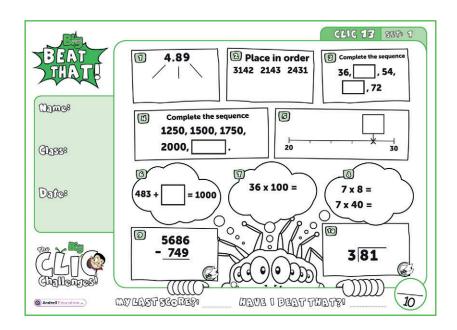


# A Guide for Home Learning

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 2dp number

Question 2 I can understand 4d numbers

Question 3 I can count in 9s

Question 4 10s / 20s / 50s / 250s

Question 5 I can still count along for all of Count Fourways' challenges

Question 6 I can find the missing piece to 1000

Question 7 I can multiply whole numbers by 100

Question 8 I can solve any 1d x 1d I can do any Smile Multiplication

Question 9 I can solve any 4d - 2d or 3d

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

#### 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**

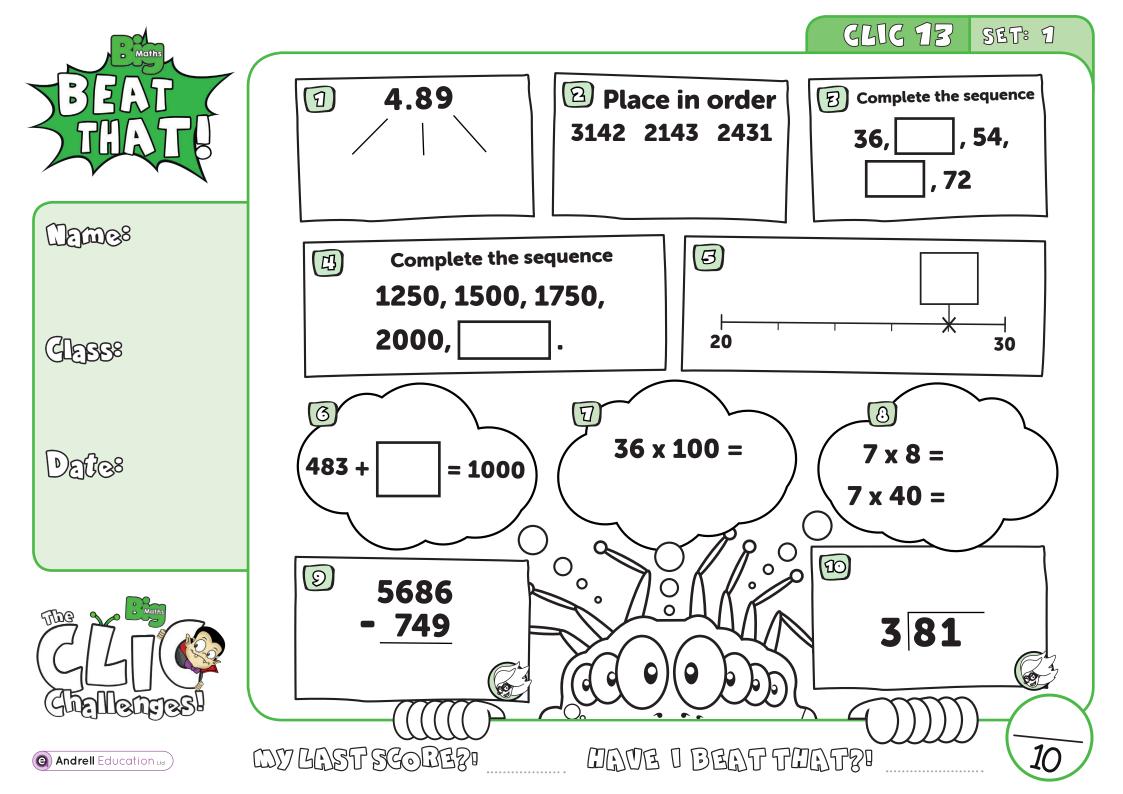
Real Life Maths sheets contain a number of questions (usually 5) where the questions have been placed into worded scenarios for a particular step, increasing the complexity and challenge further. Please feel free to create your own real life maths questions to avoid children simply memorising the questions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

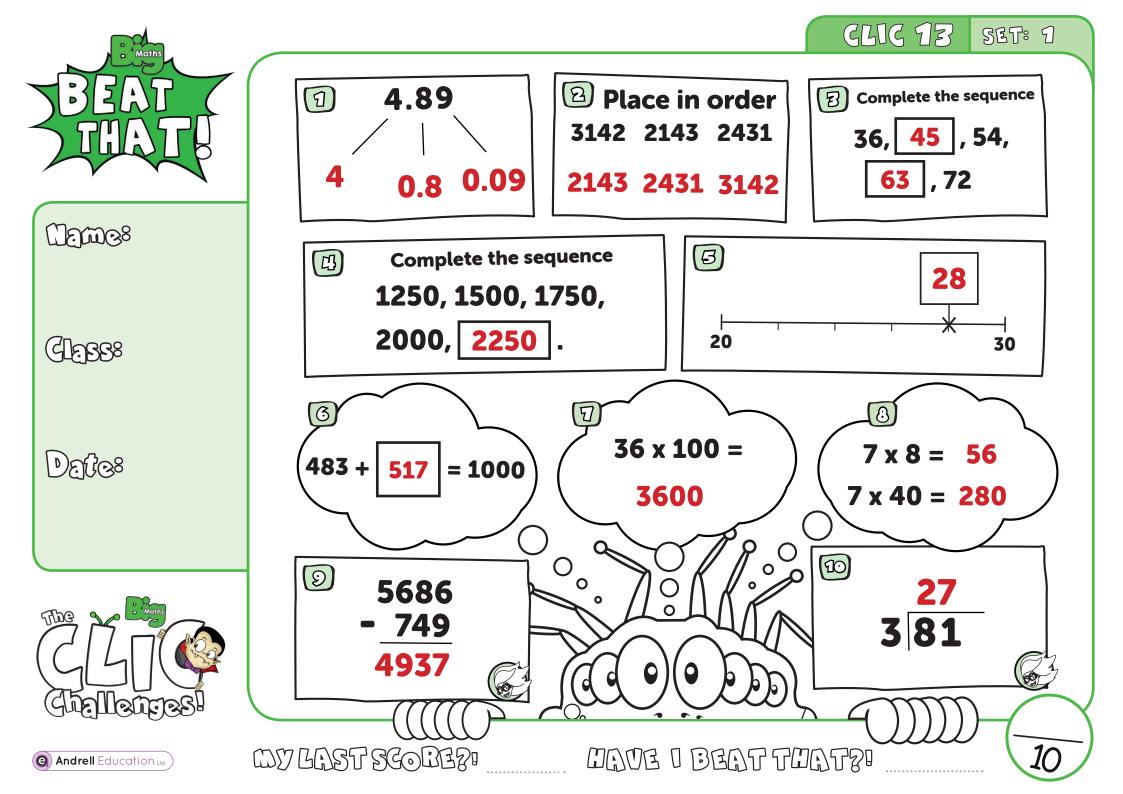
# Select Sheets

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 13

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.





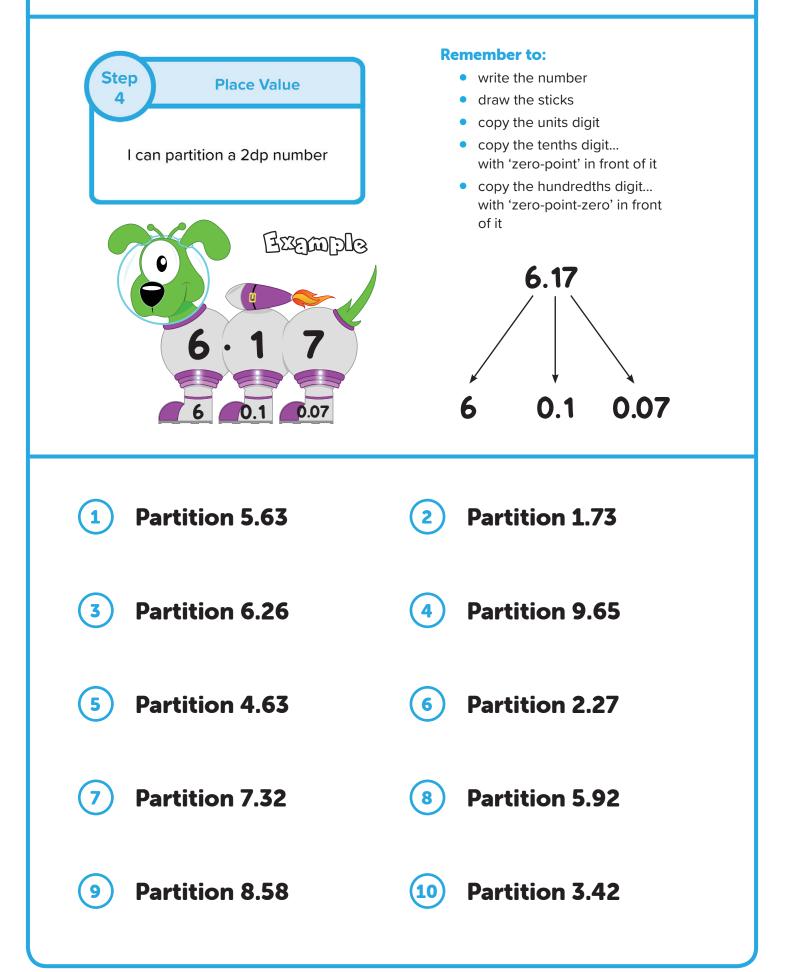
# Question 1 - I can partition a number with 2 decimal places

#### **Remember to:**

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



# **Repeat** Questions





# **Repeat** Answers

	Remember to:
Step Place Value	write the number
4	<ul> <li>draw the sticks</li> </ul>
	<ul> <li>copy the units digit</li> </ul>
I can partition a 2dp number	<ul> <li>copy the tenths digit</li> </ul>
	with 'zero-point' in front of it
	<ul> <li>copy the hundredths digit with 'zero-point-zero' in front</li> </ul>
	of it
Exemple	
	6.17
$6 \cdot 1$	
	$\checkmark$ $\downarrow$ $\checkmark$
6 0.1 0.07	6 0.1 0.07
<b>(1) 5, 0.6, 0.03</b>	$\sim$
<b>1 5</b> , 0.6, 0.05	<b>2</b> 1, 0.7, 0.03
<b>1 5</b> , 0.6, 0.05	<b>2</b> 1, 0.7, 0.03
<b>3 6</b> , 0.2, 0.06	<ul> <li>(2) 1, 0.7, 0.03</li> <li>(4) 9, 0.6, 0.05</li> </ul>
<b>3</b> 6, 0.2, 0.06	<ul> <li>9, 0.6, 0.05</li> </ul>
<b>3</b> 6, 0.2, 0.06	<ul> <li>9, 0.6, 0.05</li> </ul>
<ul> <li>3 6, 0.2, 0.06</li> <li>5 4, 0.6, 0.03</li> </ul>	<ul> <li>4 9, 0.6, 0.05</li> <li>6 2, 0.2, 0.07</li> </ul>
<b>3</b> 6, 0.2, 0.06	<ul> <li>9, 0.6, 0.05</li> </ul>
<ul> <li>3 6, 0.2, 0.06</li> <li>5 4, 0.6, 0.03</li> </ul>	<ul> <li>4 9, 0.6, 0.05</li> <li>6 2, 0.2, 0.07</li> </ul>
<ul> <li>3 6, 0.2, 0.06</li> <li>5 4, 0.6, 0.03</li> <li>7 7, 0.3, 0.02</li> </ul>	<ul> <li>4 9, 0.6, 0.05</li> <li>6 2, 0.2, 0.07</li> <li>8 5, 0.9, 0.02</li> </ul>
<ul> <li>3 6, 0.2, 0.06</li> <li>5 4, 0.6, 0.03</li> </ul>	<ul> <li>4 9, 0.6, 0.05</li> <li>6 2, 0.2, 0.07</li> </ul>

# Question 2 - I understand 4 digit numbers

#### **Remember to:**

- order the numbers by their thousands digit
- then, if they have the same thousands digit, order by the 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



