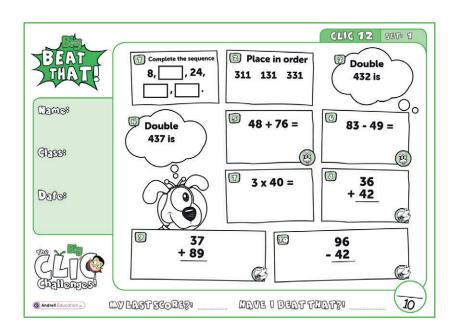


# A Guide for Home Learning

In school, each week, children complete a CLIC challenge. The answers that they provide tell their teacher what skils they understand and allow teachers to focus on teaching the skills that they don't (as well as new skills that will be taught). If your child completes their challenges online at school, you may have been sent a link to log on at home. This pupil log on only allows children to complete one challenge a week. We are currently building a new pupil area, which will help with home learning.



This guide provides you with a copy of a CLIC challenge, a description of the skill each question is challenging and some sample resources for each question to help with home learning. (A description of each of these resources is on the next page.) The key is to keep it fun, no pressure and limit the time to less than 20 minutes a day, unless your child wants to carry on!

Please seek and follow advice from your child's teacher and school!

# What skill does each question challenge?

Question 1 I can partition a 1dp number

Question 2 I can understand 3d numbers

Question 3 I can double 3d numbers

Question 4 I can write Smile Multiplication Fact Families

Question 5 I can solve 3d + 3d

Question 6 I can solve 1d x 2d (2, 3, 4, 5x tables)

Question 7 I can combine 2 or more Tables Facts to solve division (with remainders) (2, 3, 4, 5x tables)

Question 8 I can solve any 3d + 3d

Question 9 I can solve a 2d x 1d

Question 10 I can solve a 2d  $\div$  1d (using x2, 3, 4, 5) with no remainders inside the question

### Remember To's

Every step of learning (skill) in Big Maths has 'Remember to...'s. These are simple reminders for children to 'Remember to' do this, this, etc...

In Big Maths, we have divided complicated skills into small steps, provided 'Remember to...'s and examples to keep it simple for children.

A Progress Drive is a collection of skill steps that progress a child's learning to the point of mastering the larger objective.

### **Repeat Sheets**

Repeat sheets contain a number of questions (usually 10) that you can use for repeat practice of a particular step. Please feel free to create your own repeat questions to avoid children simply memorising the questions and answers.

# **Revisit Sheets**

Revisit sheets contain a number of questions (usually 10) that you can use which include a unit of measure applied to the numbers (It's Nothing New!) of a particular step. Please feel free to create your own revisit questions to avoid children simply memorising the questions and answers.

### **Real Life Maths Sheets**

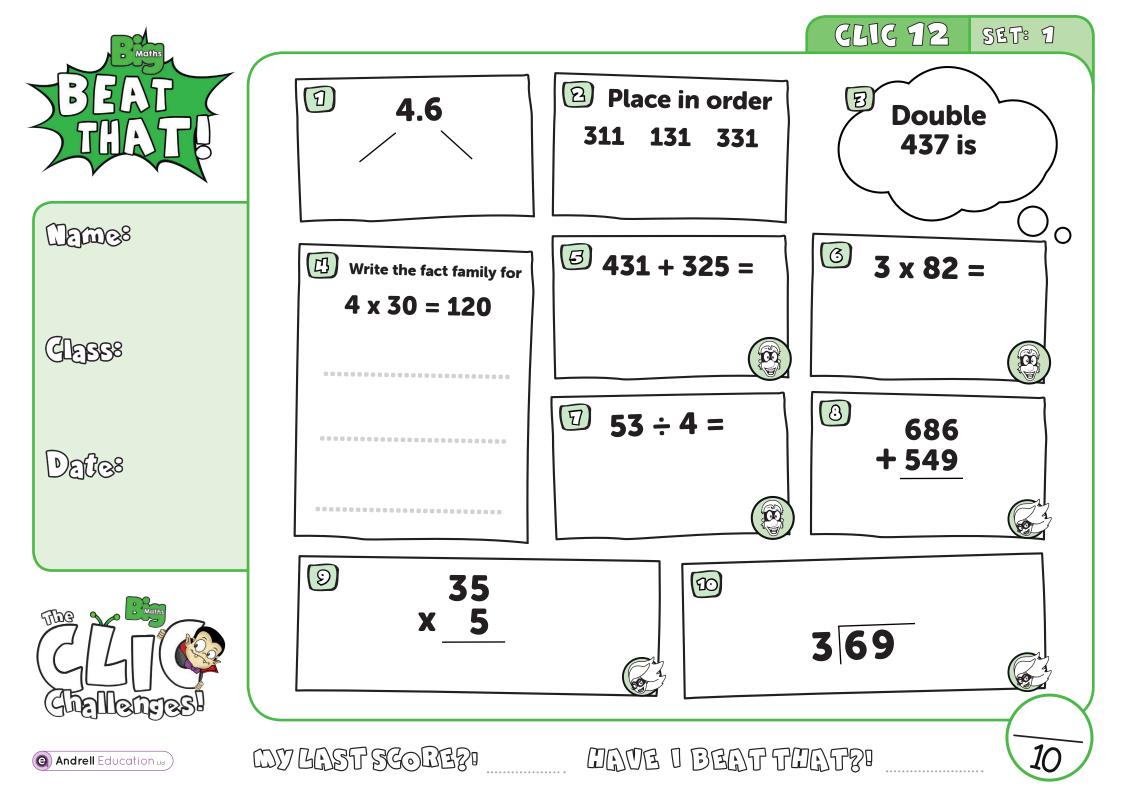
Real Life Maths sheets contain a number of questions (usually 5) where the questions have been placed into worded scenarios for a particular step, increasing the complexity and challenge further. Please feel free to create your own real life maths questions to avoid children simply memorising the questions and answers.

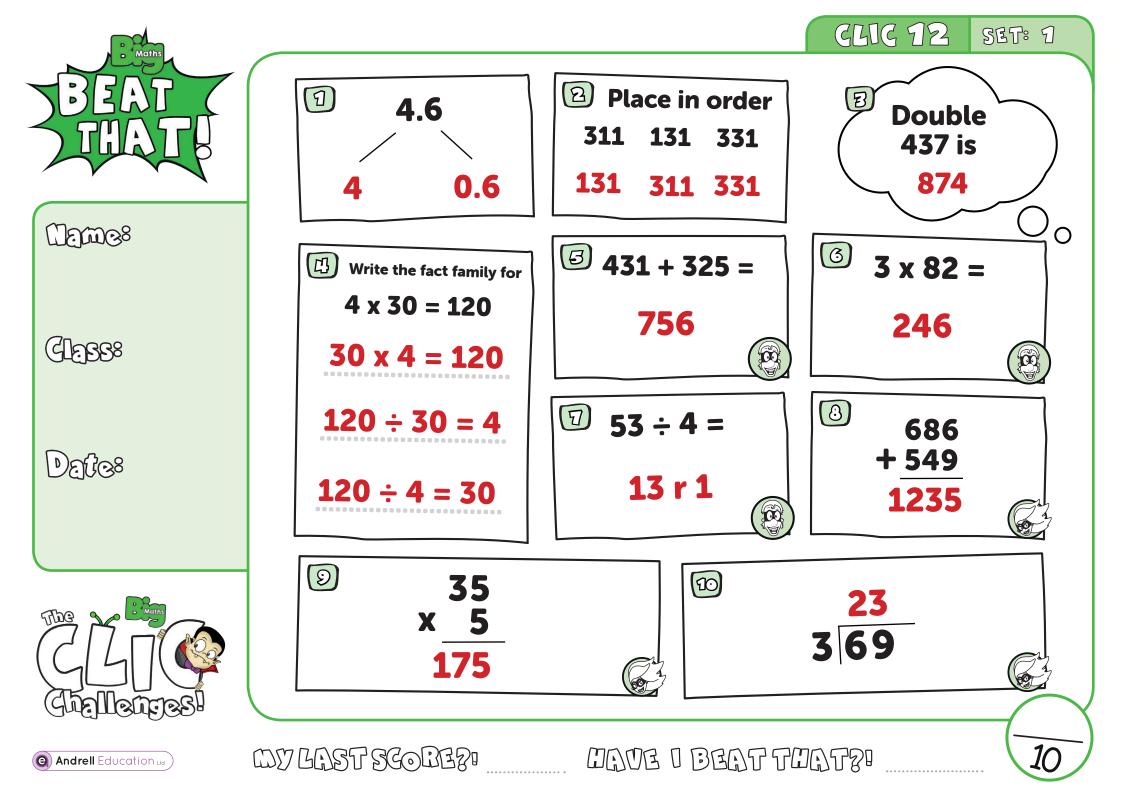
# Select Sheets

Select sheets contain a number of worded questions (usually 5) which no longer automatically relate to the step we are on. These increase the complexity and challenge further still. Please feel free to create your own select questions to avoid children simply memorising the questions and answers.

# CLIC 12

The following CLIC challenge is an example for you to use to practice at home. We have included the answer sheet as well. Please feel free to create your own additional questions by changing the numbers for any that your child gets wrong. In this pack, there is additional advice for each question, with resources that can help with home learning. It is important that you use the correct challenge level as provided by your teacher.

