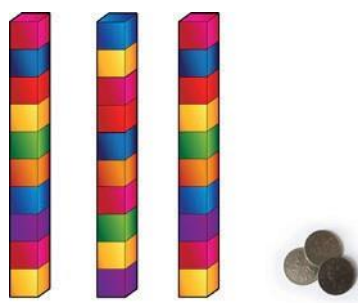




Year 1

Chant numbers in order to 100

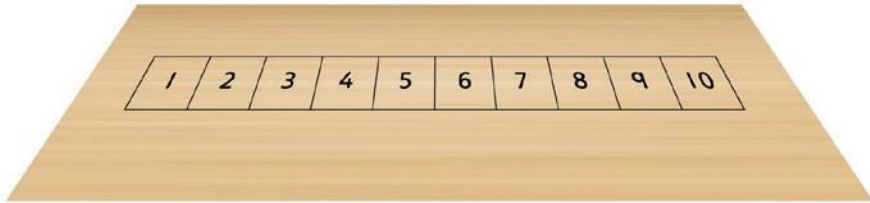

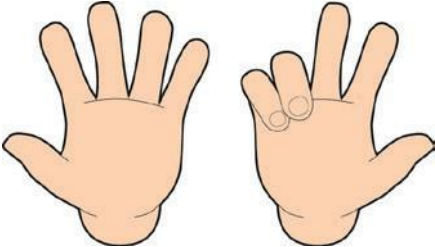




Match the units to fingers








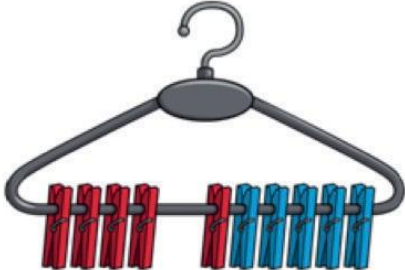
Overview of strategies and methods – Counting

	Reception	Year 1																																																																																																				
Counting	<div><div>Place value</div><div>Understand 'teen' numbers (10 to 20)</div><div></div><div>Begin to recognise 2-digit numbers</div><div></div><div>Begin to count in 10s</div><div></div></div>	<div><div>Place value</div><div>Understand 'teen' numbers (10 to 20)</div><div></div><div></div><div>Recognise place value in 2-digit numbers</div><div></div><div></div><div><table><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><tr><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td></tr><tr><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td></tr><tr><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td></tr><tr><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td></tr><tr><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td></tr></table></div></div>	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	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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91	92	93	94	95	96	97	98	99	100																																																																																													

Overview of strategies and methods – Addition

	Reception	Year 1									
Addition	<p>Counting on</p> <p>Count on one more, saying the next number</p>  <div> $7 + 1 = 8$ </div> <p>Count on 2 or 3 or 4 more from any number up to 10</p>   <div> $5 + 3 = 8$ </div>	<p>Using place value</p> <p>Count in 1s e.g. $45 + 1$</p> <p>Count in 10s e.g. $45 + 10$ without counting on in 1s</p> <table border="1"> <tr> <td>34</td><td>35</td><td>36</td></tr> <tr> <td>44</td><td></td><td>46</td></tr> <tr> <td>54</td><td>55</td><td>56</td></tr> </table> <p>Add 10 to any given 2-digit number</p> <p>Counting on</p> <p>Count on in 1s e.g. $8 + 3$ as 8, 9, 10, 11</p> <p>Add, putting the larger number first Count on in 10s e.g. $45 + 20$ as 45, 55, 65</p> 	34	35	36	44		46	54	55	56
34	35	36									
44		46									
54	55	56									

Overview of strategies and methods – Addition

	Reception	Year 1
Addition	<p>Number bonds</p> <p>Subitise</p>  <p>Split sets into bonds</p>   <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> $4 + 2 = 6$ </div>  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> $4 + 3 = 7$ </div> <p>Make small amounts</p> 	<p>Using number facts</p> <p>'Story' of 4, 5, 6, 7, 8 and 9 e.g. $7 = 7 + 0$, $6 + 1$, $5 + 2$, $4 + 3$</p> <p>Number bonds to 10 e.g. $5 + 5$, $6 + 4$, $7 + 3$, $8 + 2$, $9 + 1$, $10 + 0$</p>  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> $4 + 6 = 10$ </div> <p>Use patterns based on known facts when adding e.g. $4 + 3 = 7$ so we <i>know</i> $24 + 3$, $44 + 3$, $74 + 3$</p>

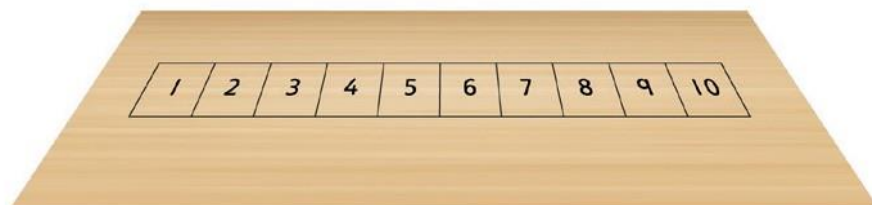
Overview of strategies and methods – Subtraction