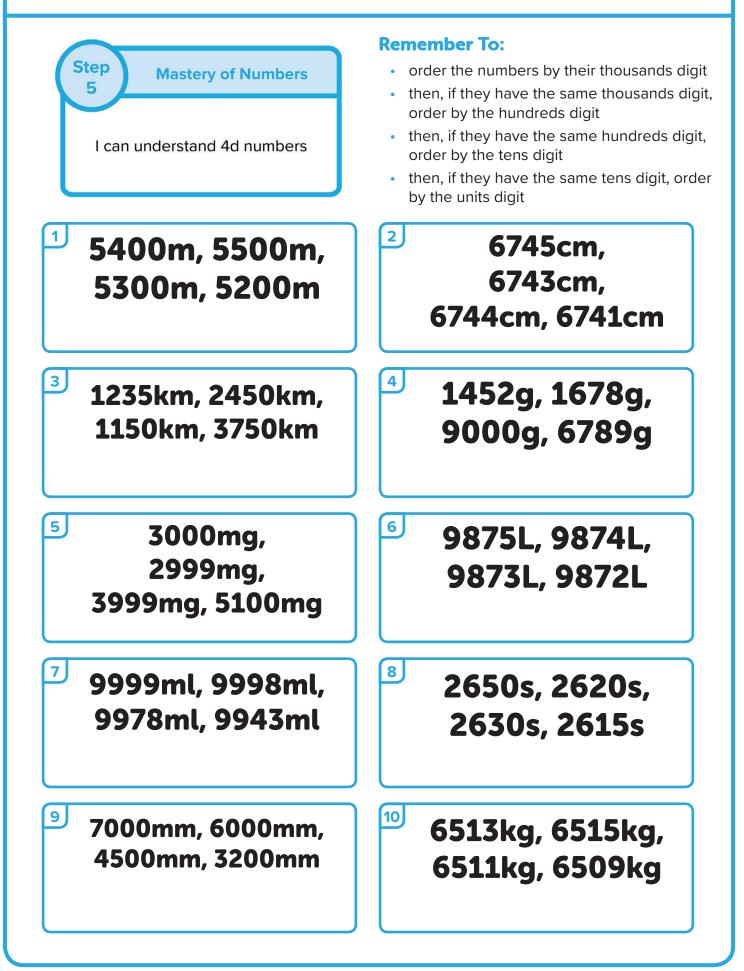
# Repeat Questions

Step       Mastery of Numbers         5       I can understand 4d numbers	<ul> <li>Remember To:</li> <li>order the numbers by their thousands digit</li> <li>then, if they have the same thousands digit, order by the hundreds digit</li> <li>then, if they have the same hundreds digit, order by the tens digit</li> <li>then, if they have the same tens digit, order by the units digit</li> </ul>	
<sup>1</sup> 1452, 1678,	<sup>2</sup> 6745, 6743,	
9000, 6789	6744, 6741	
<sup>3</sup> 9875, 9874,	4 5400, 5500,	
9873, 9872	5300, 5200	
5 2650, 2620,	<sup>6</sup> 1235, 2450,	
2630, 2615	1150, 3750	
7 6513, 6515,	<sup>8</sup> 3000, 2999,	
6511, 6509	3999, 5100	
<sup>9</sup> 7000, 6000,	<sup>10</sup> 9999, 9998,	
4500, 3200	9978, 9943	











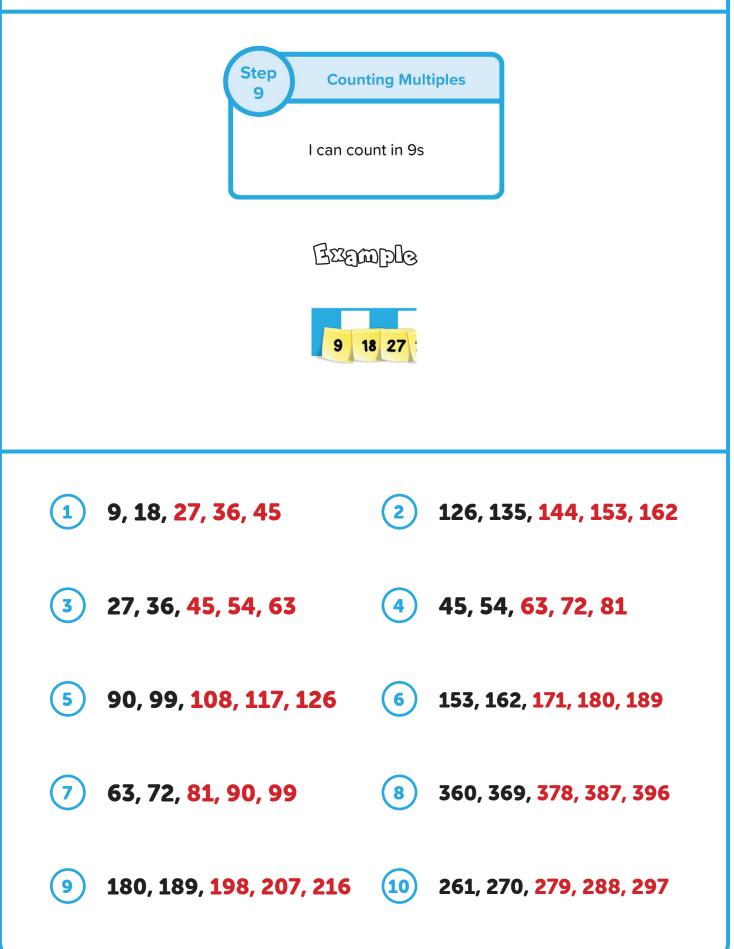


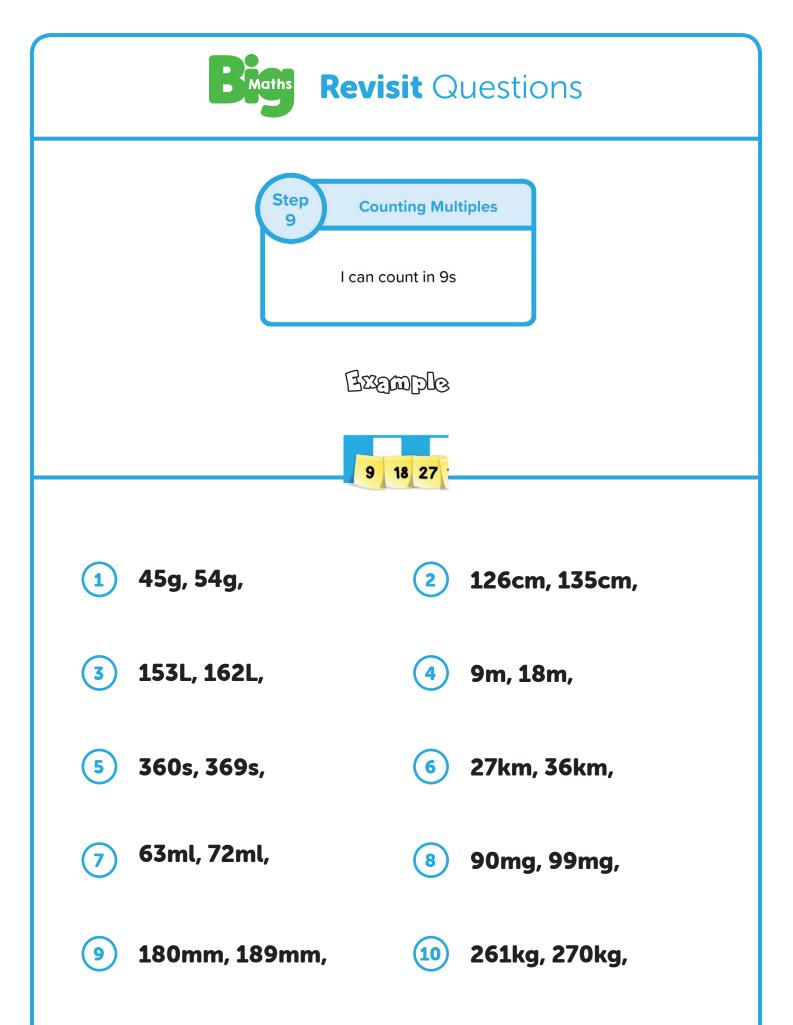
# Question 3 - I can count in 9s



Step 9 Counting Multiples I can count in 9s				
Exemple 9 18 27				
<b>1</b> 9, 18,	2 126, 135,			
3 27, 36,	<b>4 45, 54</b> ,			
<b>5</b> 90, 99,	<b>6 153, 162,</b>			
	$\checkmark$			
7 63, 72,	8 360, 369,			
9 180, 189	, 10 261, 270,			







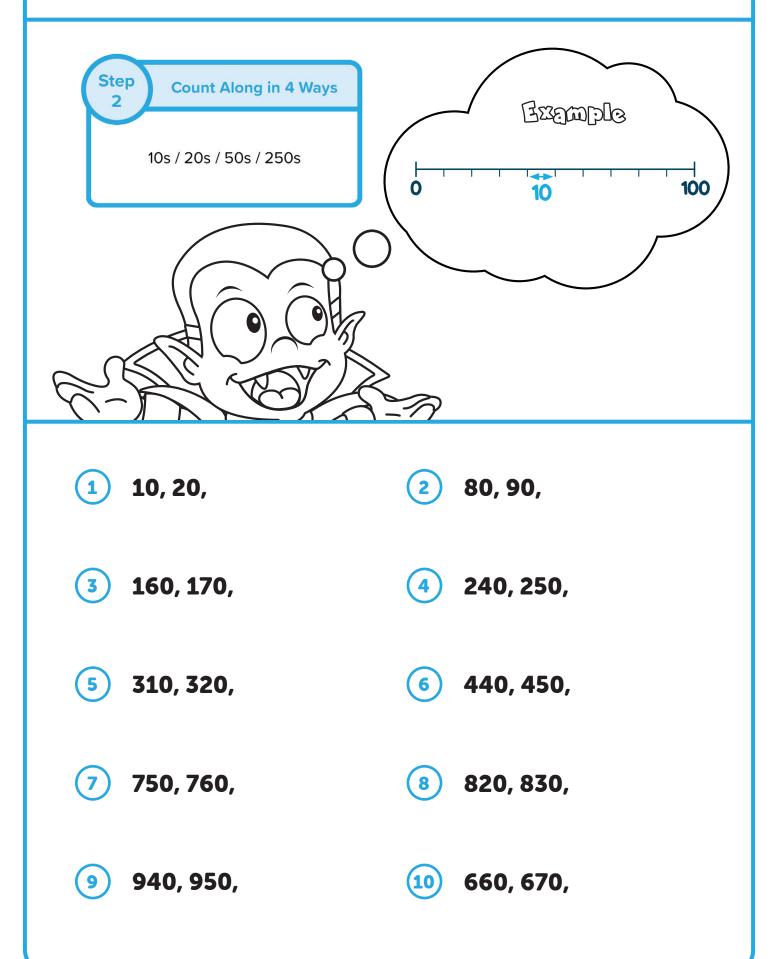


Step       Counting Multiples         9       18         9       18         1       45g, 54g, 63g, 72g, 81g       2         1       45g, 54g, 63g, 72g, 81g       2         1       45g, 54g, 63g, 72g, 81g       2         1       153L, 162L, 171L, 180L, 189L       4         3       153L, 162L, 171L, 180L, 189L       4         5       360s, 369s, 378s, 387s, 396s       6         27km, 36km, 45km, 54km, 63km       5         7       63mL, 72mL, 81mL, 90mL, 99mL       8         9       90mg, 99mg, 108mg, 117mg, 126mg         1       180mm, 189mm, 216mm       2						
Brample         9 18 27:         1       45g, 54g, 63g, 72g, 81g       2       126cm, 135cm, 144cm, 153cm, 162cm         3       153l, 162l, 171l, 180l, 189l       4       9m, 18m, 27m, 36m, 45m         3       153l, 162l, 171l, 180l, 189l       4       9m, 18m, 27m, 36m, 45m         5       360s, 369s, 378s, 387s, 396s       6       27km, 36km, 45km, 54km, 63km         7       63ml, 72ml, 81ml, 90ml, 99ml       8       90mg, 99mg, 108mg, 117mg, 126mg         9       180mm, 189mm, 198mm, 207mm,       10       261kg, 270kg, 279kg, 288kg 297kg	9					
<ul> <li>45g, 54g, 63g, 72g, 81g</li> <li>126cm, 135cm, 144cm, 153cm, 162cm</li> <li>153l, 162l, 171l, 180l, 189l</li> <li>9m, 18m, 27m, 36m, 45m</li> <li>360s, 369s, 378s, 387s, 396s</li> <li>27km, 36km, 45km, 54km, 63km</li> <li>6 27km, 36km, 45km, 54km, 63km</li> <li>6 3ml, 72ml, 81ml, 90ml, 99ml</li> <li>90mg, 99mg, 108mg, 117mg, 126mg</li> <li>180mm, 189mm, 198mm, 207mm,</li> <li>261kg, 270kg, 279kg, 288kg, 297kg</li> </ul>						
<ul> <li>81g</li> <li>153cm, 162cm</li> <li>153l, 162l, 171l, 180l, 189l</li> <li>9m, 18m, 27m, 36m, 45m</li> <li>360s, 369s, 378s, 387s, 396s</li> <li>27km, 36km, 45km, 54km, 63km</li> <li>6 27km, 36km, 45km, 54km, 63km</li> <li>6 3ml, 72ml, 81ml, 90ml, 99ml</li> <li>90mg, 99mg, 108mg, 117mg, 126mg</li> <li>180mm, 189mm, 198mm, 207mm,</li> <li>261kg, 270kg, 279kg, 288kg 297kg</li> </ul>	9 18 27					
<ul> <li>3 189l</li> <li>4 45m</li> <li>5 360s, 369s, 378s, 387s, 396s</li> <li>6 27km, 36km, 45km, 54km, 63km</li> <li>7 63ml, 72ml, 81ml, 90ml, 99ml</li> <li>8 90mg, 99mg, 108mg, 117mg, 126mg</li> <li>9 180mm, 189mm, 189mm, 198mm, 207mm,</li> <li>261kg, 270kg, 279kg, 279kg, 288kg, 297kg</li> </ul>		21				
<ul> <li>396s</li> <li>54km, 63km</li> <li>63ml, 72ml, 81ml, 90ml, 99ml</li> <li>90mg, 99mg, 108mg, 117mg, 126mg</li> <li>180mm, 189mm, 198mm, 207mm,</li> <li>261kg, 270kg, 279kg, 288kg, 297kg</li> </ul>		4				
<ul> <li>90ml, 99ml</li> <li>117mg, 126mg</li> <li>180mm, 189mm,</li> <li>198mm, 207mm,</li> <li>261kg, 270kg, 279kg,</li> <li>288kg, 297kg</li> </ul>		6				
9 198mm, 207mm, 10 261Kg, 270Kg, 279Kg, 288kg, 297kg						
	9 198mm, 207mm,					