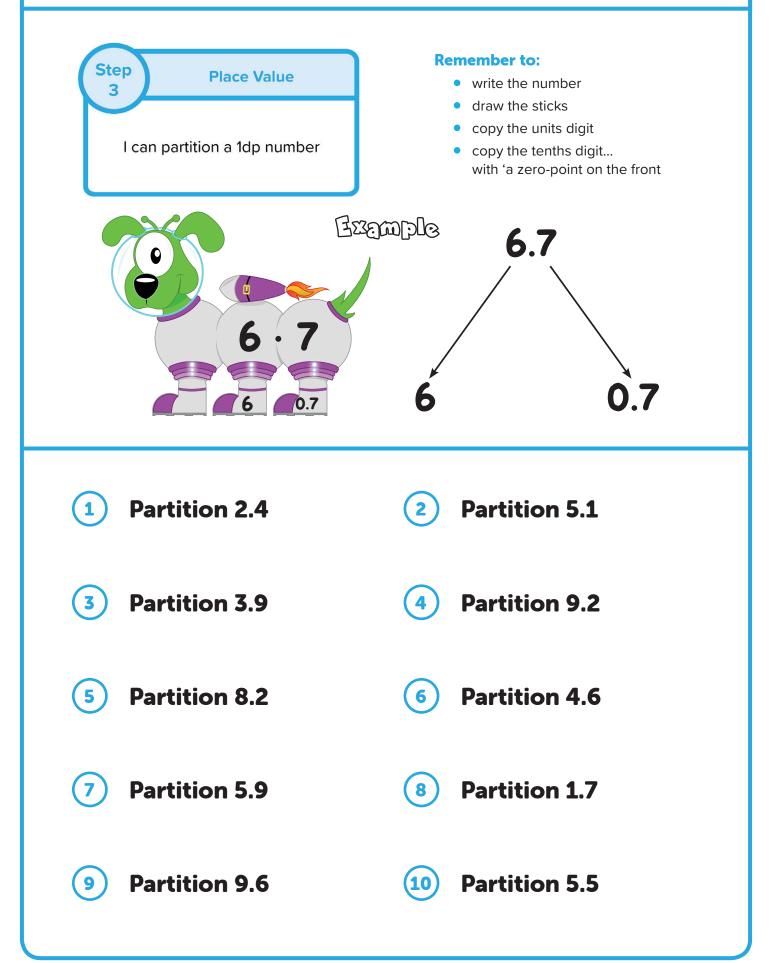




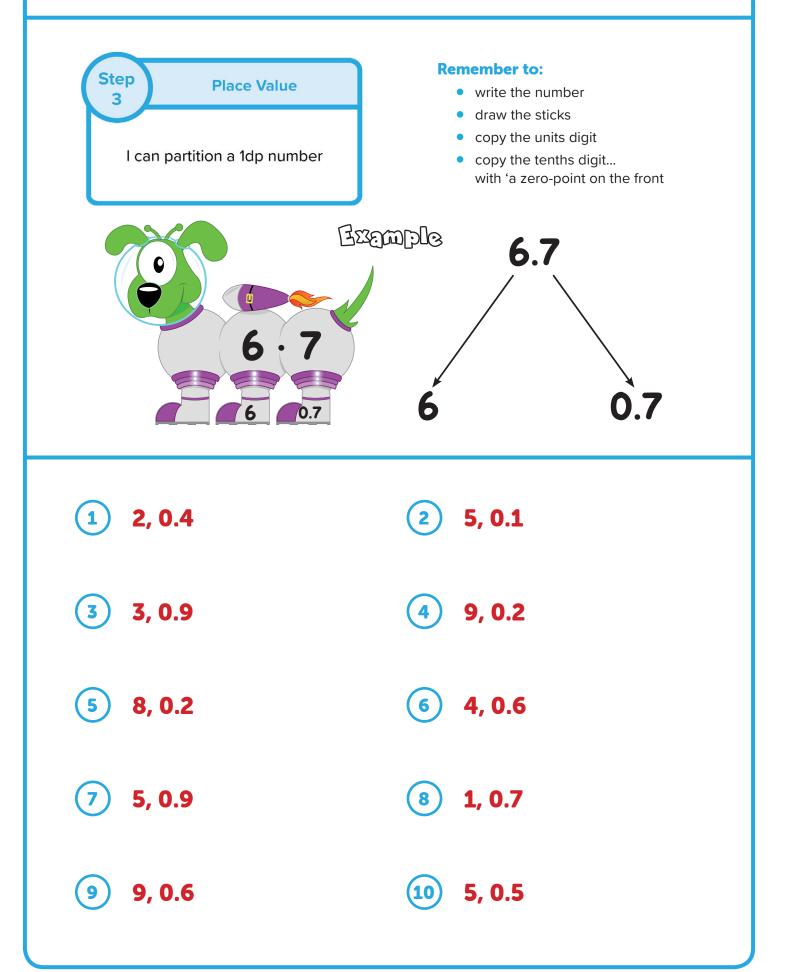
# Question 1 - I can partition a number with 1 decimal place

- write the number
- draw the sticks
- copy the units digit
- copy the tenths digit ... with a 'zero-point' in front of it







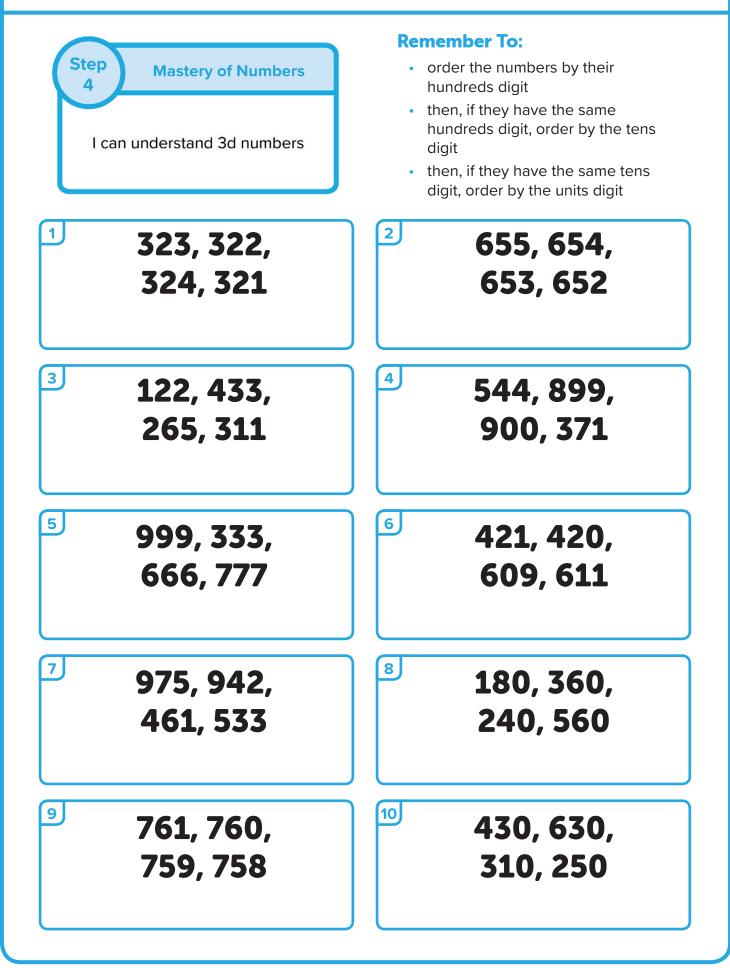


# Question 2 - I can understand 3 digit numbers

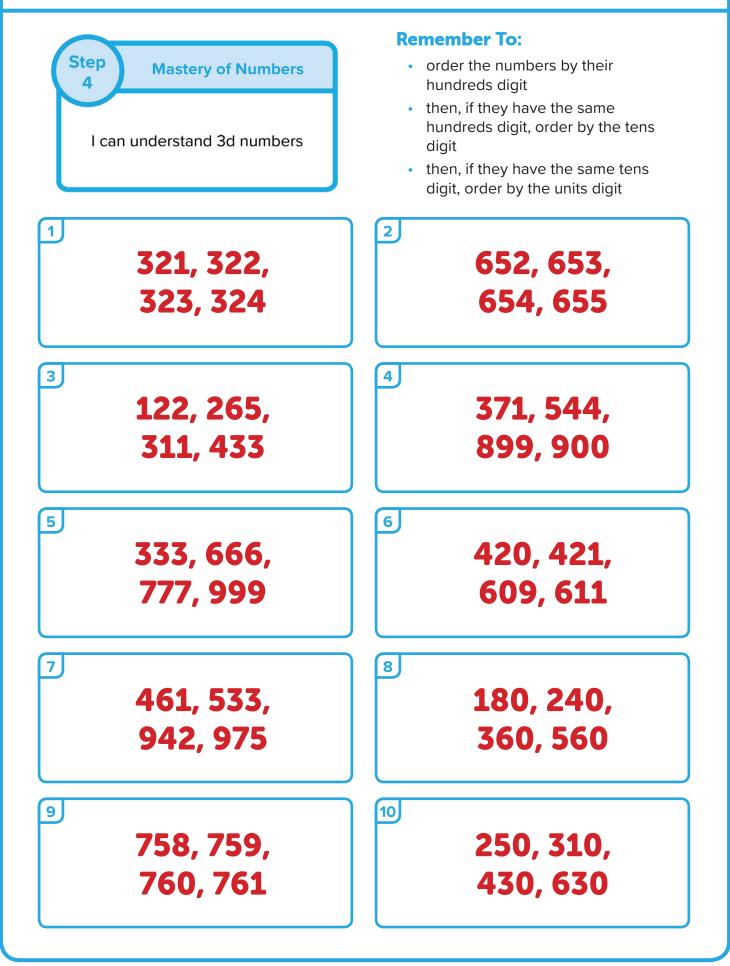
- order the numbers by their hundreds digit
- then, if they have the same hundreds digit, order by the tens digit
- then, if they have the same tens digit, order by the units digit



