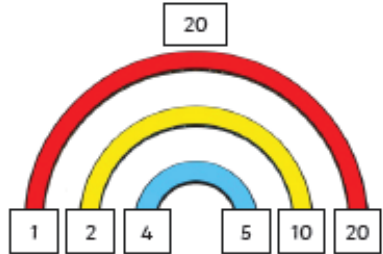
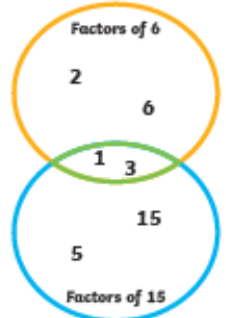



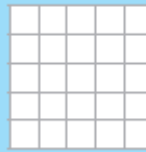
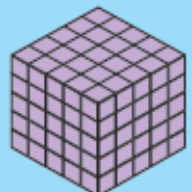


Key Vocabulary
multiply
groups of
lots of
times
divide
share
remainder
factor
multiple
product
prime
composite
powers
squared
cubed

Factors	Prime Numbers								
<p>A factor is a number that divides into another number exactly, without leaving a remainder.</p>  <p>The factors of 20 are 1, 2, 4, 5, 10 and 20.</p> <p>The factor pairs are: 1 and 20 2 and 10 4 and 5</p> <p>A common factor is a factor of 2 or more numbers.</p> 									
Squared ² and Cubed ³ Numbers	Related Calculations								
 $2^2 = 4$ $2 \times 2 = 4$  $2^3 = 8$ $2 \times 2 \times 2 = 8$  $5^2 = 25$ $5 \times 5 = 25$  $5^3 = 125$ $5 \times 5 \times 5 = 125$	<table border="1"> <tr> <td>$8 \times 9 = 72$</td> <td>$9 \times 8 = 72$</td> </tr> <tr> <td>$80 \times 9 = 720$</td> <td>$90 \times 8 = 720$</td> </tr> <tr> <td>$72 \div 9 = 8$</td> <td>$72 \div 8 = 9$</td> </tr> <tr> <td>$720 \div 9 = 80$</td> <td>$720 \div 8 = 90$</td> </tr> </table>	$8 \times 9 = 72$	$9 \times 8 = 72$	$80 \times 9 = 720$	$90 \times 8 = 720$	$72 \div 9 = 8$	$72 \div 8 = 9$	$720 \div 9 = 80$	$720 \div 8 = 90$
$8 \times 9 = 72$	$9 \times 8 = 72$								
$80 \times 9 = 720$	$90 \times 8 = 720$								
$72 \div 9 = 8$	$72 \div 8 = 9$								
$720 \div 9 = 80$	$720 \div 8 = 90$								

Short Multiplication					Long Multiplication				
$2543 \times 7 = 17\ 801$					$2543 \times 67 = 170\ 381$				
2	5	4	3		2	5	4	3	
x				7	x		6	7	
1	7	8	0	1	1	7	8	0	1
1	3	3	2		1	3	3	2	
1	7	8	0	1	1	5	2	5	8
					1	3	2	1	
					1	7	0	3	8
					1	1			

Remember to move any regrouped digits into the next column. After the next multiplication, add the regrouped number to the answer.

Before multiplying by the number in the tens column, remember to use zero as a placeholder because the 6 in 67 is 6 tens (60).

Division
$136 \div 4 = 34$

3	4		
4	1	3	6
-	1	2	0
		1	6
	-	1	6
			0

→ 30 × 4

→ 4 × 4

Short Division				
3	8			
4	1	5	2	

$15 \div 4 = 3$ remainder 3
Remember to regroup any remainders and move them into the next column.

$28 \div 5 = 5$ remainder 3
If your calculation has a remainder, remember to record it in the answer using the letter r.