### Question 4 - I can in 10s, 20s, 50s and 250s

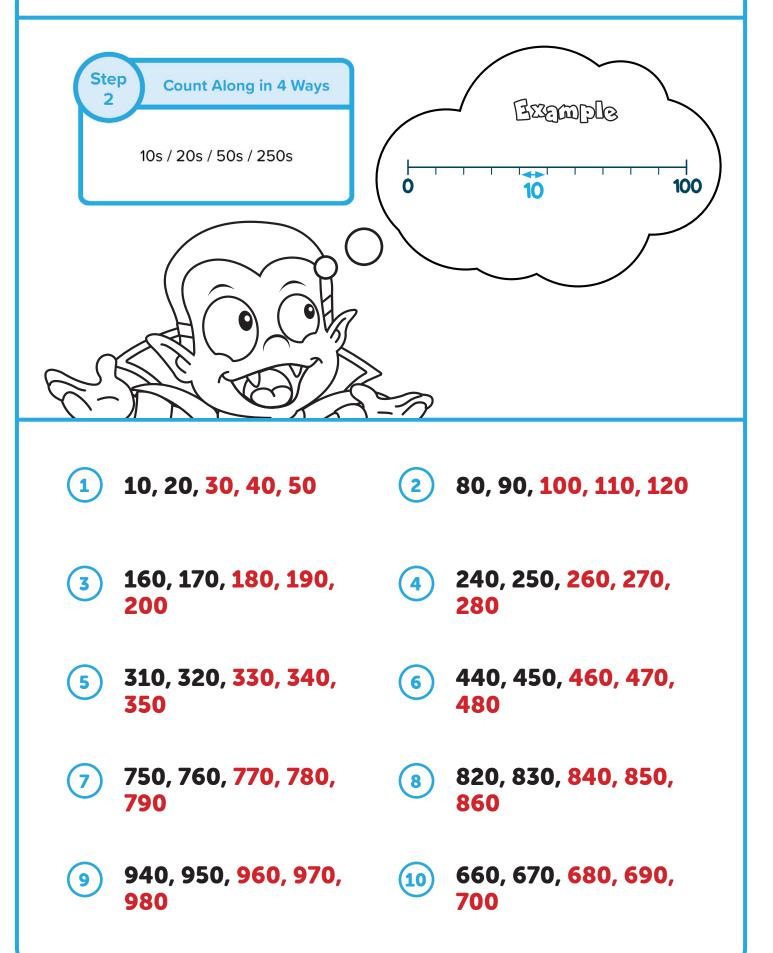


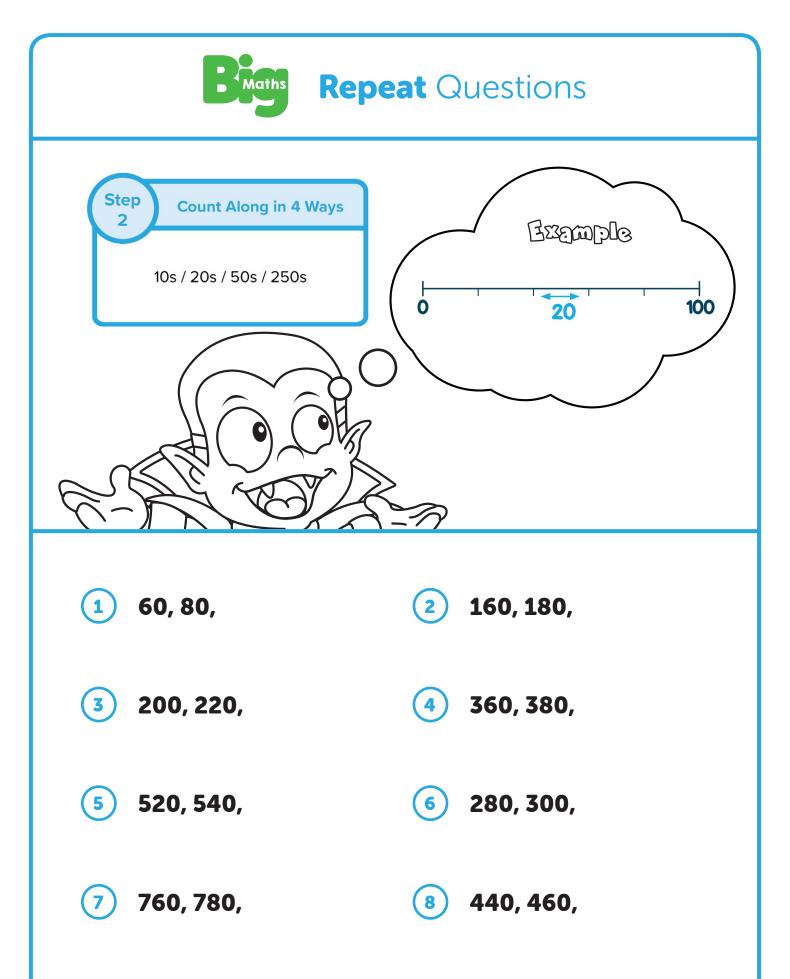
# **Repeat** Questions





**Repeat** Answers

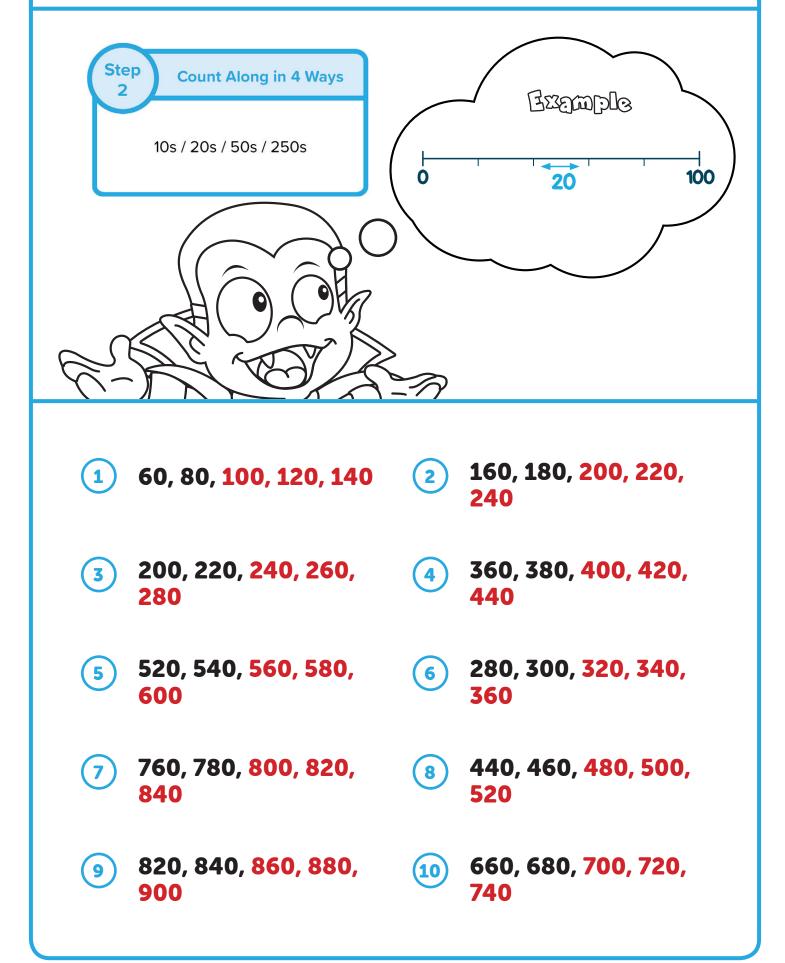


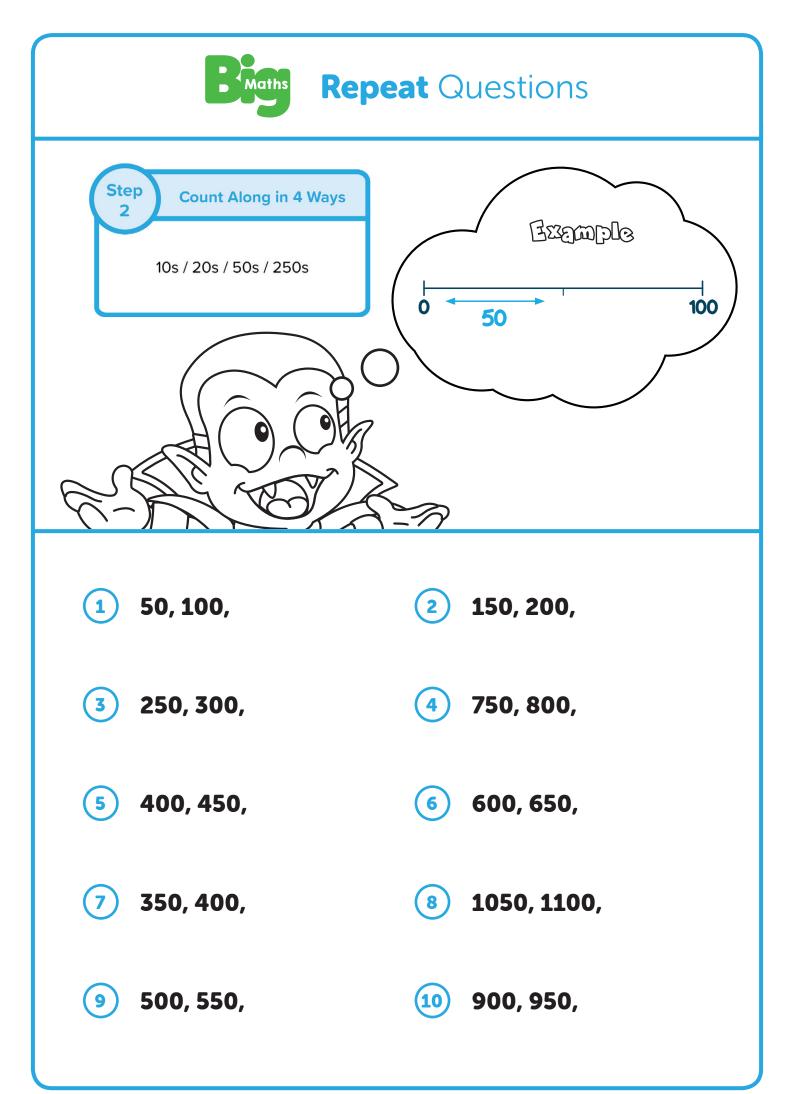


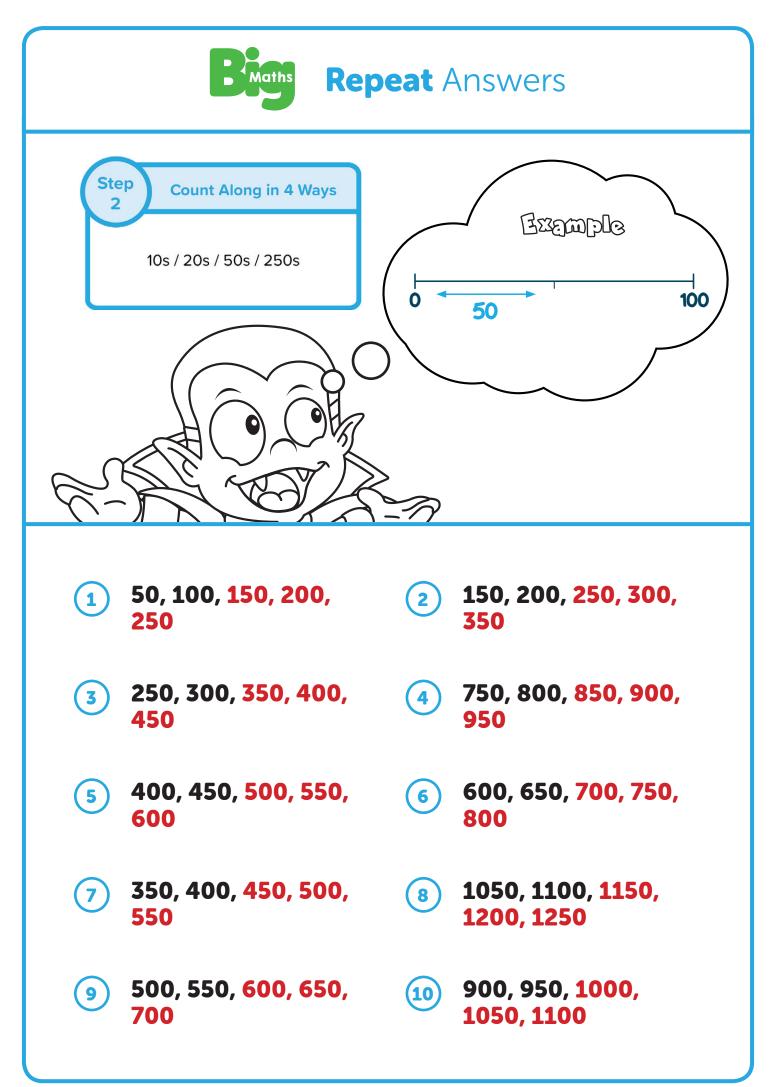
9 820, 840,
10 660, 680,

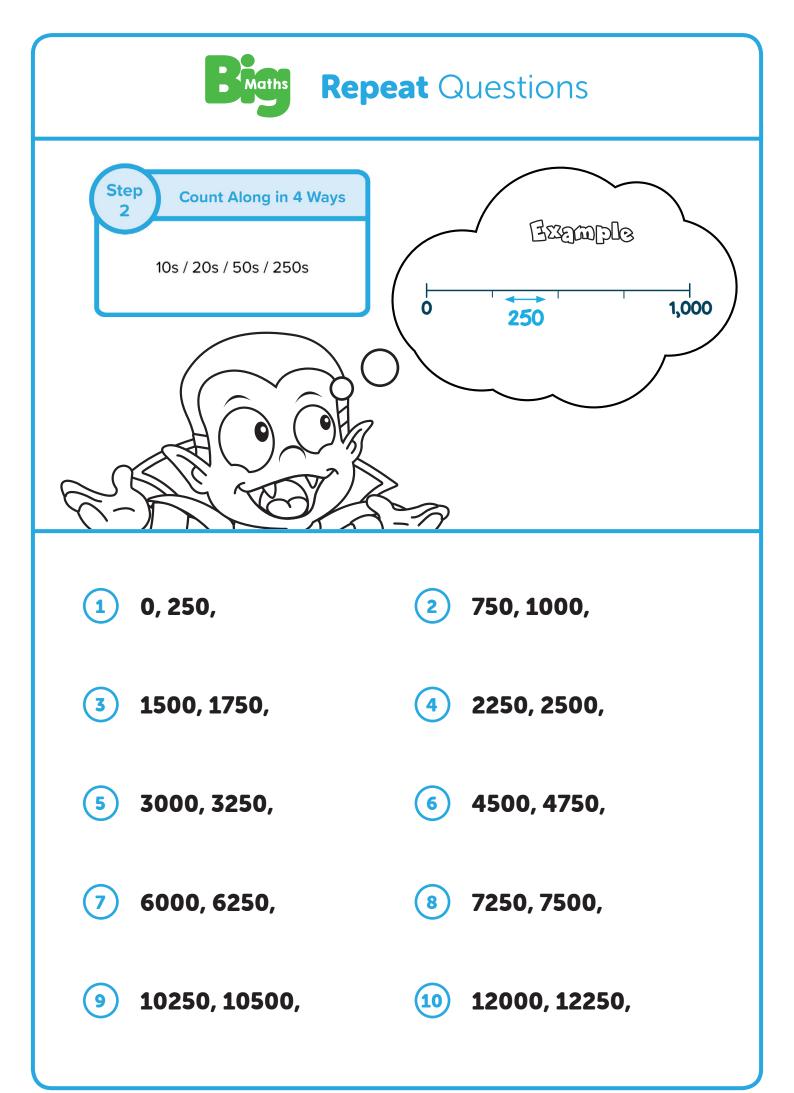


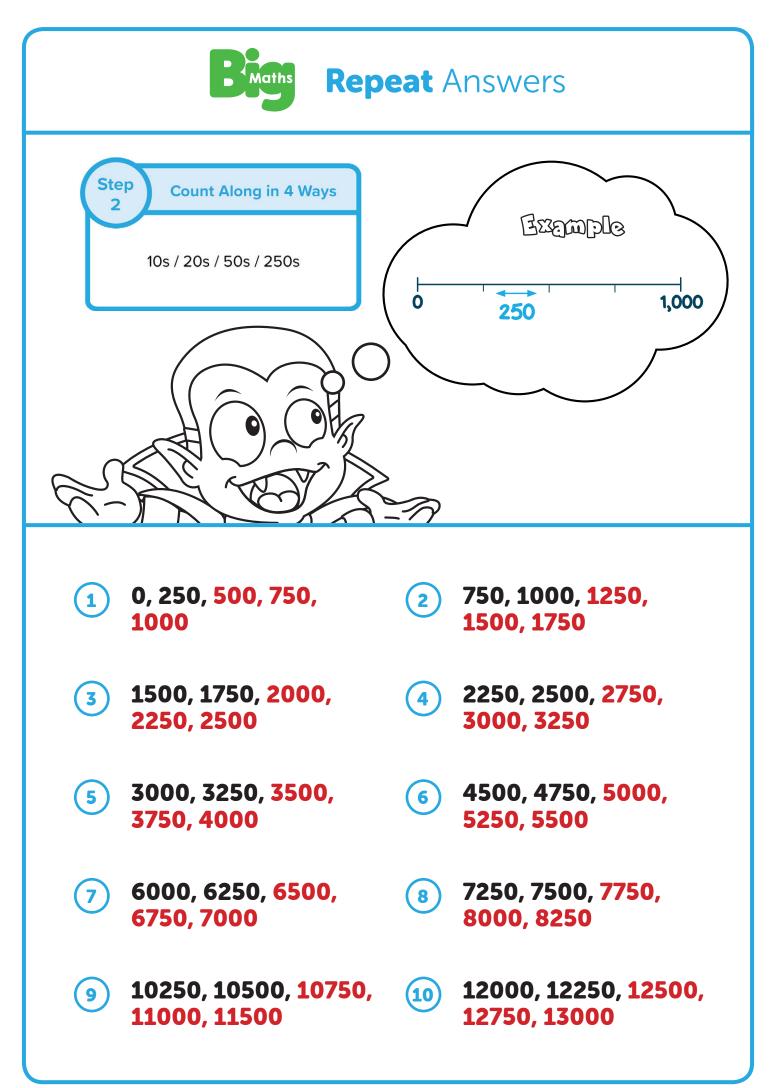
**Repeat** Answers

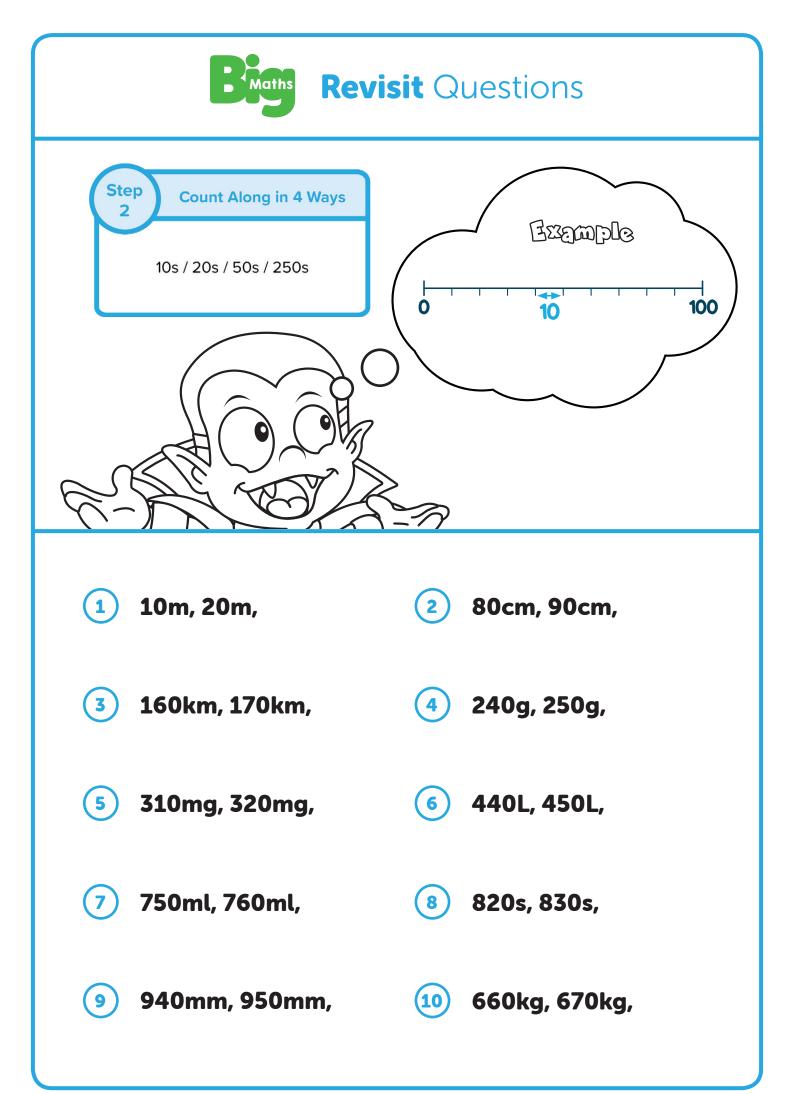


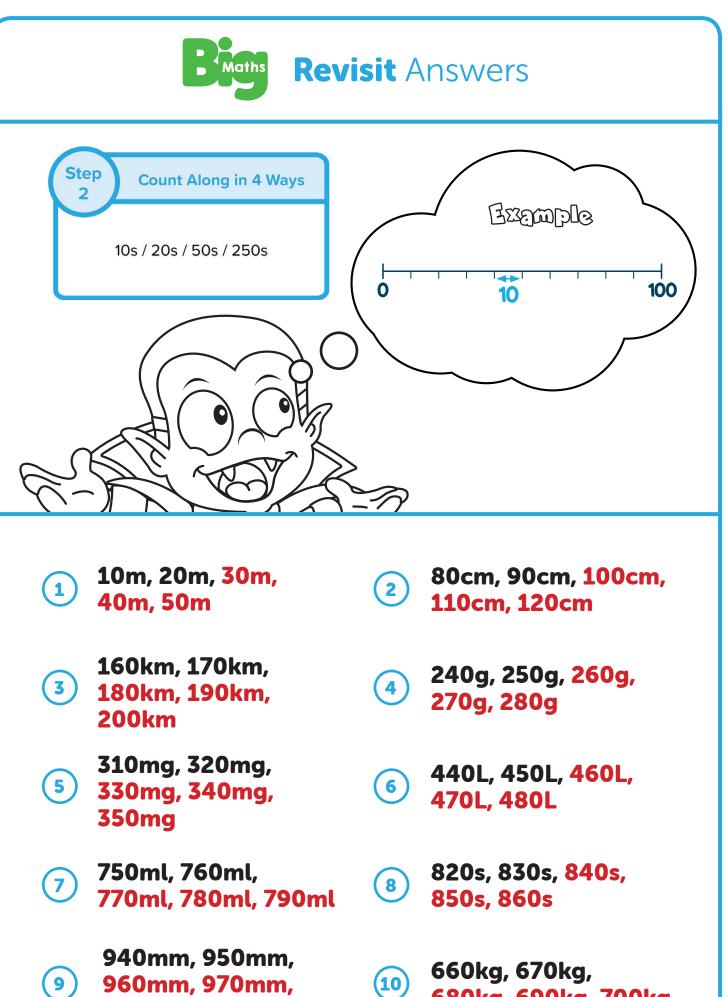






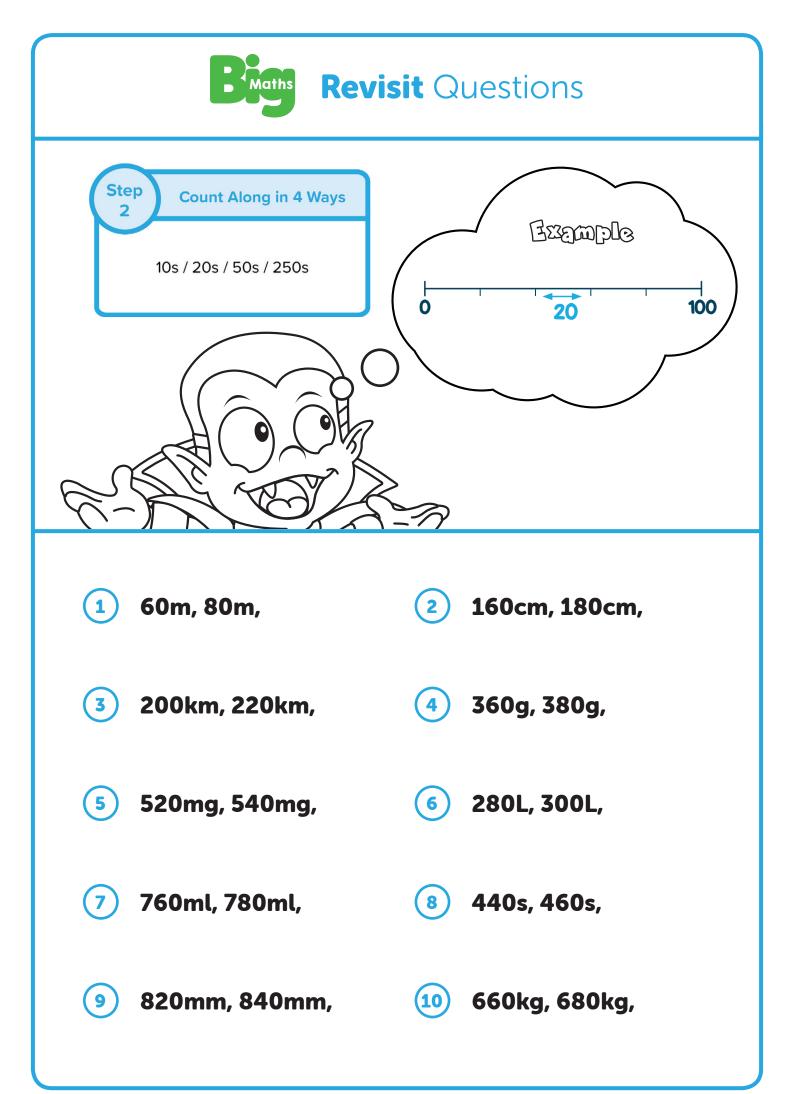






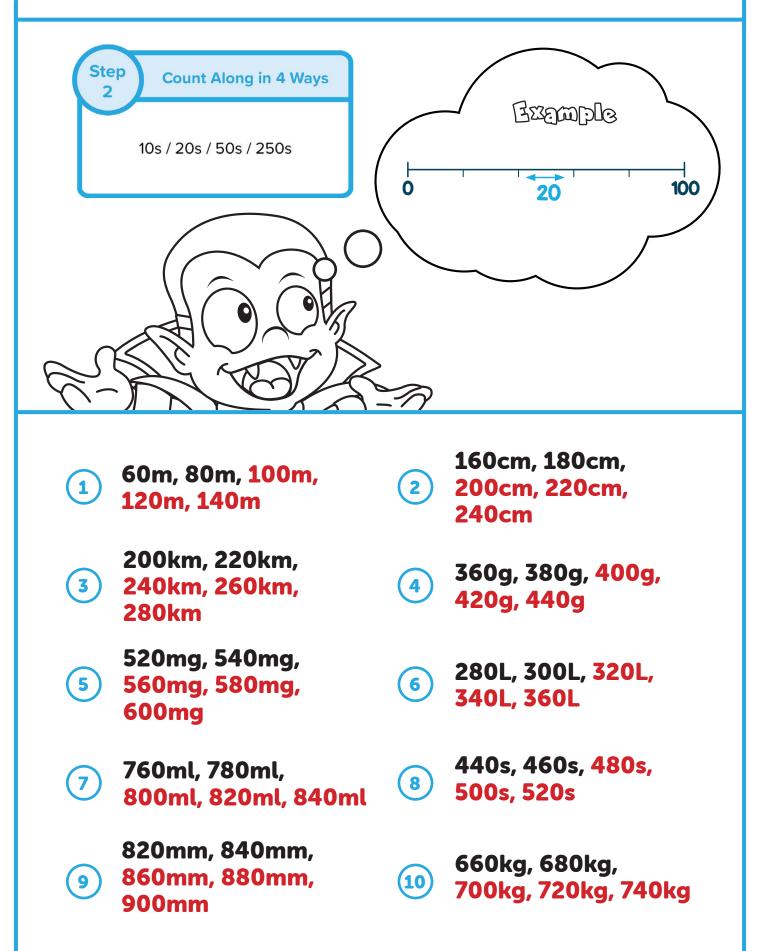
960mm, 970mm, 980mm

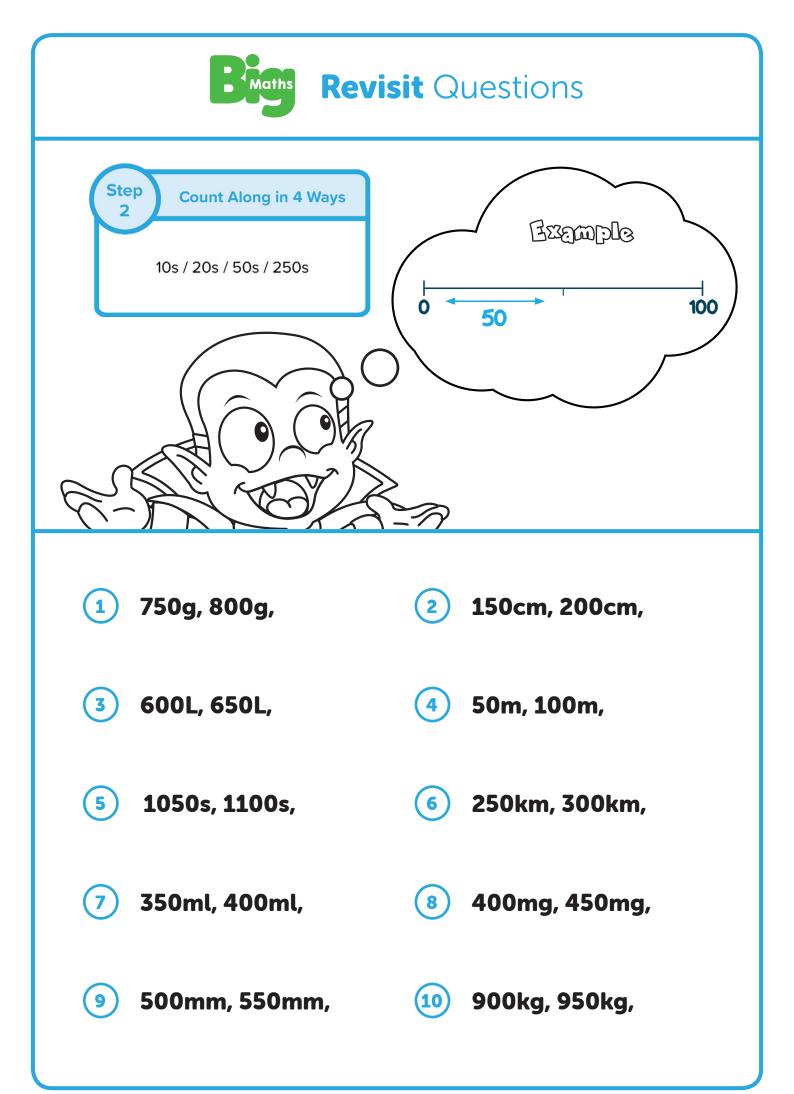
680kg, 690kg, 700kg

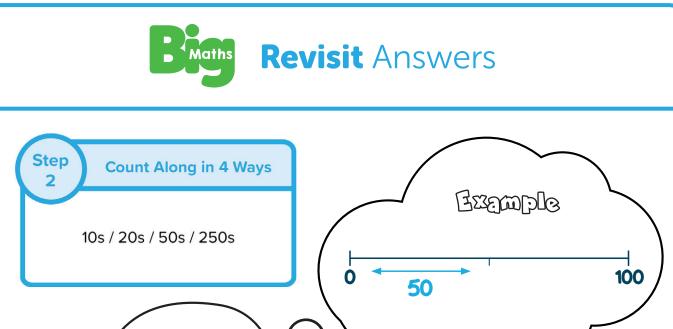




**Revisit** Answers

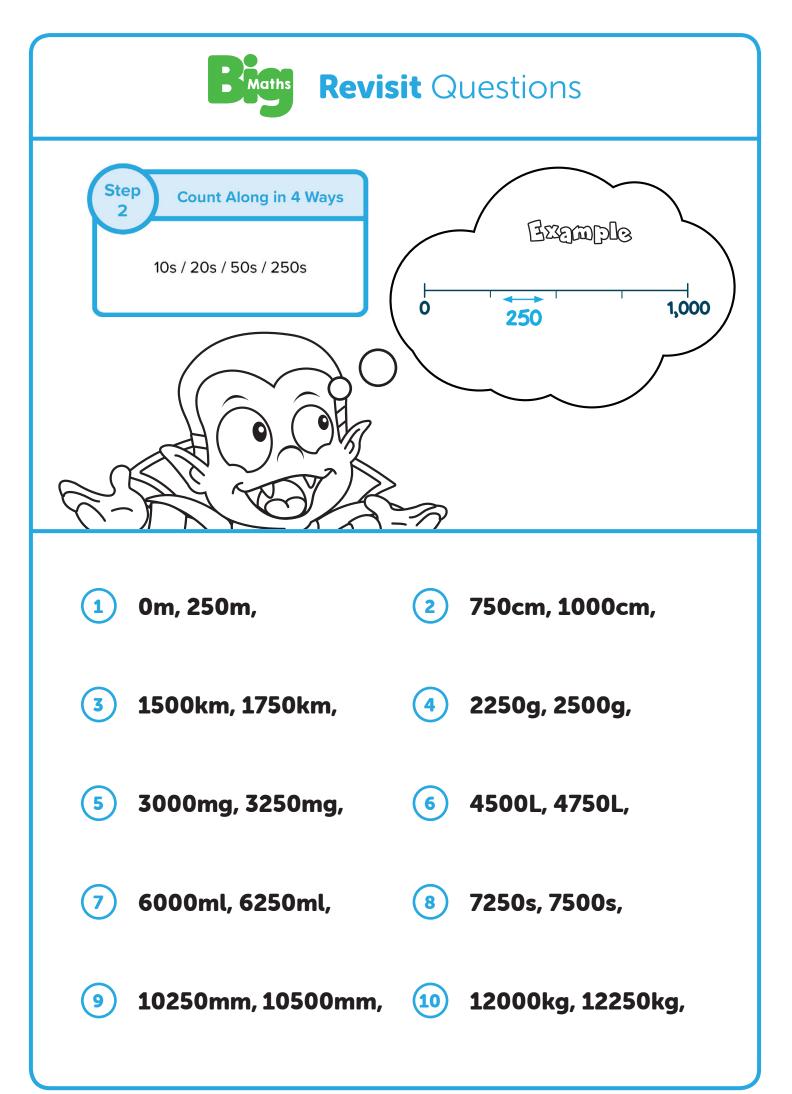