# **Repeat** Questions

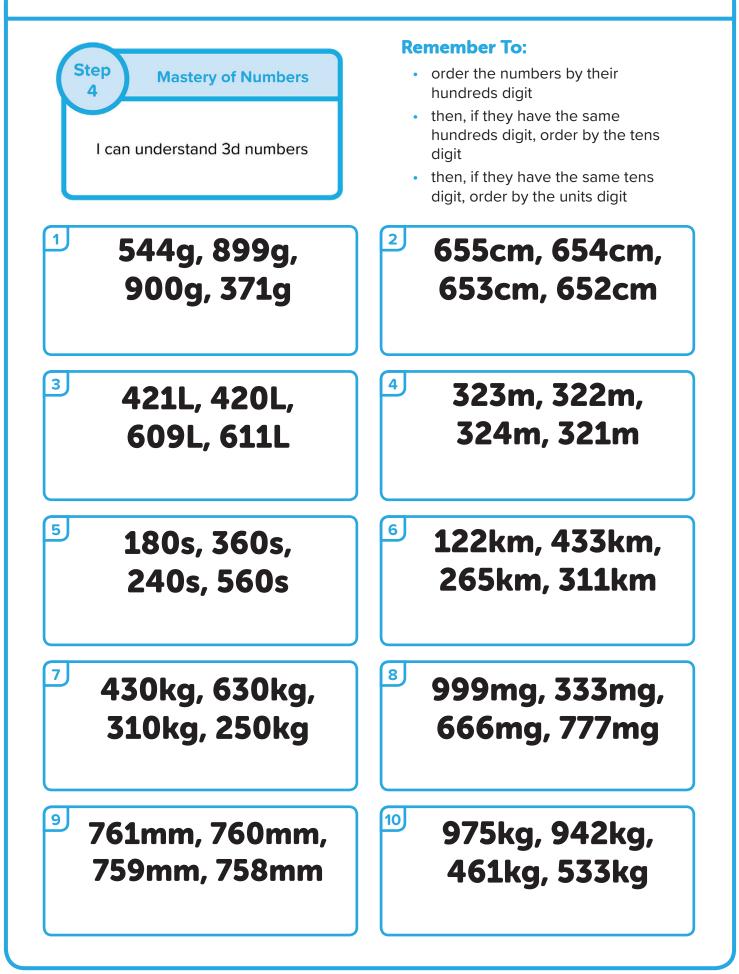




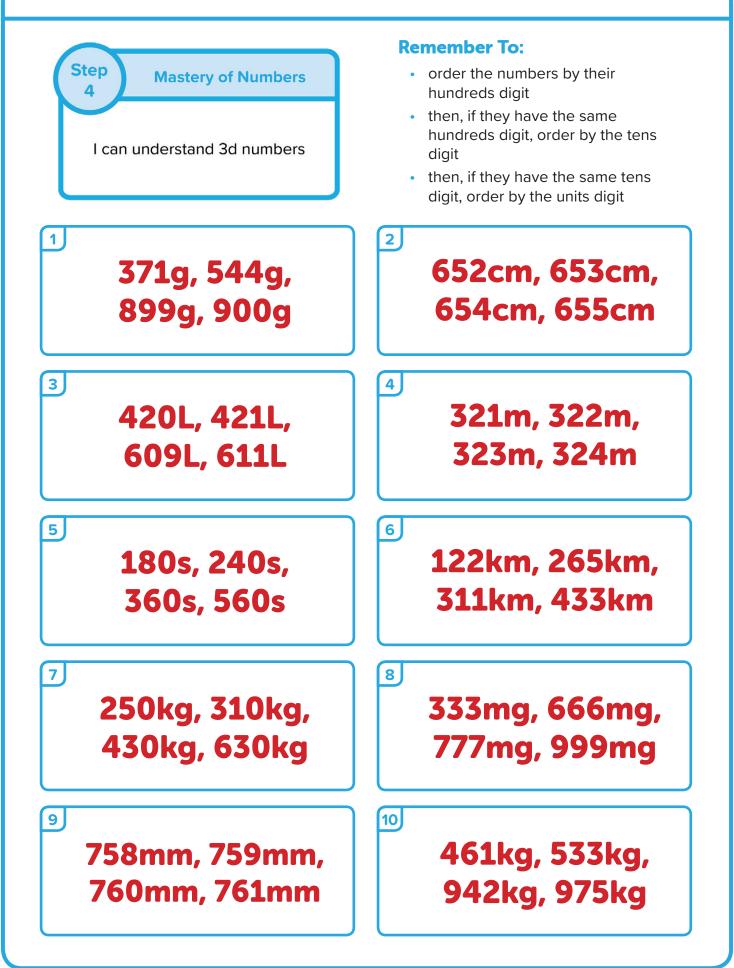




# **Revisit** Questions



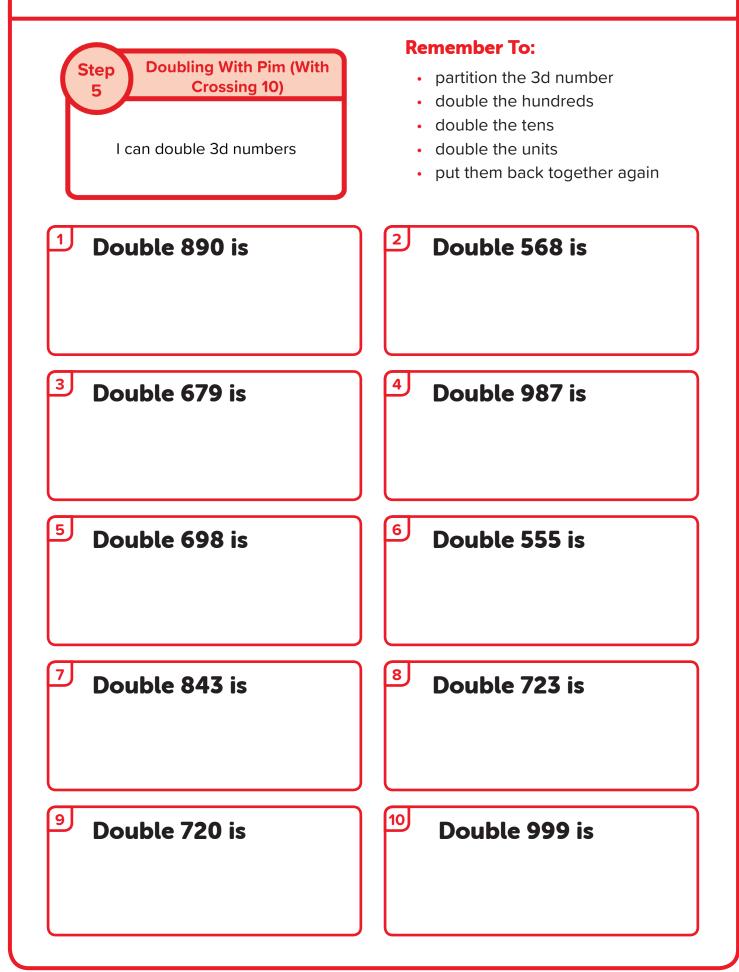




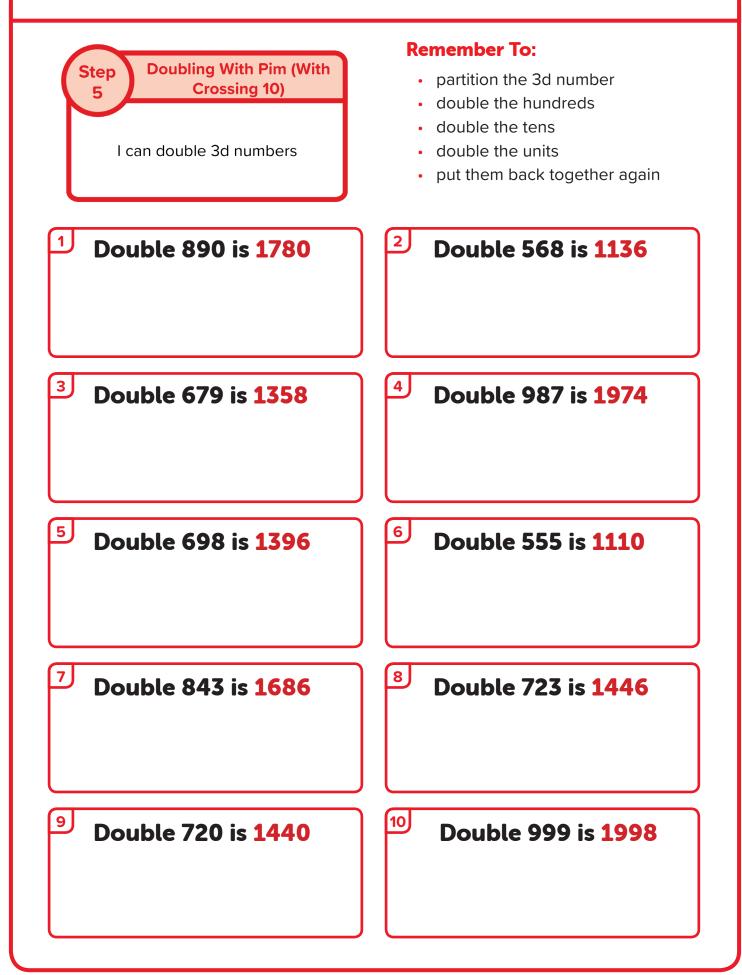
## Question 3 - I can double 3 digit numbers

- partition the 3 digit numbers
- double the hundreds
- double the tens
- double the units
- put them back together again



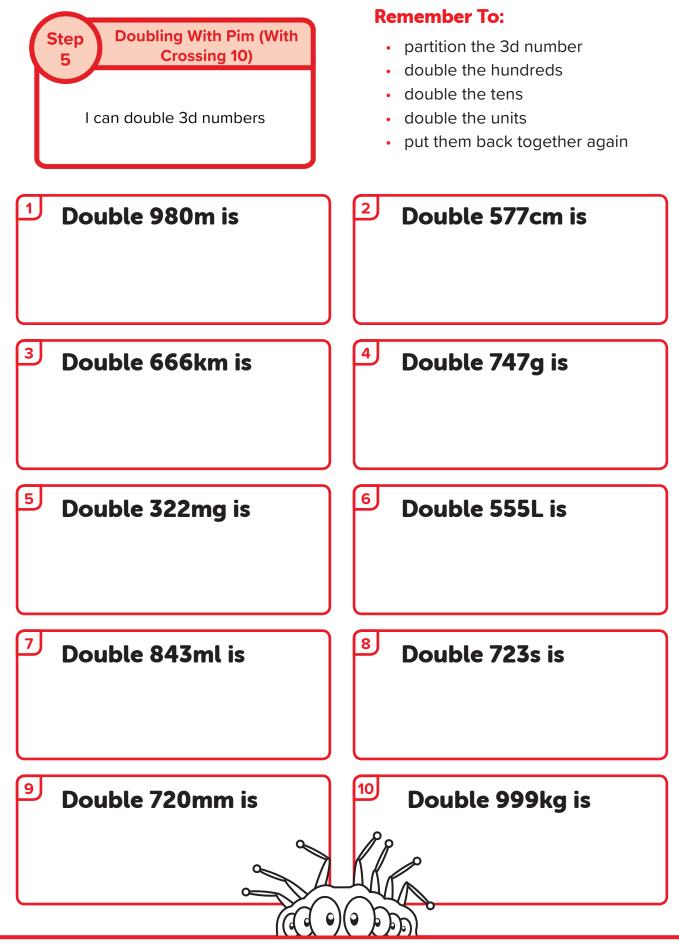




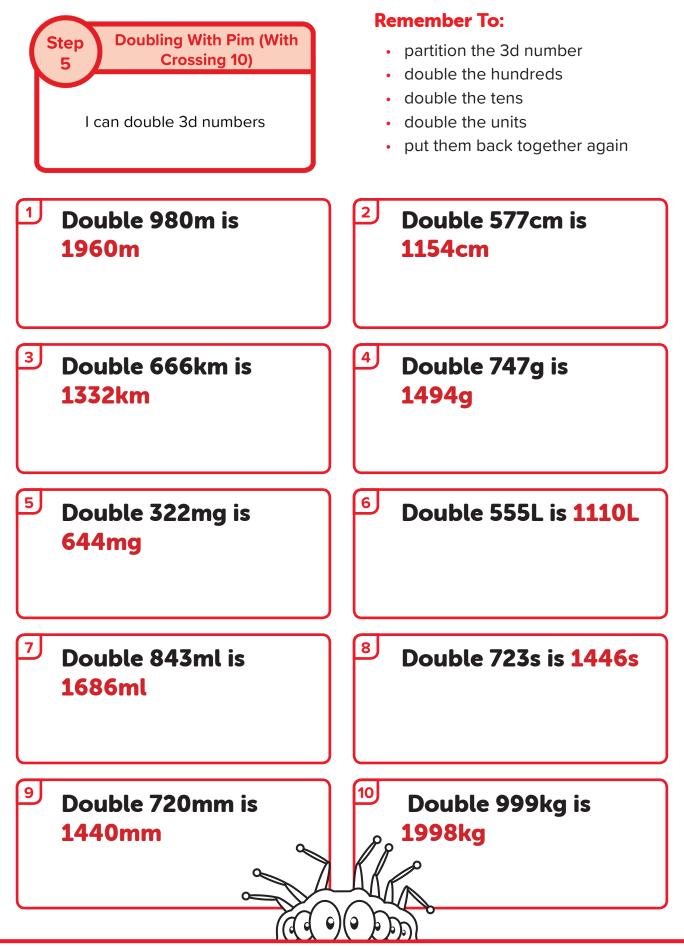




**Revisit** Questions

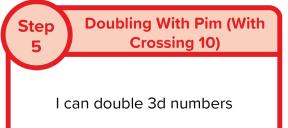








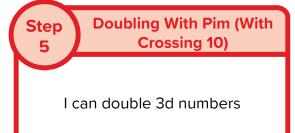
# **Real Life Maths** Questions



- partition the 3d number
- double the hundreds
- double the tens
- double the ones (units)
- put them back together again

	Pim has 2 boxes of sweets. Each box contains 578 sweets. How many sweets are there in total?
2	There are 766 people at a party. Each person 2 sandwiches. How many sandwiches are there in total?
3	A computer costs £869. How much do 2 computers cost?
4	Pim wants to buy 2 bars of gold. Each bar costs £999. How much does it cost in total?
5	What is double 665?





1

2 J

3

5

### **Remember to:**

- partition the 3d number
- double the hundreds
- double the tens
- double the ones (units)
- put them back together again

Pim has 2 boxes of sweets. Each box contains 578 sweets. How many sweets are there in total?

### There are 1156 sweets in total.

There are 766 people at a party. Each person 2 sandwiches. How many sandwiches are there in total?

### There are 1532 sandwiches in total.

A computer costs £869. How much do 2 computers cost?

### They cost £1738.

<sup>4</sup> Pim wants to buy 2 bars of gold. Each bar costs £999. How much does it cost in total?

It costs £1998 in total.

What is double 665?

The answer is 1330.