Subtraction

Reception

Counting back

Count back 1 less, saying the number before



$$7 - 1 = 6$$

Take away 2 or 3 or 4 from any number up to 10



$$5 - 2 = 3$$



$$7 - 1 = 6$$

Year 1

Using place value

Count back in 1s

e.g. know $53 - 1$

Count back in 10s

e.g. know $53 - 10$ without counting back in 1s

32	33	34
42	43	44
52	53	54

Taking away

Count back in 1s

e.g. $11 - 3$ as 11, 10, 9, 8





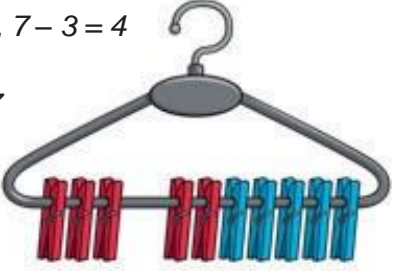
e.g. $14 - 3$ as 14, 13, 12, 11

Count back in 10s

e.g. $53 - 20$ as 53, 43, 33



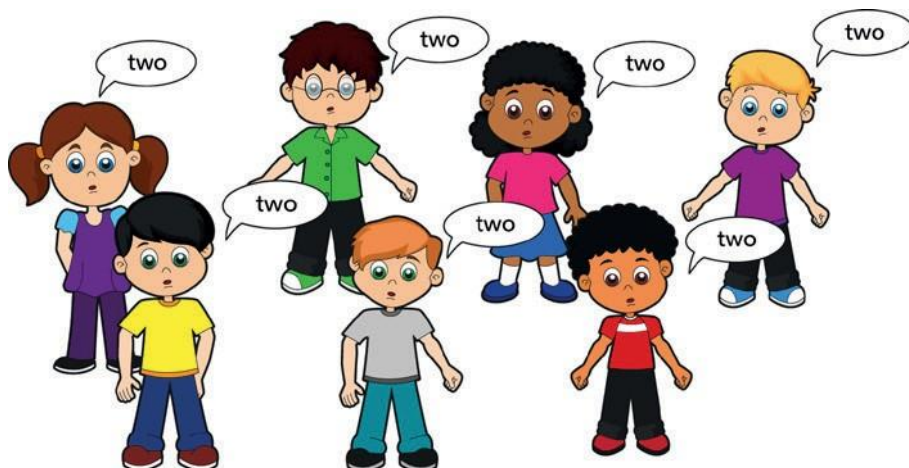
Overview of strategies and methods – Subtraction

	Reception	Year 1
Subtraction	<p>Number bonds</p> <p>Subitise</p>  <p>Split sets into bonds</p>  <div> $6 - 2 = 4$ </div>  <div> $7 - 4 = 3$ </div>  <p>Use money</p>	<p>Using number facts</p> <p>'Story' of 4, 5, 6, 7, 8 and 9 e.g. 'Story' of 7 is $7 - 1 = 6$, $7 - 2 = 5$, $7 - 3 = 4$</p> <p>Number bonds to 10 e.g. $10 - 1 = 9$, $10 - 2 = 8$, $10 - 3 = 7$</p>  <div> $10 - 7 = 3$ </div> <p>Subtract using patterns of known facts e.g. $7 - 3 = 4$ so we know $27 - 3 = 24$, $47 - 3 = 44$, $77 - 3 = 74$</p>

Reception

Counting in steps ('clever counting')

Begin to count in 2s



Two, four, six...

Begin to count in 5s



Five, ten, fifteen, twenty...

Begin to count in 10s

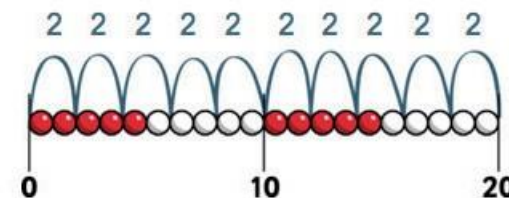


Ten, twenty, thirty...

Year 1

Counting in steps ('clever counting')

Counting in 2s



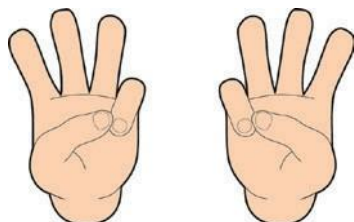
Count in 10s

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
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Reception

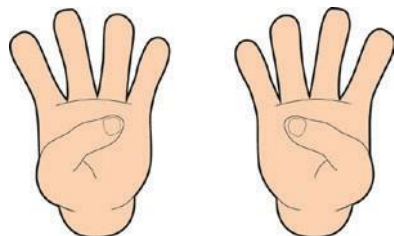
Doubling and halving

Double numbers to 5



Double 3 is 6

Halve even numbers to 10



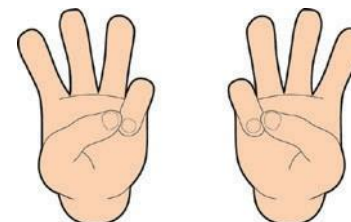
Half of 8 is 4

Year 1

Doubling and halving

Find doubles to double 5 using fingers

e.g. double 3



Find half of even numbers up to 12, including realising that it is hard to halve an odd number

Reception

Sharing

Share multiples of 2 and 4 into halves and quarters

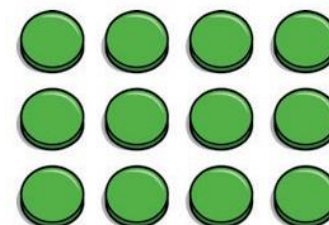
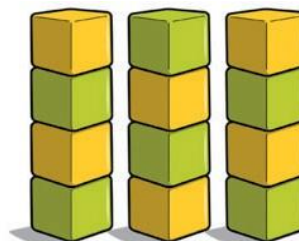


Year 1

Grouping

Begin to use visual and concrete arrays and sets of objects to find the answers to 'three lots of four' or 'two lots of five'

e.g. three lots of four



Begin to use visual and concrete arrays and sets of objects to find the answers to questions such as 'How many towers of three can I make with twelve cubes?'

Sharing

Begin to find half of a quantity using sharing

e.g. find half of 16 cubes by giving one each repeatedly to two children