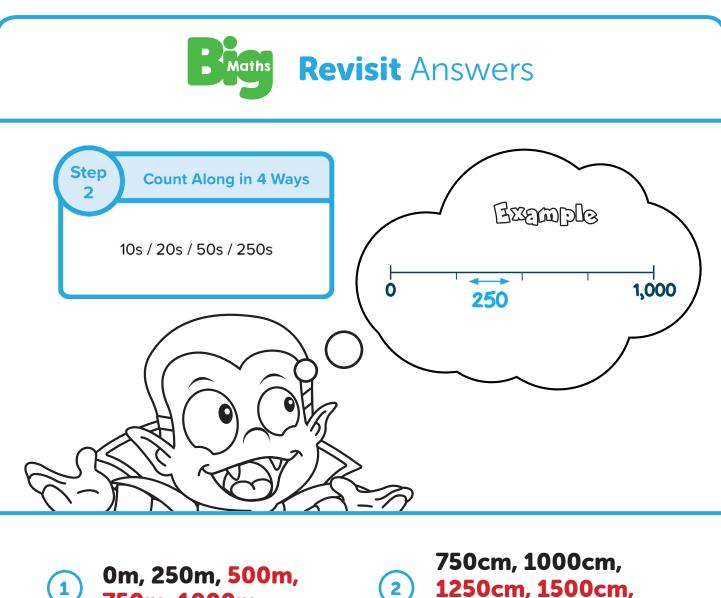




R-ALOXA-M	

1	750g, 800g, <mark>850g,</mark> 900g, 950g	2	150cm, 200cm, 250cm, 300cm, 350cm
3	600L, 650L, <mark>700L,</mark> 750L, 800L	4	50m, 100m, 150m, 200m, 250m
5	1050s, 1100s, <mark>1150s,</mark> 1200s, 1250s	6	250km, 300km, 350km, 400km, 450km
7	350ml, 400ml, <mark>450ml, 500ml, 550ml</mark>	8	400mg, 450mg, 500mg, 550mg, 600mg
9	500mm, 550mm, 600mm, 650mm, 700mm	10	900kg, 950kg, 1000kg, 1050kg,1100kg





750m, 1000m

1500km, 1750km, **3** 2000km, 2250km, 2500km

3000mg, 3250mg, **5 3500mg**, **3750mg**, 4000mg

6000ml, 6250ml, (7) 6500ml, 6750ml, 7000ml

10250mm,

9) 10500mm, 10750mm, 11000mm, 11500mm

1250cm, 1500cm, 1750cm

2250g, 2500g, (4) 2750g, 3000g, 3250g

4500L, 4750L, (6) 5000L, 5250L, 5500L

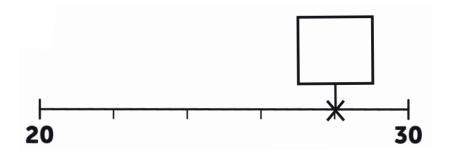
7250s, 7500s, 7750s, 8 8000s, 8250s

> 12000kg, 12250kg, 12500kg, 12750kg, 13000kg

(10)

# Question 5 - I can still count along for all of Count Fourways' challenges

This question challenges a child's ability to still count along for all of Count Fourways' challenges.



There is no new skill to be mastered here, it is just the confirmation that the child has the ability to cope with unlabelled divisions with number lines in context from all of the four ways discussed, and for all steps of progression.

Once the child has this skill, then we can ask them to find another number on the number line using this skill, and then, if their calculation ability allows, find the gap (difference) between the 2 values.