# Question 4 - I can write Smile Multiplication Fact Families

- copy the Smile Multiplication fact
- write the Switcher
- bring the product to the front, change the symbol and write the 2 switchers



I can write Smile Multiplication Fact Families

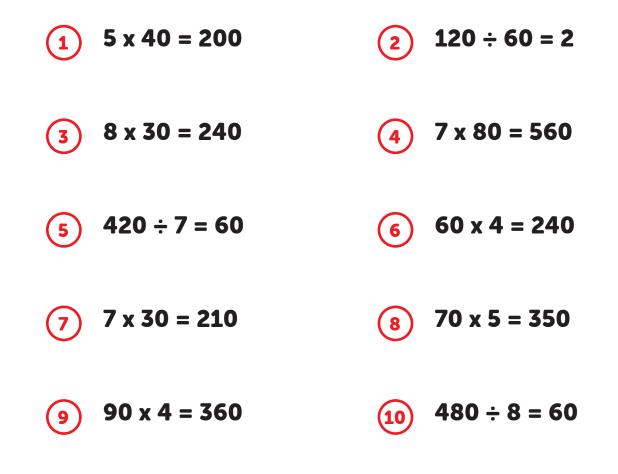
### **Remember to:**

step

3

- copy the 'Smile Multiplication' fact
- write the Switcher
- bring the product to the front, change the symbol and write the 2 switchers

# $6 \times 80 = 480$ $80 \times 6 = 480$ $480 \div 6 = 80$ $480 \div 80 = 6$





I can write Smile Multiplication Fact Families

### **Remember to:**

Step

3

- copy the 'Smile Multiplication' fact
- write the Switcher
- bring the product to the front, change the symbol and write the 2 switchers

# $6 \times 80 = 480$ $80 \times 6 = 480$ $480 \div 6 = 80$ $480 \div 80 = 6$

$\begin{array}{c} 1 \\ 1 \\ 200 \div 5 = 40, 200 \div 40 = 5 \end{array}$	2 $120 \div 60 = 2, 120 \div 2 = 60,$ 60 x 2 = 120, 2 x 60 = 120
3       8 x 30 = 240, 30 x 8 = 240, 240 ÷ 30 = 8         240 ÷ 8 = 30, 240 ÷ 30 = 8	4 7 x 80 = 560, 80 x 7 = 560, 560 ÷ 80 = 7, 560 ÷ 7 = 80
$5  420 \div 7 = 60, 420 \div 60 = 7, 60 x 7 = 420, 7 x 60 = 420$	$ \begin{array}{c} 6 \\ 6 \\ 240 \div 60 = 4, 240 \div 4 = 60 \end{array} $
7       7 x 30 = 210, 30 x 7 = 210, 210 ÷ 30 = 7, 210 ÷ 7 = 30	8       70 x 5 = 350, 5 x 70 = 350, 350 ÷ 70 = 5, 350 ÷ 5 = 70         350 ÷ 70 = 5, 350 ÷ 5 = 70
9 90 x 4 = 360, 4 x 90 = 360, 360 ÷ 90 = 4, 360 ÷ 4 = 90	(10) $480 \div 8 = 60, 480 \div 60 = 8, 60 \times 8 = 480, 8 \times 60 = 480$



I can write Smile Multiplication Fact Families

### **Remember to:**

Step

3

- copy the 'Smile Multiplication' fact
- write the Switcher
- bring the product to the front, change the symbol and write the 2 switchers

### Exemple

6 x 80 = 480 80 x 6 = 480 480 ÷ 6 = 80 480 ÷ 80 = 6

<b>5m x 40 = 200m</b>	<b>2</b> 120cm ÷ 60 = 2cm
<b>3</b> 8km x 30 = 240km	<b>4</b> 7g x 80 = 560g
<b>5</b> 420mg ÷ 7 = 60mg	<b>6 60L x 4 = 240L</b>
<b>7</b> 7ml x 30 = 210ml	<b>8</b> 70s x 5 = 350s
9 90mm x 4 = 360mm	<b>10 480kg</b> ÷ 8 = 60kg



I can write Smile Multiplication Fact Families

### **Remember to:**

Step

3

- copy the 'Smile Multiplication' fact
- write the Switcher
- bring the product to the front, change the symbol and write the 2 switchers

### Eremple

 $6 \times 80 = 480$ 80 x 6 = 480 **480** ÷ **6 = 80**  $480 \div 80 = 6$ 

1	5m x 40 = 200m, 40m x 5 = 200m, 200m ÷ 5 = 40m, 200m ÷ 40 = 5m	2	120cm ÷ 60 = 2cm, 120cm ÷ 2 = 60cm, 60cm x 2 = 120cm, 2cm x 60 = 120cm
3	8km x 30 = 240km, 30km x 8 = 240km, 240km ÷ 8 = 30km, 240km ÷ 30 = 8km	4	7g x 80 = 560g, 80g x 7 = 560g, 560g ÷ 80 = 7g, 560g ÷ 7 = 80g
5	420mg ÷ 7 = 60mg, 420mg ÷ 60 = 7mg, 60mg x 7 = 420mg, 7mg x 60mg = 420mg	6	60L x 4 = 240, 4L x 60 = 240L, 240L ÷ 60 = 4L, 240L ÷ 4 = 60L
7	7ml x 30 = 210ml, 30ml x 7 = 210ml, 210ml ÷ 30 = 7ml, 210ml ÷ 7 = 30ml	8	70s x 5s = 350s, 5s x 70 = 350s, 350s ÷ 70 = 5s, 350s ÷ 5 = 70s
9	90mm x 4 = 360mm, 4mm x 90 = 360mm, 360mm ÷ 90mm = 4mm, 360mm ÷ 4mm = 90mm	10	480kg ÷ 8 = 60kg, 480kg ÷ 60kg = 8kg, 60kg x 8kg = 480kg, 8kg x 60kg = 480kg



Step

3

# Real Life Maths Questions

I can write Smile Multiplication Fact Families

**INN: Multiplication** 

### **Remember to:**

- copy the 'Smile Multiplication' fact
- write the Switcher
- bring the product to the front, change the symbol and write the 2 switchers

1 Pim has 6 boxes. Each box has 20 sweets. Write out the Smile **Multiplication Fact Family.** 2 J There are 4 friends at a party. Each friend gets 70 sweets. Write out the Smile Multiplication Fact Family. 3 A box of apples costs £5. Pim buys 60 boxes. Write out the **Smile Multiplication Fact Family.** 4 A box of oranges weighs 8kg. There are 90 boxes. Write out the **Smile Multiplication Fact Family.** 5 Pim has 9 jugs of water. Each jug contains 50L. Write out the **Smile Multiplication Fact Family.** 



Step

# Real Life Maths Answers

I can write Smile Multiplication Fact Families

**INN: Multiplication** 

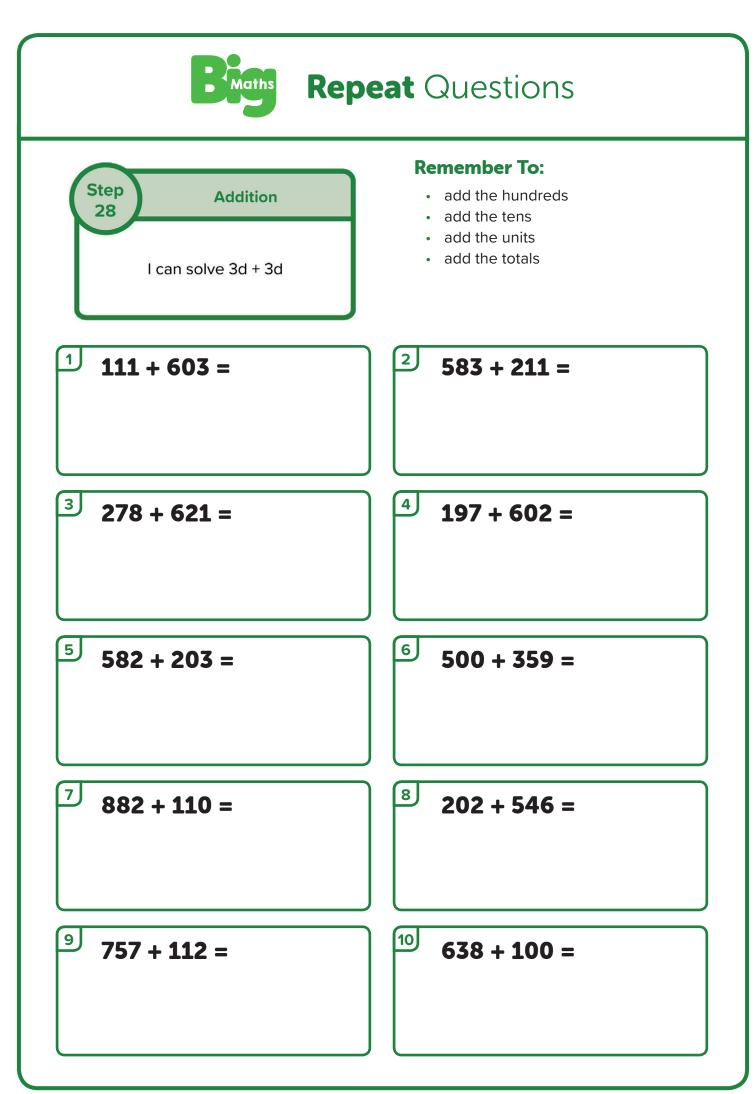
### **Remember to:**

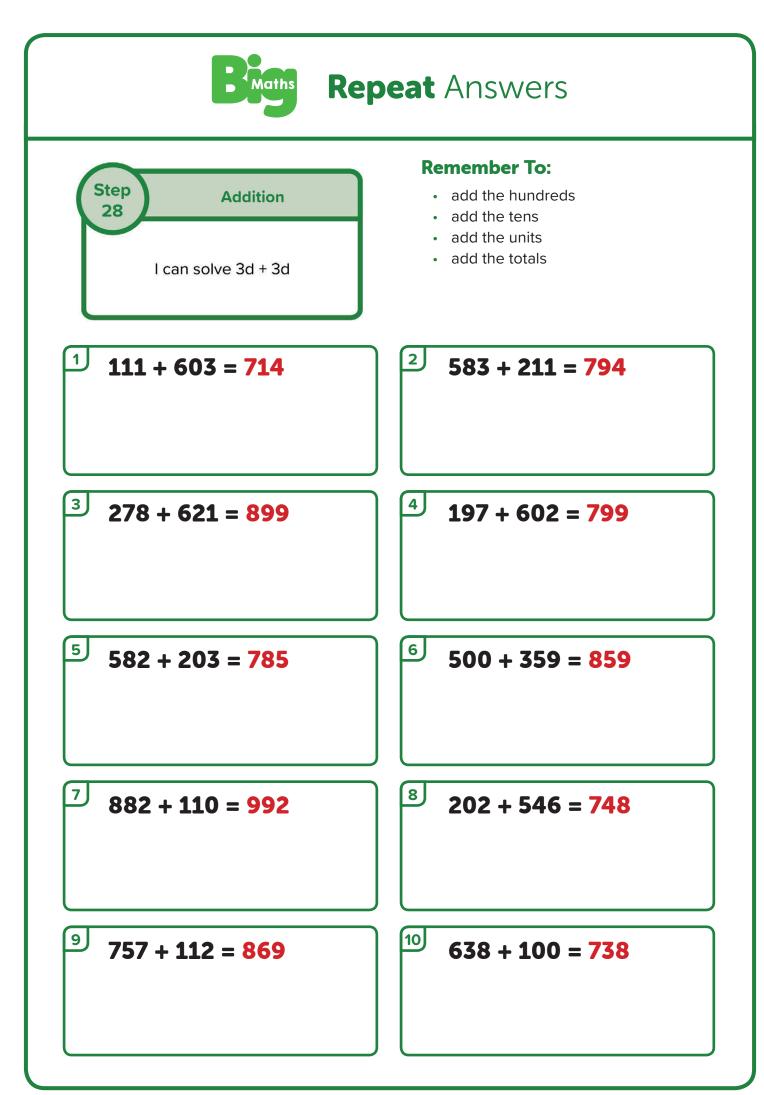
- copy the 'Smile Multiplication' fact
- write the Switcher
- bring the product to the front, change the symbol and write the 2 switchers

1 Pim has 6 boxes. Each box has 20 sweets. Write out the Smile **Multiplication Fact Family.** There are 120 sweets in total. 6 x 20 sweets = 120 sweets,  $20 \times 6 = 120, 120 \div 6 = 20, 120 \div 20 = 6.$ 2 J There are 4 friends at a party. Each friend gets 70 sweets. Write out the Smile Multiplication Fact Family. There are 280 sweets in total. 4 x 70 sweets = 280 sweets,  $70 \times 4 = 280, 280 \div 70 = 4, 280 \div 4 = 70.$ 3 A box of apples costs £5. Pim buys 60 boxes. Write out the **Smile Multiplication Fact Family.** It costs £300.  $£5 \times 60 = £300, 60 \times 5 = 300, 300 \div 5 = 60, 300 \div 60 = 5.$ 4 A box of oranges weighs 8kg. There are 90 boxes. Write out the **Smile Multiplication Fact Family.** The total weight is 720kg. 8kg x 90 = 720kg, 90 x 8 = 720, 720  $\div$  90 = 8, 720  $\div$  8 = 90. 5 Pim has 9 jugs of water. Each jug contains 50L. Write out the **Smile Multiplication Fact Family.** There is 450L in total.  $9 \times 50L = 450L$ ,  $50 \times 9 = 450$ ,  $450 \div 50 = 9$ ,  $450 \div 9 = 50$ .

# Question 5 - I can solve 3 digit + 3 digit

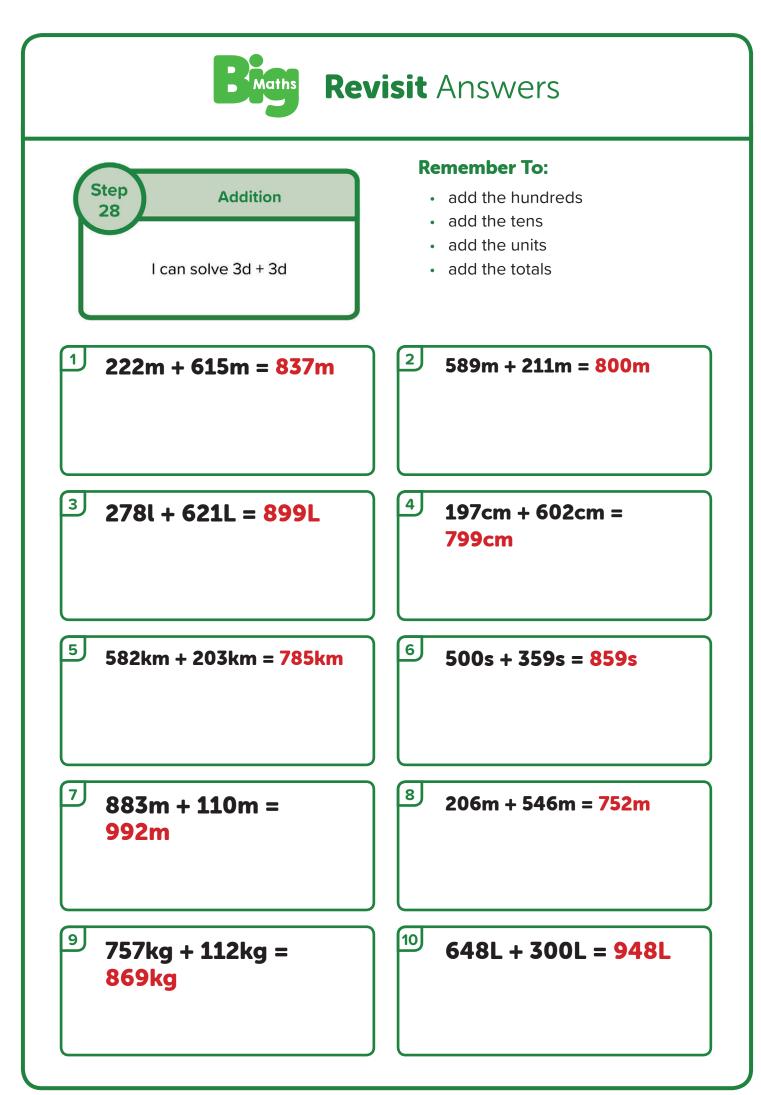
- add the hundreds
- add the tens
- add the units
- add the totals





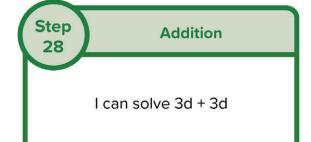


Remember To:				
Step Addition	<ul> <li>add the hundreds</li> </ul>			
28	<ul> <li>add the tens</li> </ul>			
	<ul> <li>add the units</li> </ul>			
l can solve 3d + 3d	<ul> <li>add the totals</li> </ul>			
1 222				
$^{1}$ 222m + 615m =	<sup>2</sup> 589m + 211m =			
<sup>3</sup> 278L + 621L =	<sup>4</sup> 197cm + 602cm =			
<sup>5</sup> 582km + 203km =	<sup>6</sup> 500s + 359s =			
	$8 206m \pm 546m =$			
<sup>2</sup> 883m + 110m =	<sup>8</sup> 206m + 546m =			
$9757ka \pm 112ka =$	<sup>10</sup> 648L + 300L =			
<sup>9</sup> 757kg + 112kg =				





# Real Life Maths Questions

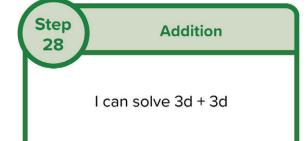


### Remember to:

- add the hundreds
- add the tens
- add the ones (units)
- add the totals

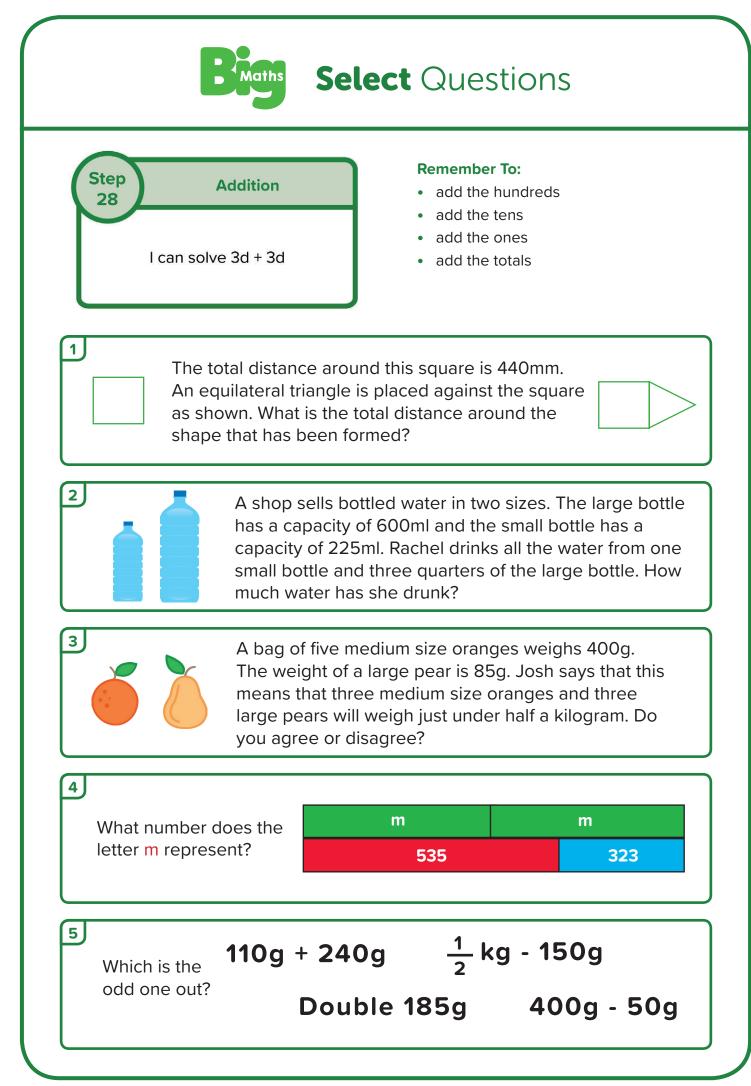
1 Mully has 321 conkers and his friend gives him 222 more. How many conkers does Mully have? **2**] Pim has 576 balls. Pom has 421 balls. How many do they have altogether? **3** Pom is 443cm tall. Pim is 231cm tall. How tall are they together? 4 What is 566 add 323? 5 Pom bought books for £212 and toys for £206. How much did he spend?

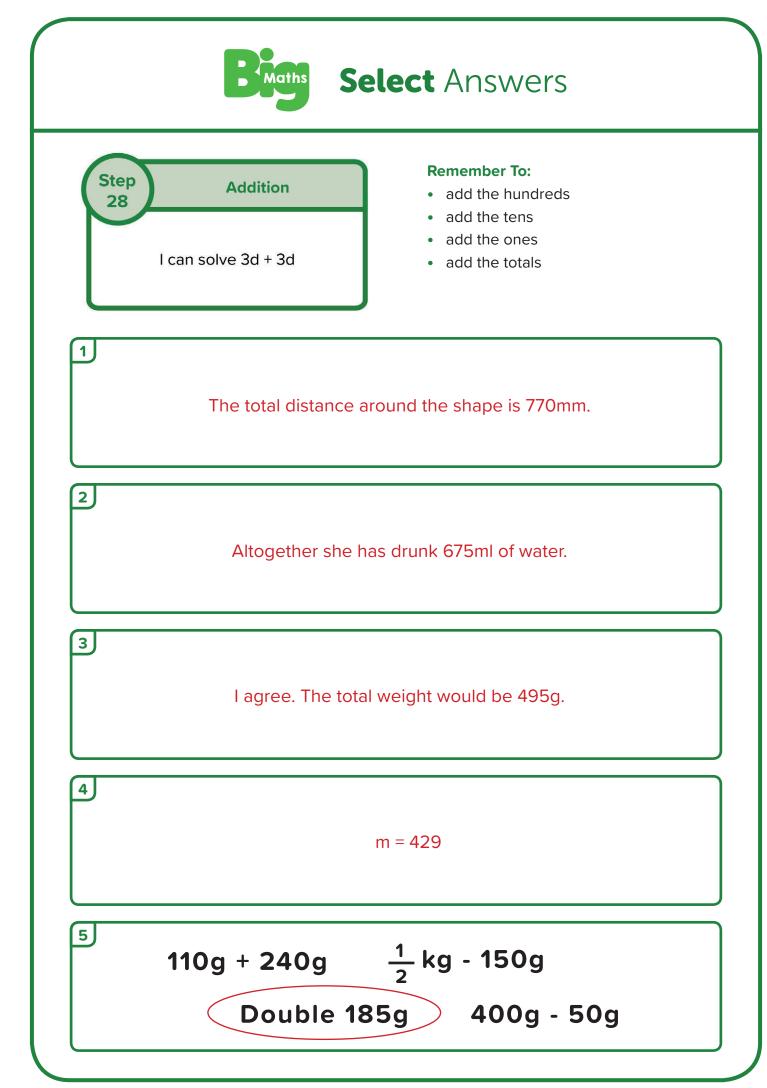




- add the hundreds
- add the tens
- add the ones (units)
- add the totals







### Question 6 - I can solve 1 digit x 2 digit (2, 3, 4, 5x tables)

### **Remember to:**

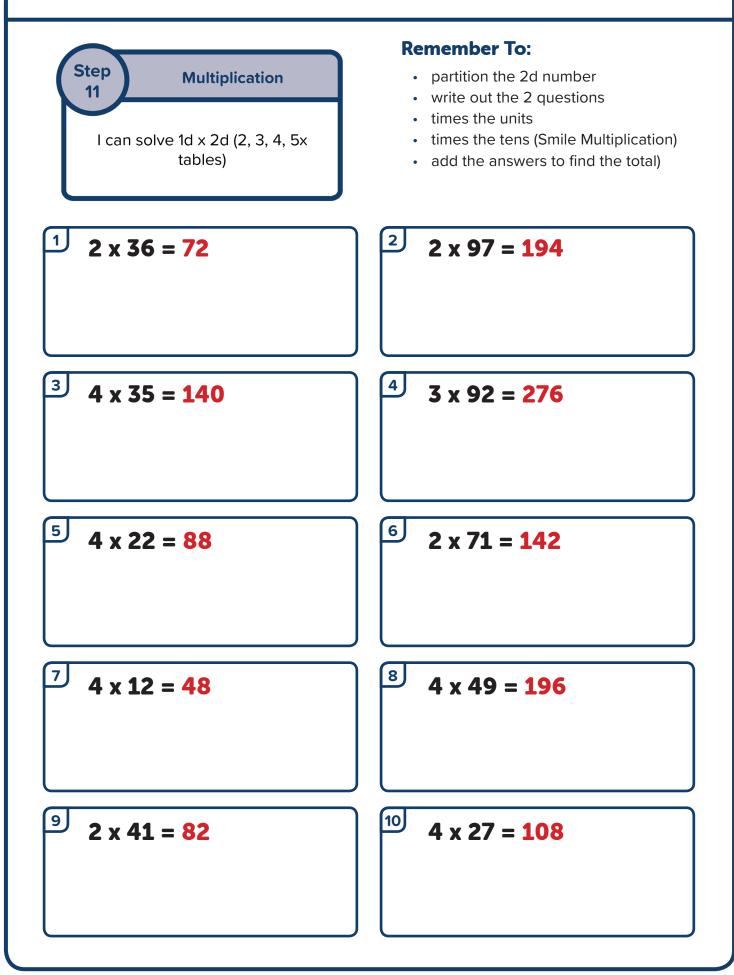
- partition the 2d number
- write out the 2 questions
- times the units
- times the tens (Smile Multiplication)
- add the answers to find the total