# Question 6 - I can find the missing piece to 1000

- make the units digits total 10
- make the tens digits total 9
- make the hundreds digits total 9



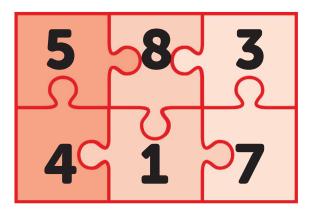
# **Repeat** Questions

Step INN: Number Bonds to 10

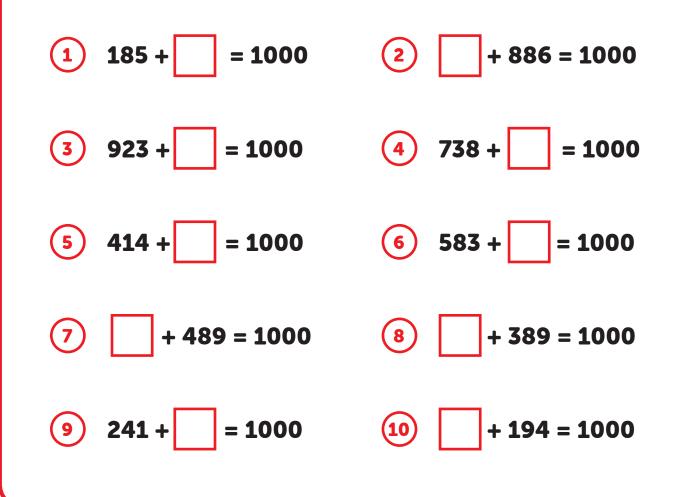
I can find the missing piece to 1000

#### **Remember to:**

- make the units digits total 10
- make the tens digits total 9
- make the hundreds digit total 9



# = 1000





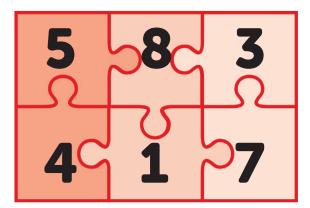
## **Repeat** Answers

Step INN: Number Bonds to 10

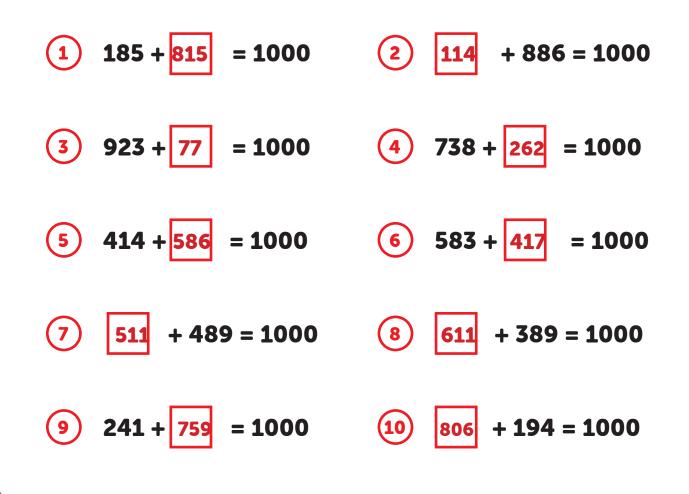
I can find the missing piece to 1000

#### **Remember to:**

- make the units digits total 10
- make the tens digits total 9
- make the hundreds digit total 9



= 1000



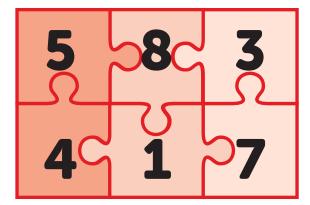


# **Revisit** Questions

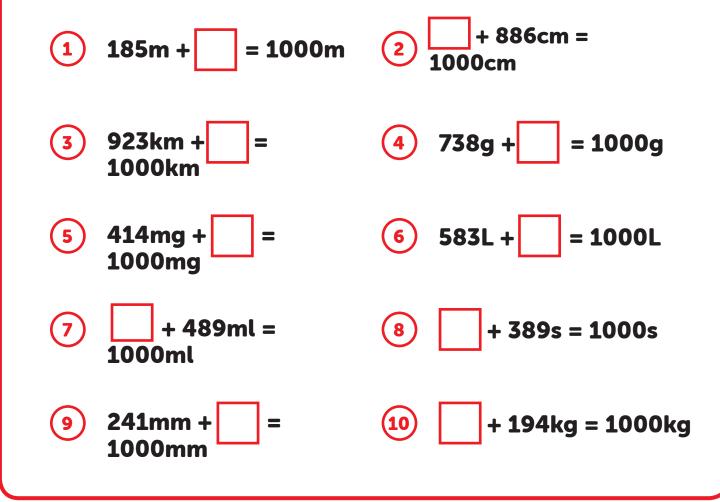
Step INN: Number Bonds to 10

I can find the missing piece to 1000

- make the units digits total 10
- make the tens digits total 9
- make the hundreds digit total 9





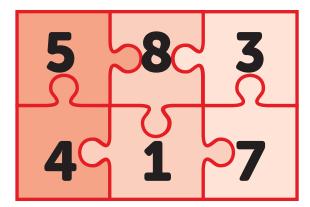




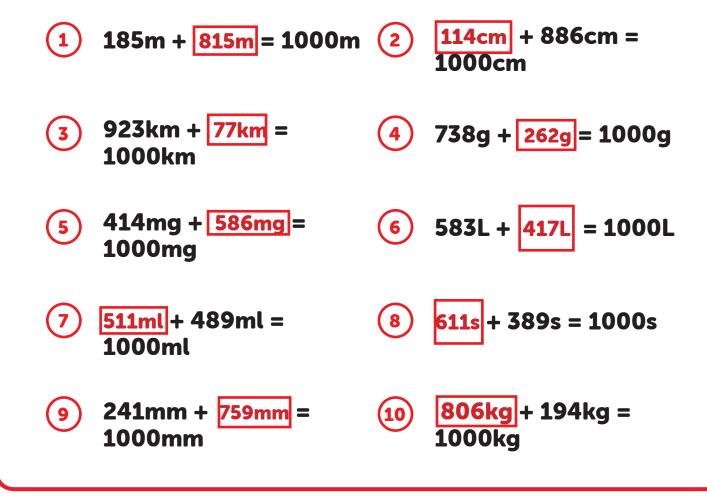
Step INN: Number Bonds to 10

I can find the missing piece to 1000

- make the units digits total 10
- make the tens digits total 9
- make the hundreds digit total 9









# Real Life Maths Questions

I can find the missing piece to 1000

**INN: Number Bonds to 10** 

#### **Remember to:**

- make the (ones) units digits total 10
- make the tens digits total 9
- make the hundreds digit total 9

1 Mully has 294 pears. He wants 1000 pears. How many more pears does he need? 2 Pim wants £1000. He has £546. How much more money does he need? 3 Speedy Col has a barrel containing 835L of water. The barrel can hold 1000L. How much liquid can she still pour in? 4 What is the missing piece: 686 + [ ] = 1000? 5 Pim has 371kg of sand. He needs 1000kg of sand. How much more sand does he need?



1

4

5

I can find the missing piece to

**INN: Number Bonds to 10** 

1000

### **Remember to:**

- make the (ones) units digits total 10
- make the tens digits total 9
- make the hundreds digit total 9

Mully has 294 pears. He wants 1000 pears. How many more pears does he need?

### He needs 706 more pears.

2 Pim wants £1000. He has £546. How much more money does he need?

### He needs £454.

<sup>3</sup>Speedy Col has a barrel containing 835L of water. The barrel can hold 1000L. How much liquid can she still pour in?

She can still pour in 165L of water.

What is the missing piece: 686 + [ ] = 1000?

The missing piece is 314.

Pim has 371kg of sand. He needs 1000kg of sand. How much more sand does he need?

He needs 629kg of sand.

## Question 7 - I can multiply whole numbers by 100

- place 2 zeros on the units end
- remember that this moves the digits two places to the left
- remember that this makes the number 100 times bigger



















2

1

2

3

4

5

## Real Life Maths Questions

I can multiply whole numbers by 100

Multiplying by 10

#### **Remember to:**

- place 2 zeros on the ones (units) end
- remember that this moves the digits two place to the left
- remember that this makes the number 100 times bigger

Pim has 12 boxes. Each box has 100 cherries. How many cherries are there in total?

There are 43 people at a party. Each person gets 100g of sweets. How many grams of sweets are there in total?

A computer game costs £18. I want to buy 100 copies. How much does that cost?

A box of rocks weighs 74kg. There are 100 boxes. What is the total weight?

Pim has 59 jugs of water. Each jug contains 100ml. How many millilitres of water is there in total?



2

1

2

3

4

5

## Real Life Maths Answers

I can multiply whole numbers by 100

Multiplying by 10

#### **Remember to:**

- place 2 zeros on the ones (units) end
- remember that this moves the digits two place to the left
- remember that this makes the number 100 times bigger

Pim has 12 boxes. Each box has 100 cherries. How many cherries are there in total?

There are 1200 cherries in total.

There are 43 people at a party. Each person gets 100g of sweets. How many grams of sweets are there in total?

There are 4300g of sweets.

A computer game costs £18. I want to buy 100 copies. How much does that cost?

It costs £1800.

A box of rocks weighs 74kg. There are 100 boxes. What is the total weight?

The total weight is 7400kg.

Pim has 59 jugs of water. Each jug contains 100ml. How many millilitres of water is there in total?

There is 5900ml of water.

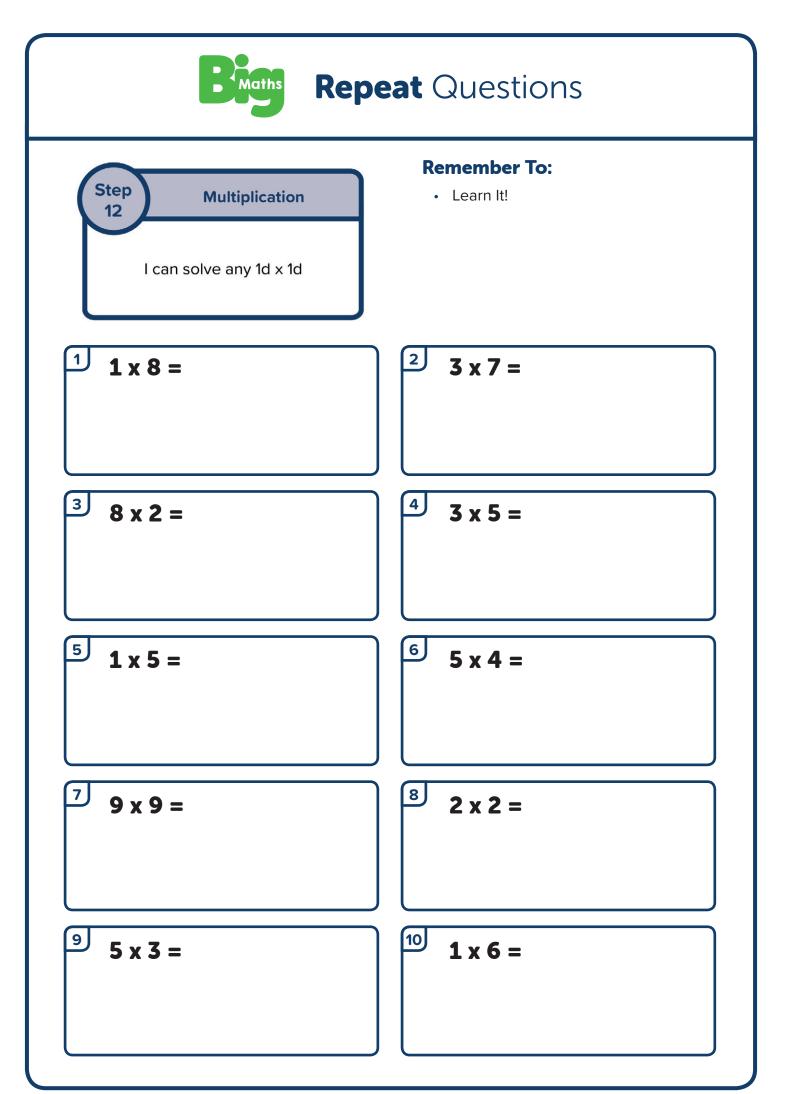
# Question 8.1 - I can solve any 1 digit x 1 digit