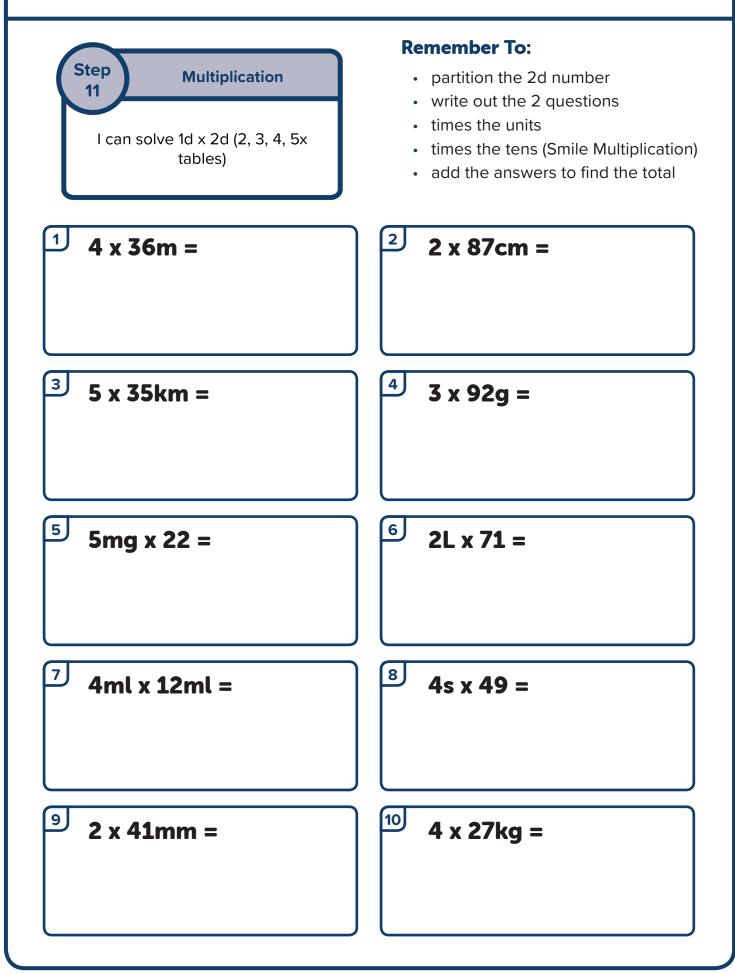
## Repeat Questions

Step 11MultiplicationI can solve 1d x 2d (2, 3, 4, 5x tables)	<ul> <li>Remember To:</li> <li>partition the 2d number</li> <li>write out the 2 questions</li> <li>times the units</li> <li>times the tens (Smile Multiplication)</li> <li>add the answers to find the total</li> </ul>
<sup>1</sup> 2 x 36 =	<sup>2</sup> 2 x 97 =
<sup>3</sup> 4 x 35 =	<sup>4</sup> 3 x 92 =
<sup>5</sup> 4 x 22 =	<sup>6</sup> 2 x 71 =
<sup>7</sup> 4 x 12 =	<sup>8</sup> 4 x 49 =
9 2 x 41 =	<sup>10</sup> 4 x 27 =

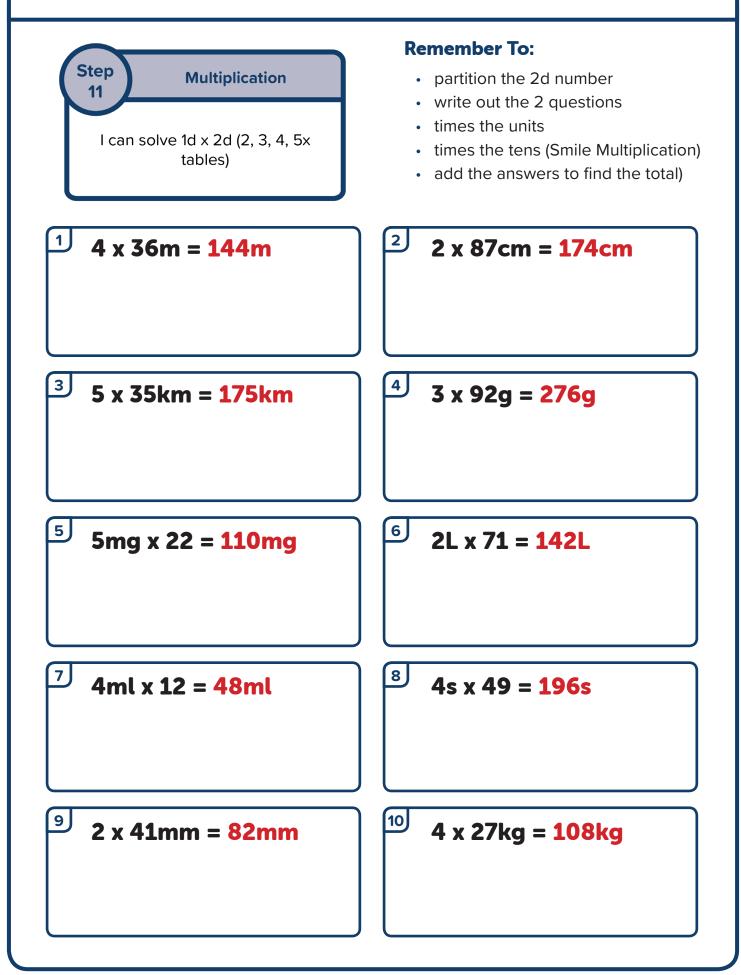














### Real Life Maths Questions

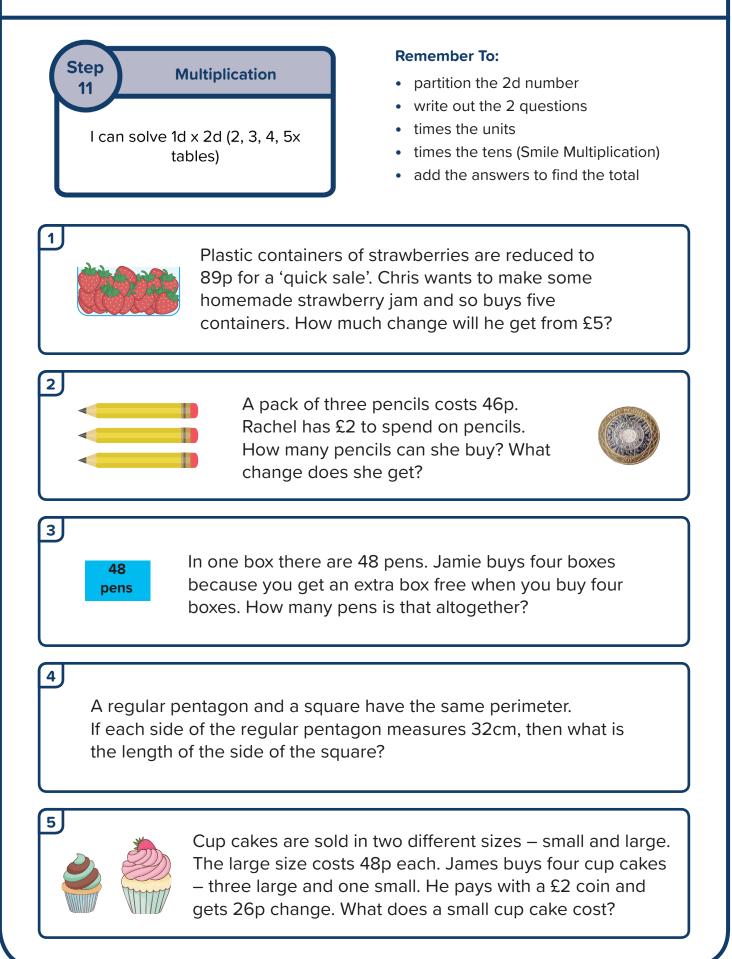
	Step 11MultiplicationI can solve 1d x 2d (2, 3, 4, 5x tables)	<ul> <li>Remember to:</li> <li>partition the 2d number</li> <li>write out the 2 questions</li> <li>times the ones (units)</li> <li>times the tens (Smile Multiplication)</li> <li>add the answers to find the total</li> </ul>
1	4 friends put together the How many are there in tot	ir sweets. They each have 52 sweets. al?
2	A box of chocolates has 5 are in 34 boxes?	options in it. How many chocolates
3	A box of oranges weighs 3kg. There are 25 boxes. What is the total weight?	
4	A jug contains 5L of water is there in total?	. There are 43 jugs. How much water
5	What is 3 times 44?	

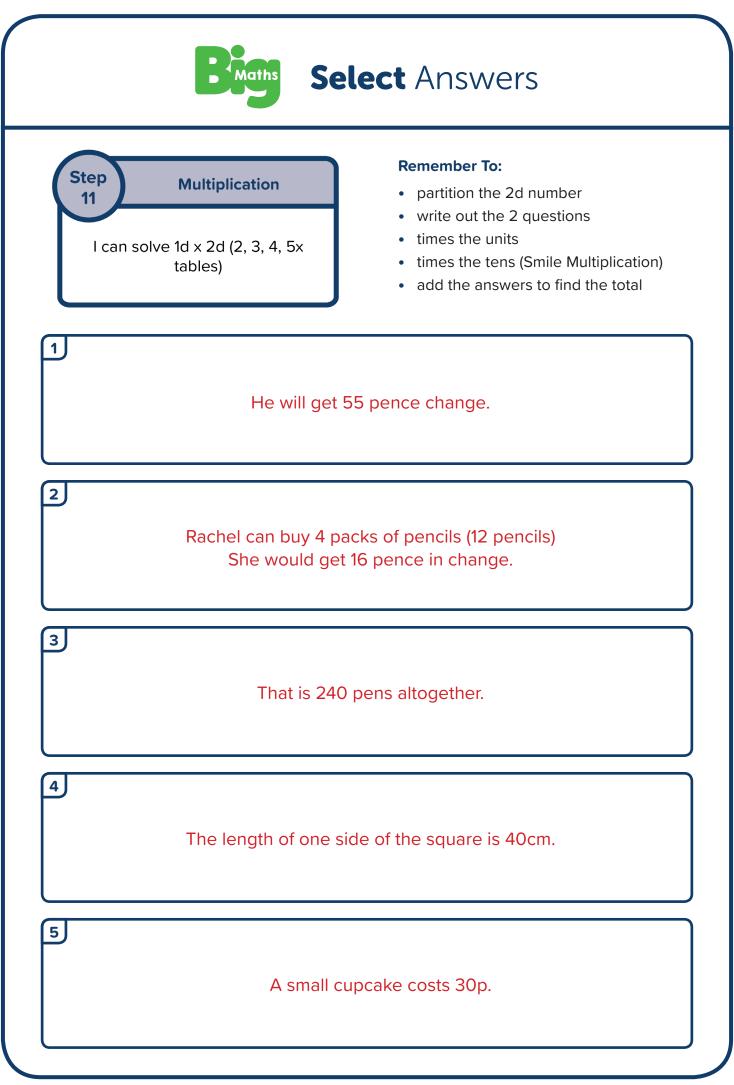


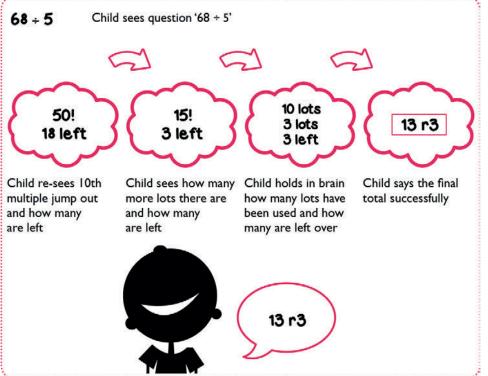
**Remember to:** Step **Multiplication** • partition the 2d number 11 • write out the 2 questions • times the ones (units) I can solve 1d x 2d (2, 3, 4, 5x tables) • times the tens (Smile Multiplication) add the answers to find the total 1 J 4 friends put together their sweets. They each have 52 sweets. How many are there in total? There are 208 sweets. 2 J A box of chocolates has 5 options in it. How many chocolates are in 34 boxes? There are 170 chocolates. 3 J A box of oranges weighs 3kg. There are 25 boxes. What is the total weight? The total weight is 75kg. **4** A jug contains 5L of water. There are 43 jugs. How much water is there in total? There is 215L in total. 5 J What is 3 times 44? The answer is 132.



### Select Questions







Question 7 - I can combine 2 or more Tables Facts to solve division (with remainders) (2, 3, 4, 5x tables)

#### **Remember to:**

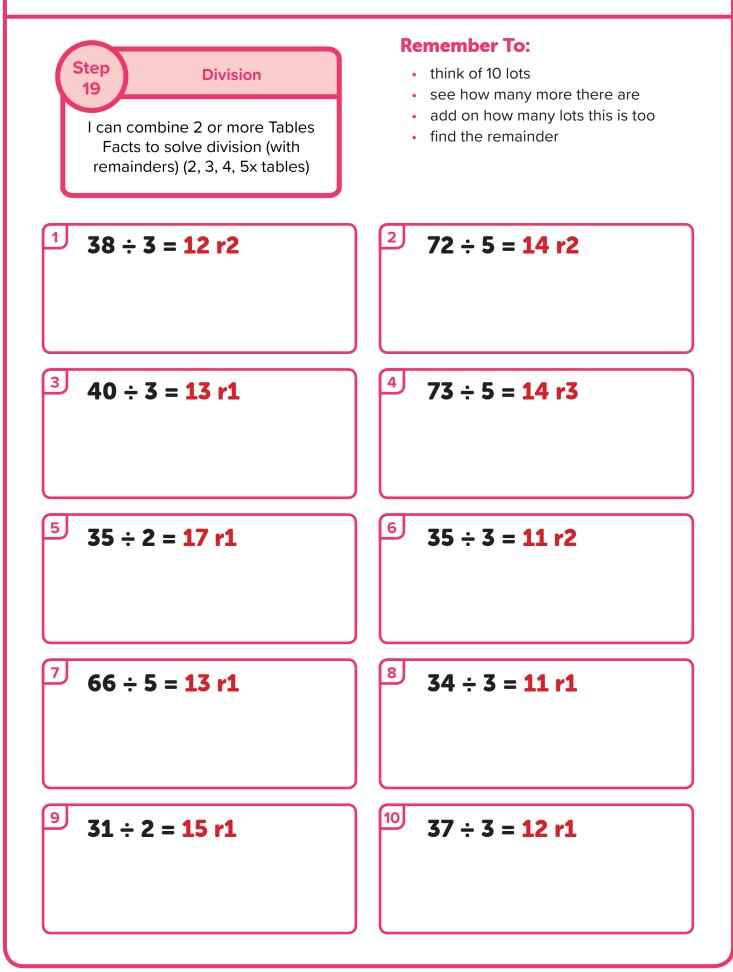
- think of 10 lots
- see how many more there are
- add on how many lots this is too
- find the remainder



## Repeat Questions

	Remember To:
Step 19DivisionI can combine 2 or more Tables Facts to solve division (with remainders) (2, 3, 4, 5x tables)	<ul> <li>think of 10 lots</li> <li>see how many more there are</li> <li>add on how many lots this is too</li> <li>find the remainder</li> </ul>
1 38 ÷ 3 =	<sup>2</sup> 72 ÷ 5 =
<sup>3</sup> 40 ÷ 3 =	4 73 ÷ 5 =
<sup>5</sup> 35 ÷ 2 =	<sup>6</sup> 35 ÷ 3 =
<sup>7</sup> 66 ÷ 5 =	<sup>8</sup> 34 ÷ 3 =
9 <b>31 ÷ 2 =</b>	<sup>10</sup> 37 ÷ 3 =

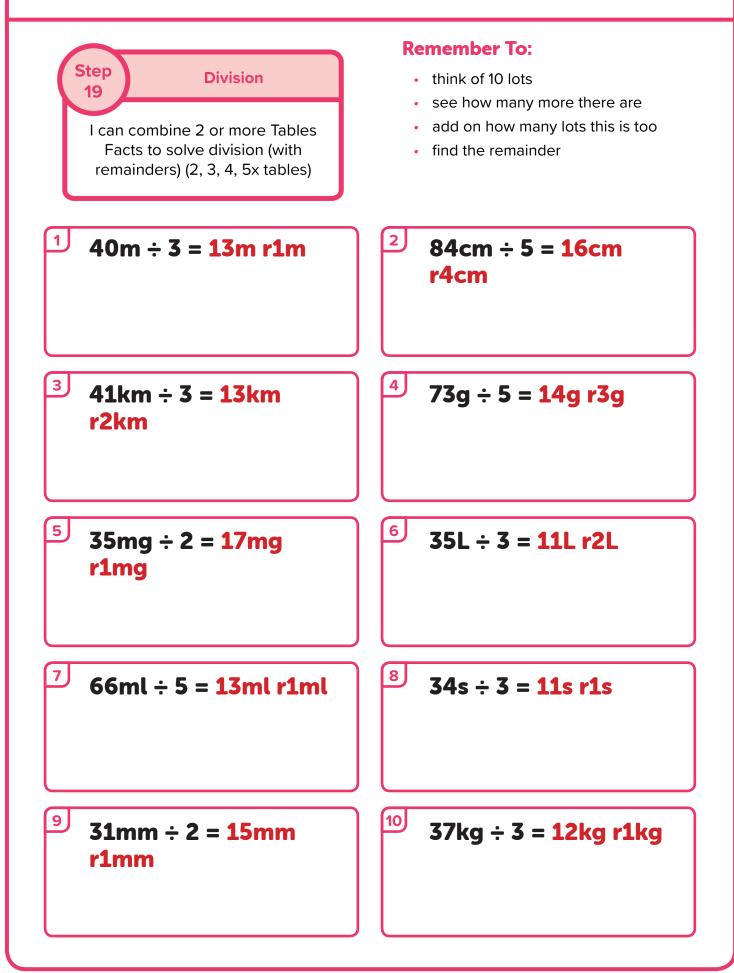






Step 19DivisionI can combine 2 or more Tables Facts to solve division (with remainders) (2, 3, 4, 5x tables)	<ul> <li>Remember To:</li> <li>think of 10 lots</li> <li>see how many more there are</li> <li>add on how many lots this is too</li> <li>find the remainder</li> </ul>
1 40m ÷ 3 =	<sup>2</sup> 84cm ÷ 5 =
<sup>3</sup> 41km ÷ 3 =	4 73g ÷ 5 =
<sup>5</sup> 35mg ÷ 2 =	<sup>6</sup> 35L ÷ 3 =
<sup>7</sup> 66ml ÷ 5 =	<sup>8</sup> 34s ÷ 3 =
9 31mm ÷ 2 =	<sup>10</sup> 37kg ÷ 3 =







Step

19

1

2)

5

### Real Life Maths Questions

#### Division

I can combine 2 or more Tables Facts to solve division (with remainders) (2, 3, 4, 5x tables)

#### **Remember to:**

- think of 10 lots
- see how many more there are
- add on how many lots this is too
- find the remainder

Pim has 23 toys. He shared them between 2 people. How many toys does each person get? How many toys are left over?

There are 5 people at a party. Pim has 72 sweets to share. How many sweets does each person get? How many sweets are left over?

<sup>3</sup> Pim has £37. He shares the money between 3 people. How much does each person get? How much money is left?

Pim has a jug containing 50L of water. He pours it into 4 jugs.
 How much liquid is in each jug? How much water is left?

What is 54 shared by 4? What is the remainder?



Step

19

### Real Life Maths Answers

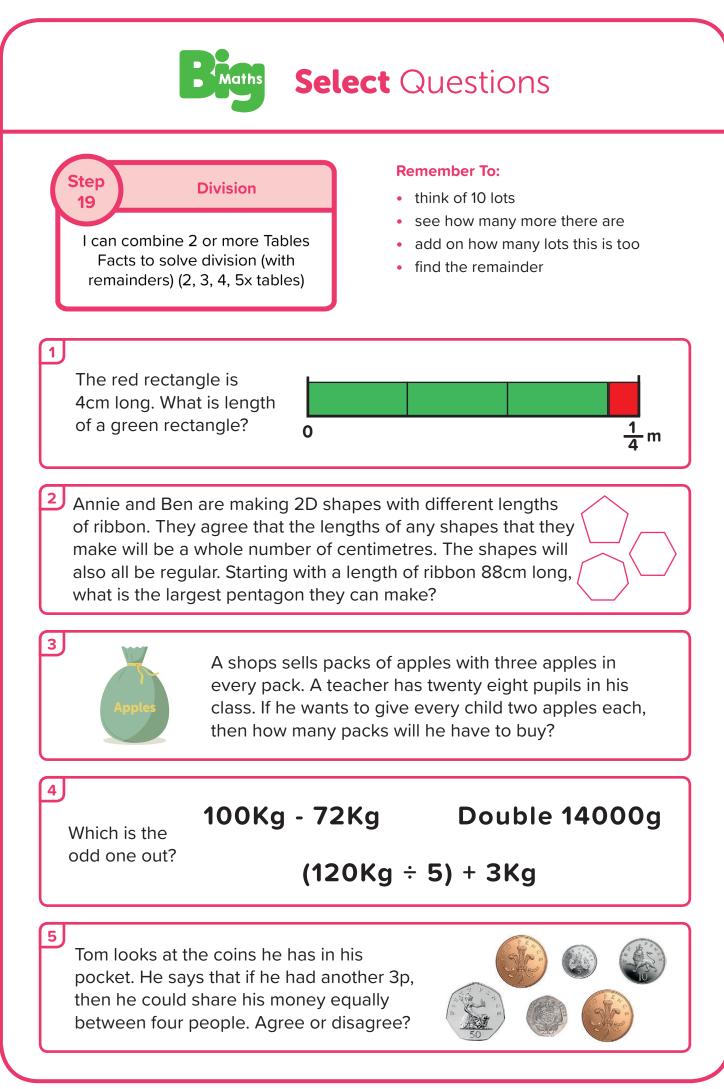
#### Division

I can combine 2 or more Tables Facts to solve division (with remainders) (2, 3, 4, 5x tables)