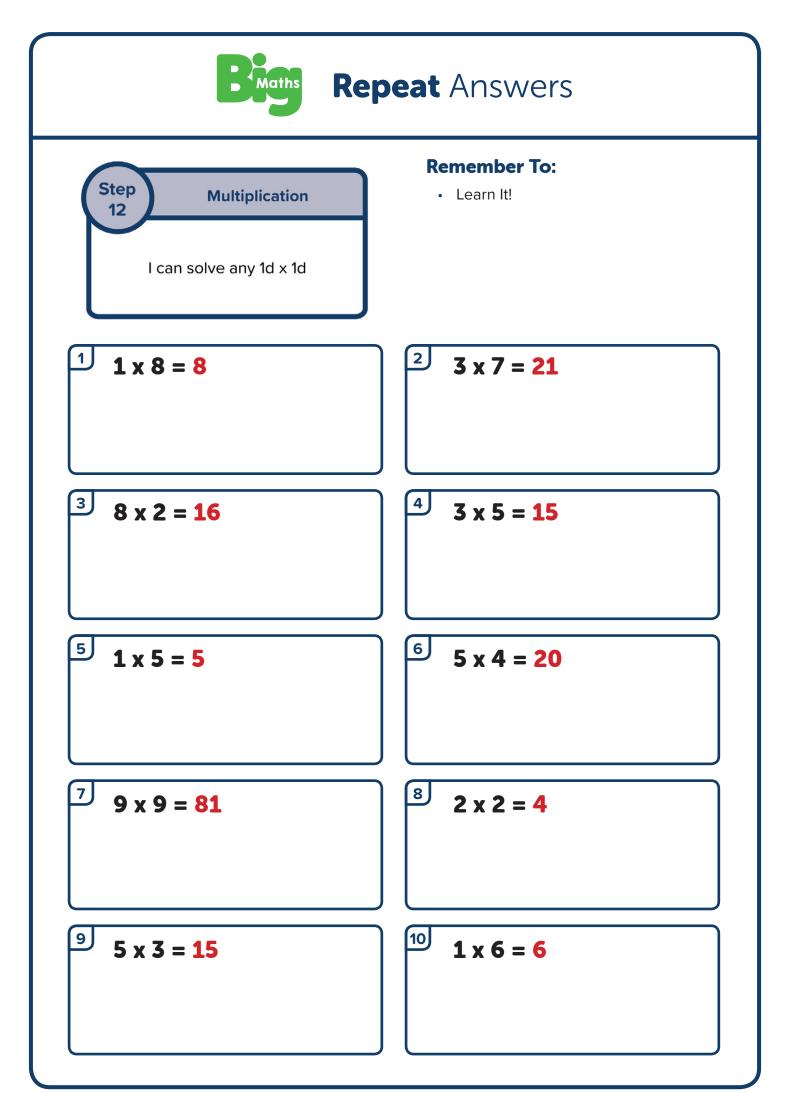
## **Remember to:**

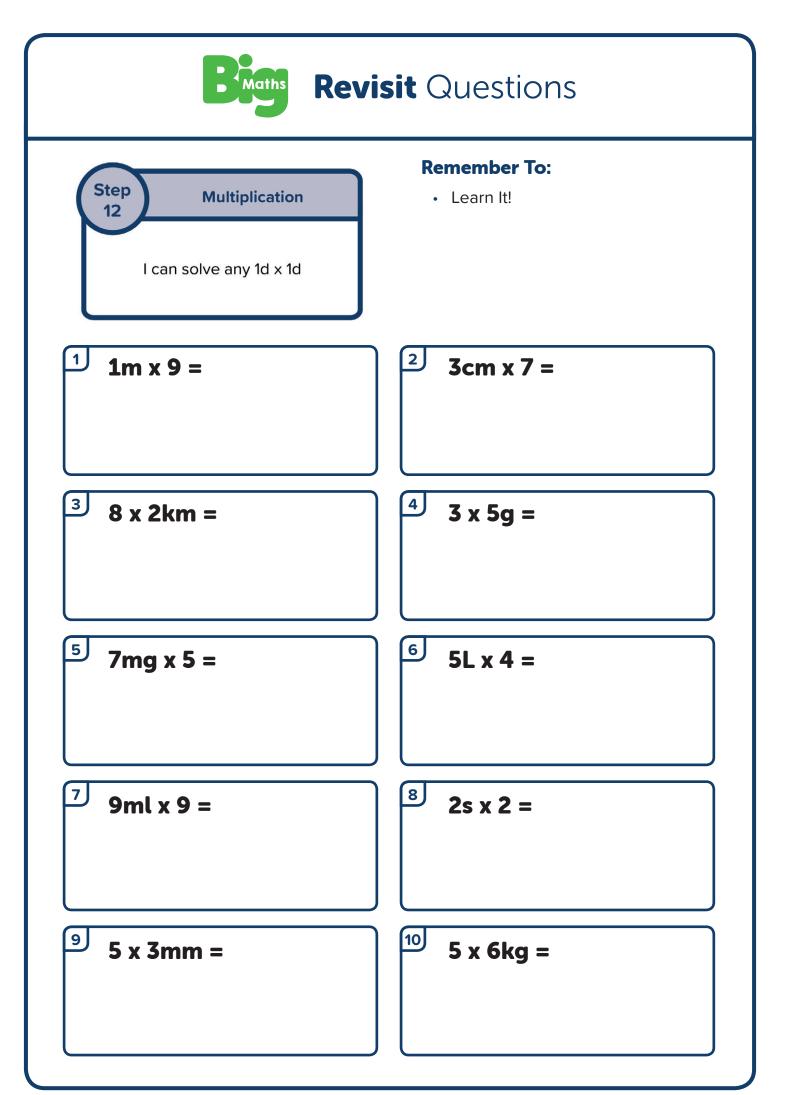
• Learn It!

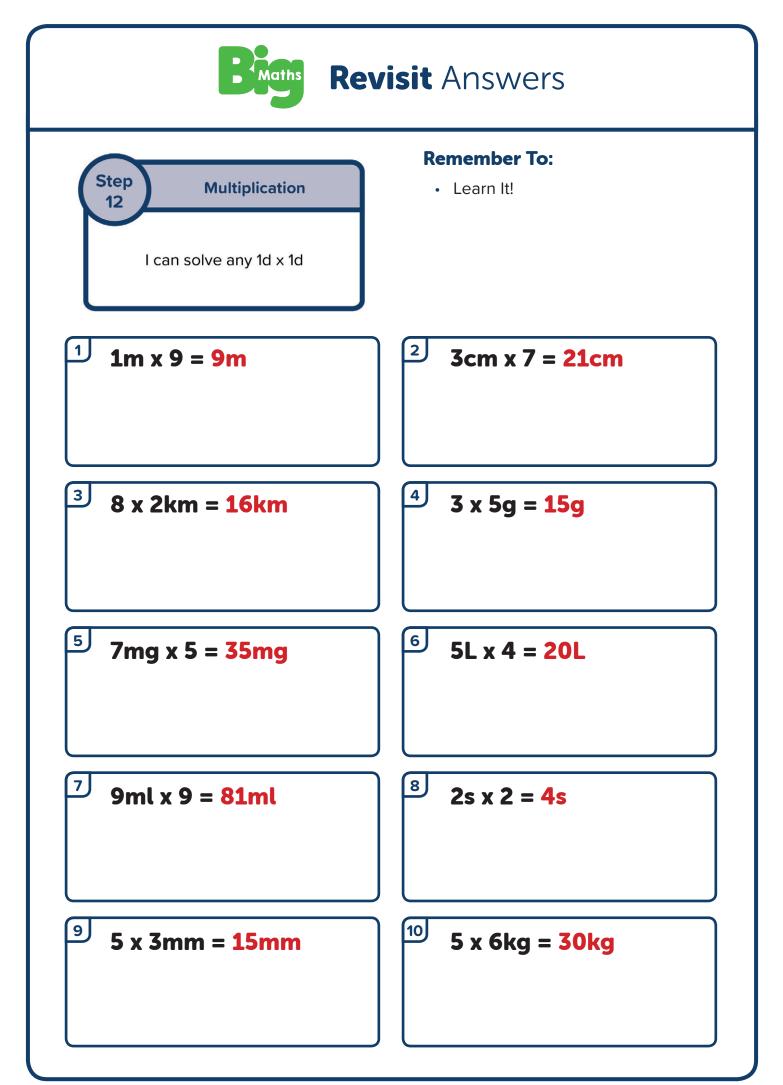
# Question 8.2 - I can do any Smile Multiplication

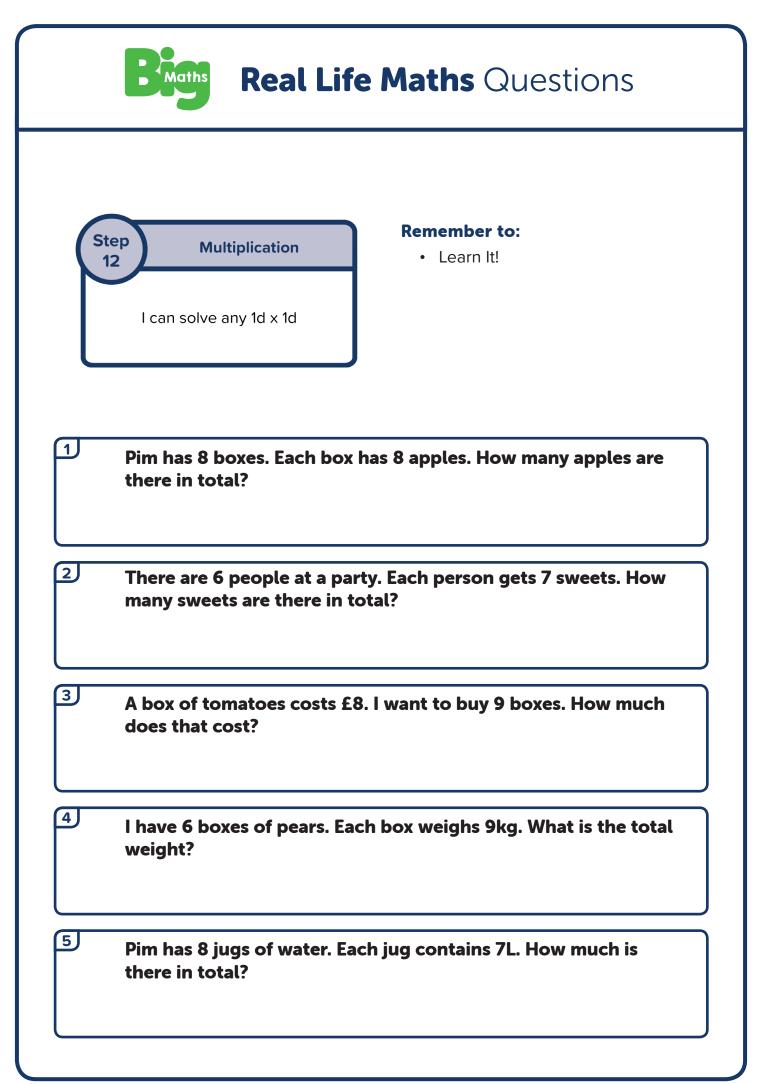
- do the tables bit
- count the zeros in the question
- put the zeros on your answer