#### **Remember to:**

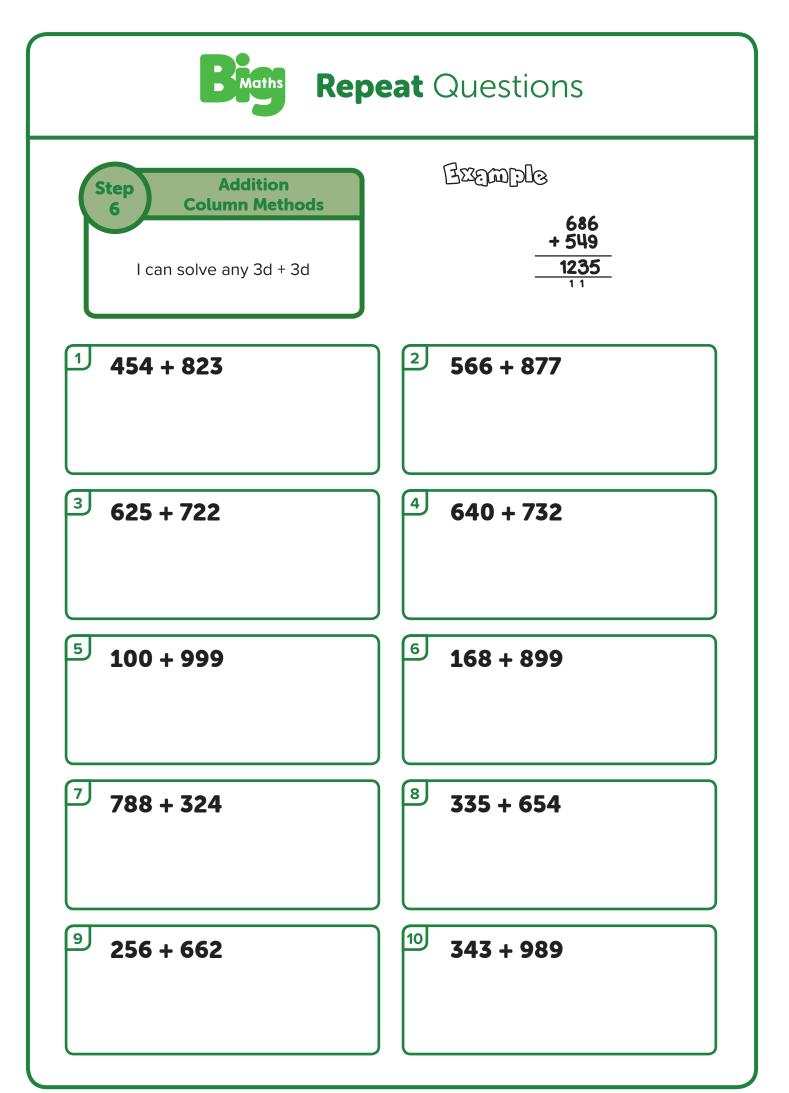
- think of 10 lots
- see how many more there are
- add on how many lots this is too
- find the remainder

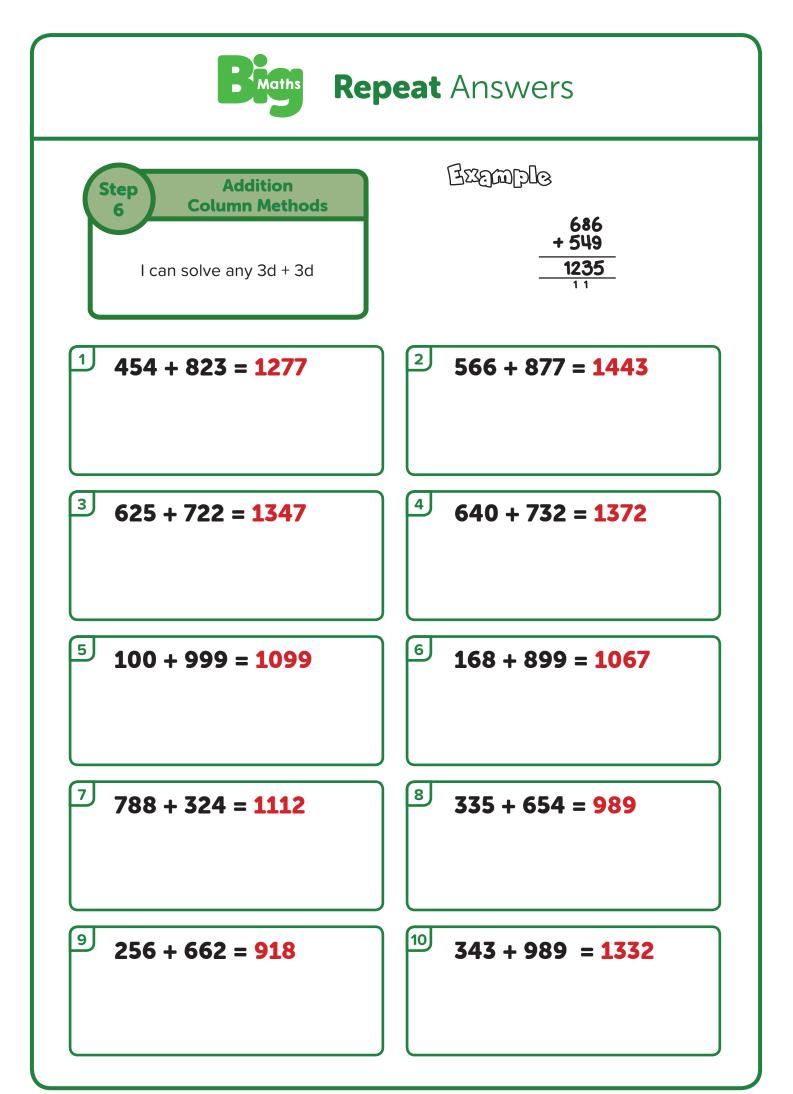
1 Pim has 23 toys. He shared them between 2 people. How many toys does each person get? How many toys are left over? Each person gets 11 toys. There is 1 toy left over. 2 There are 5 people at a party. Pim has 72 sweets to share. How many sweets does each person get? How many sweets are left over? Each person gets 14 sweets. There are 2 sweets left over. 3 Pim has £37. He shares the money between 3 people. How much does each person get? How much money is left? Each person gets £12. There is £1 left over. 4 Pim has a jug containing 50L of water. He pours it into 4 jugs. How much liquid is in each jug? How much water is left? There is 12L of water in each jug. There is 2L left over. 5 What is 54 shared by 4? What is the remainder? The answer is 13. The remainder is 2.



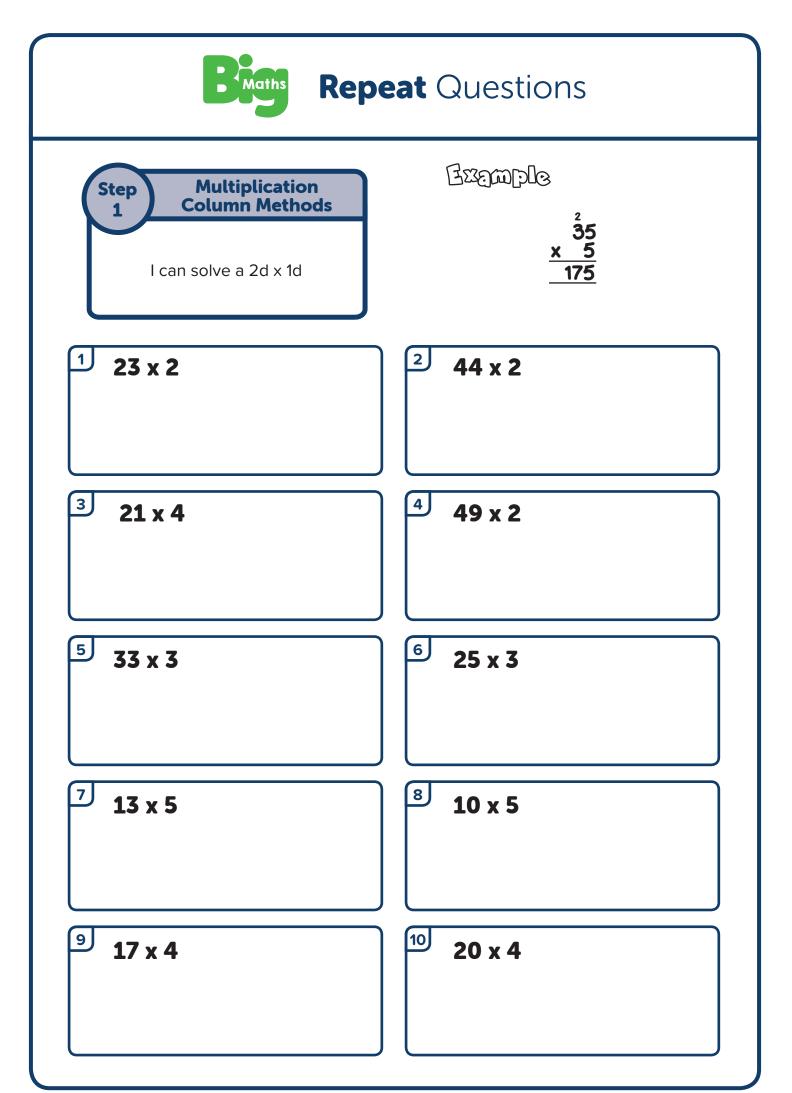


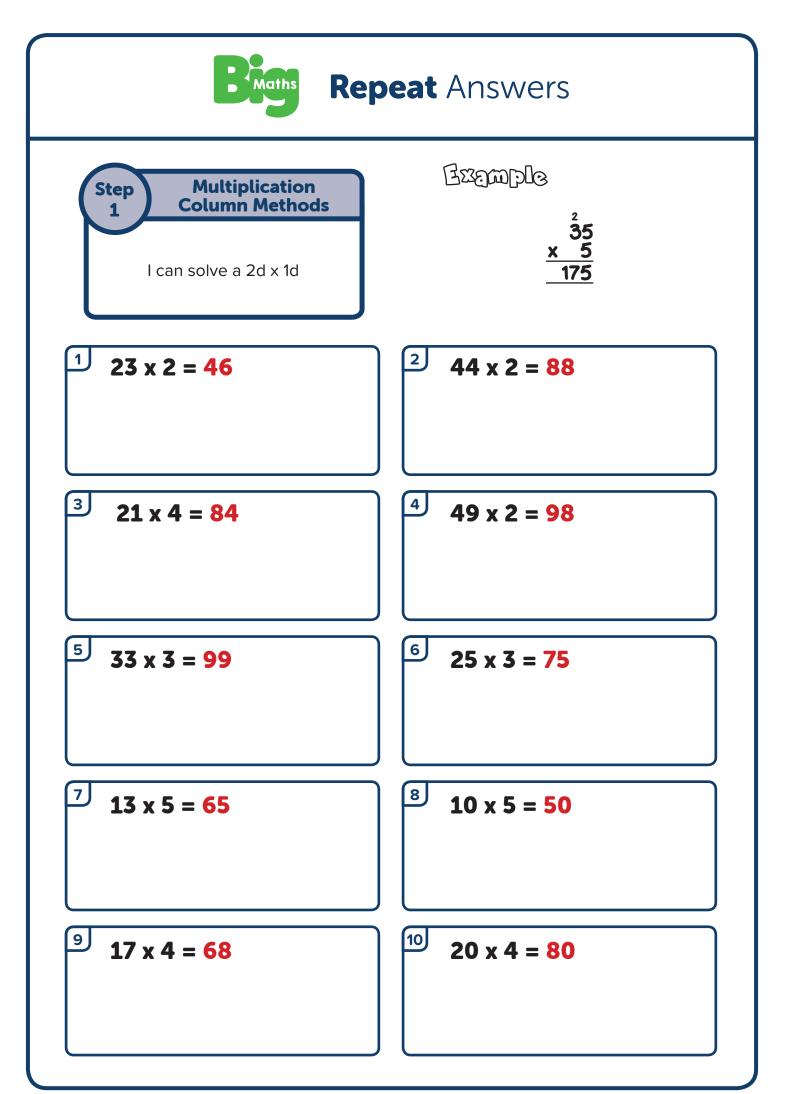
### Question 8 - I can solve any 3 digit + 3 digit





# Question 9 - I can combine 2 digit x 1 digit (using column method)





Question 10 - I can solve 2 digit ÷ 1 digit (using x2, 3, 4, 5) with no remainders