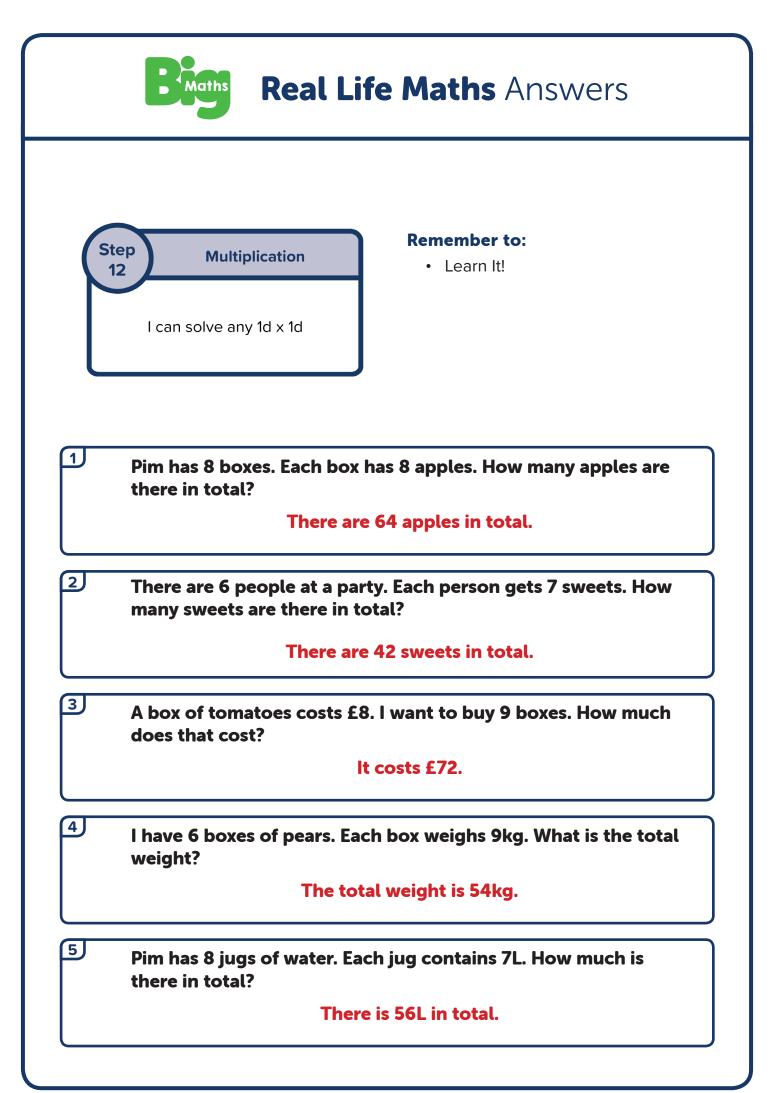


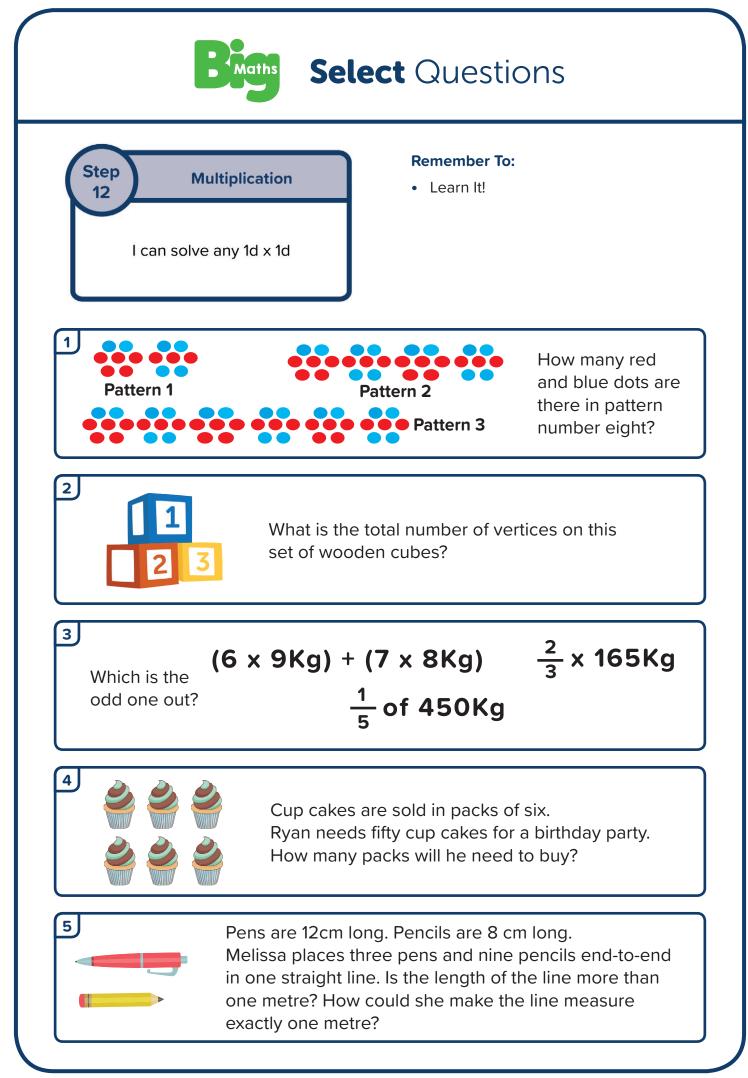


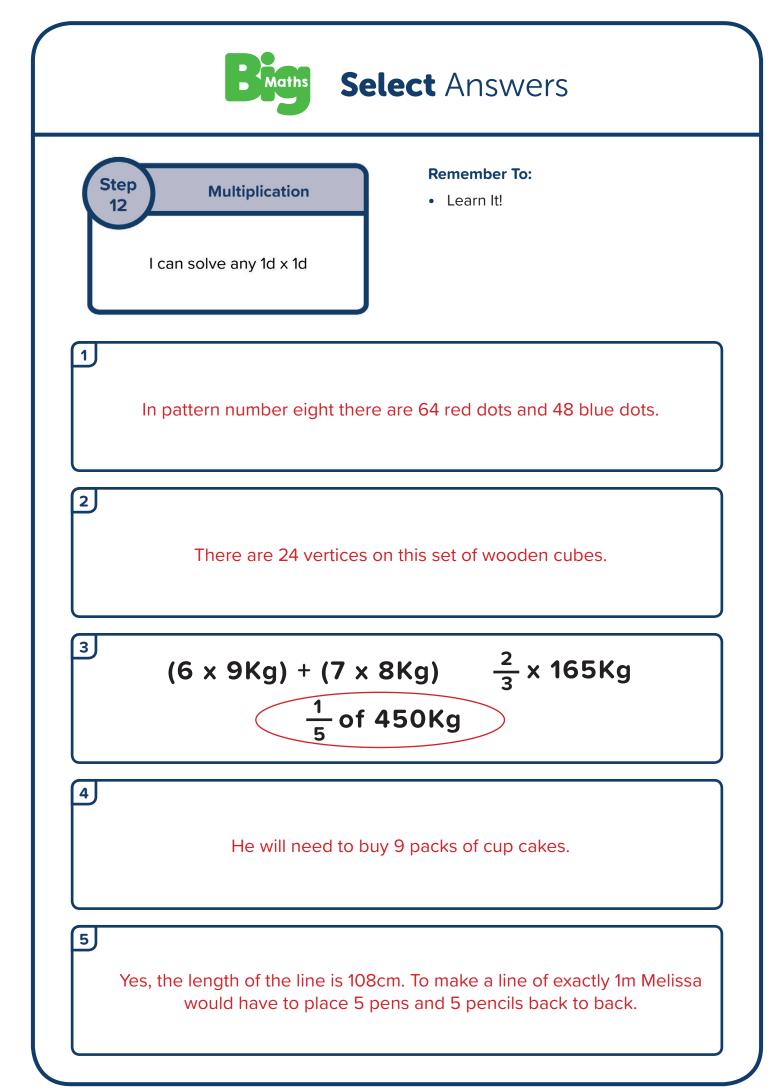


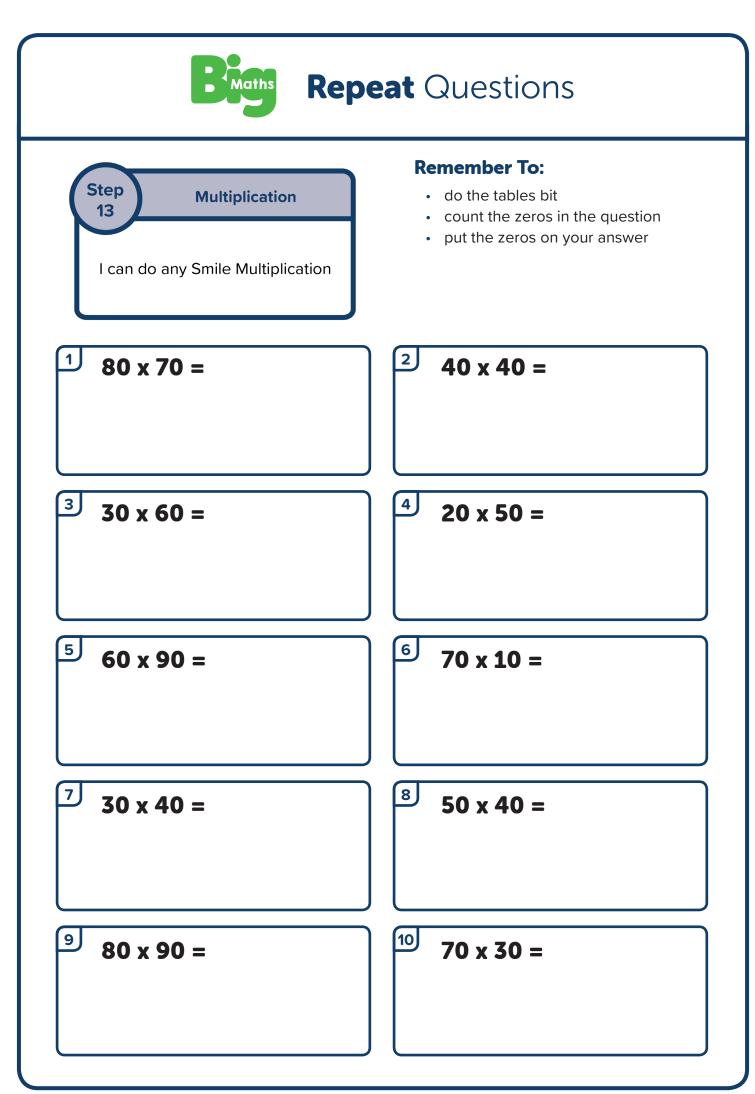


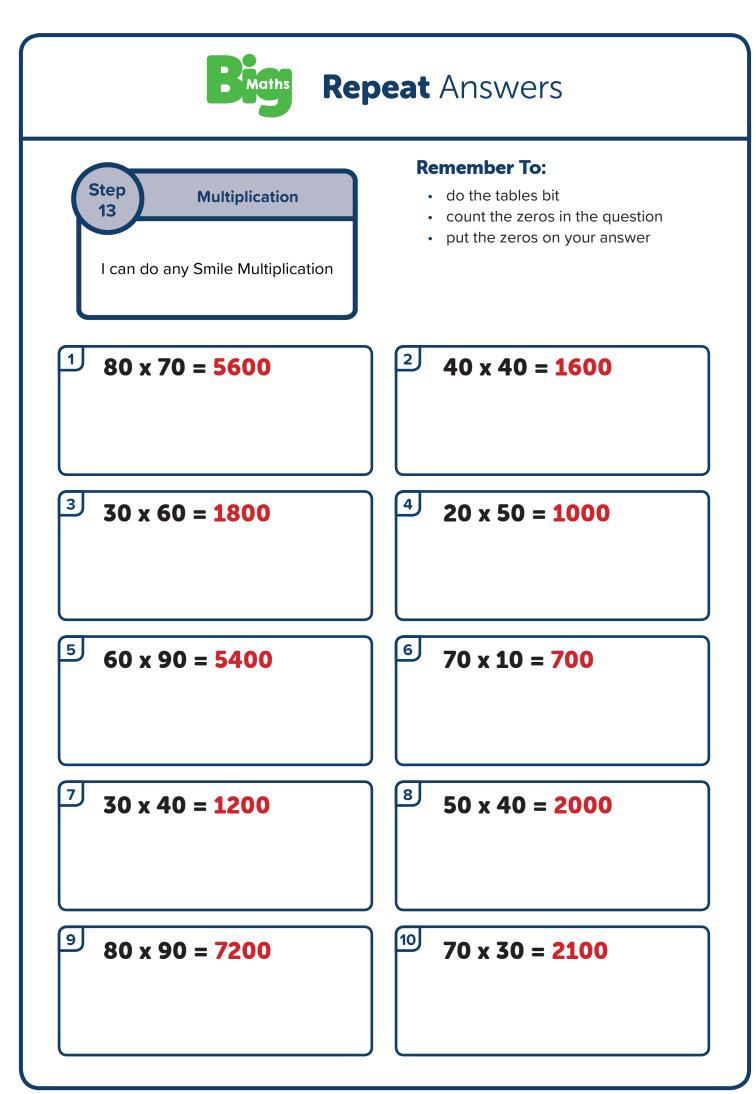


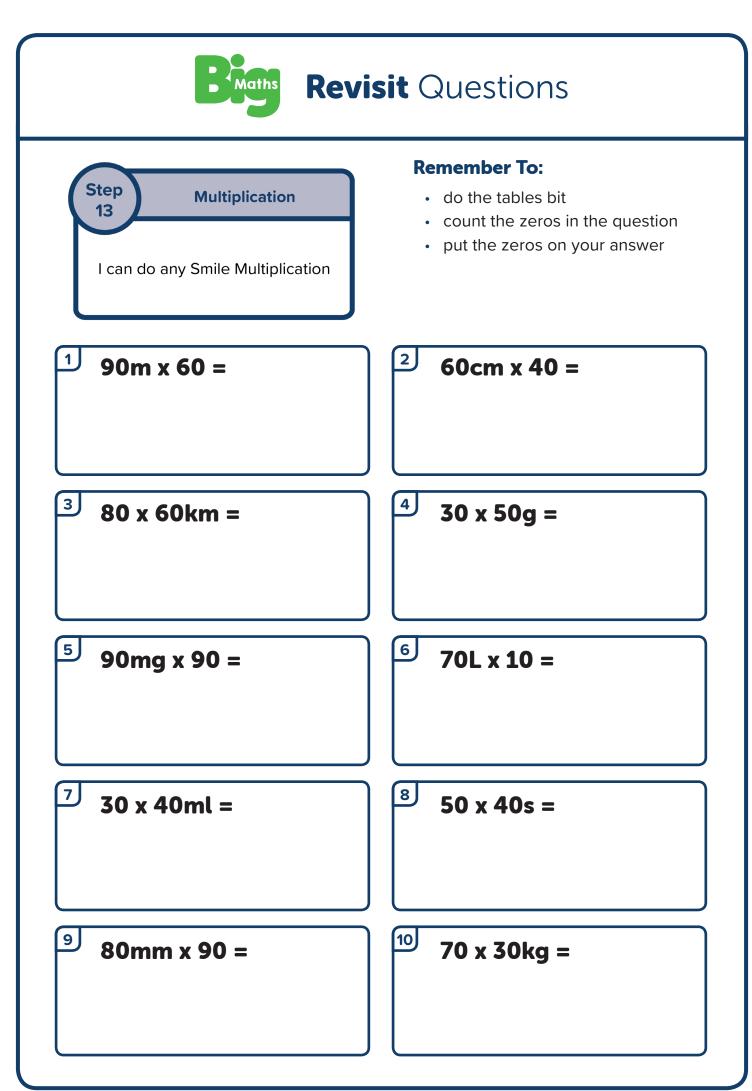




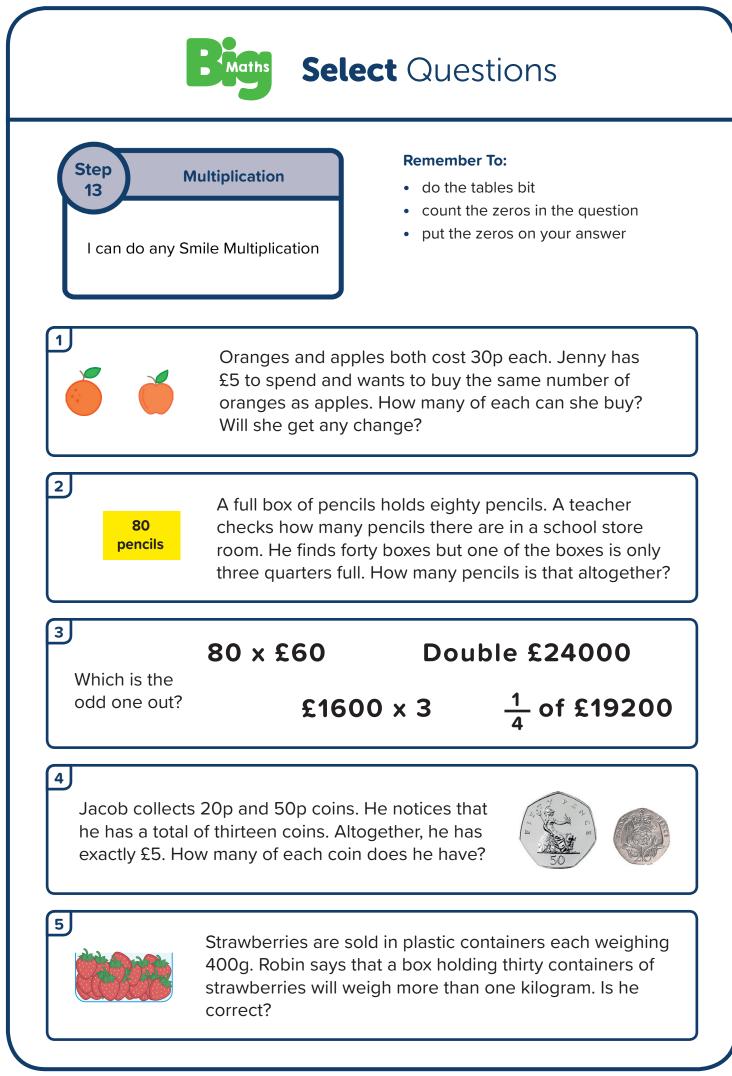


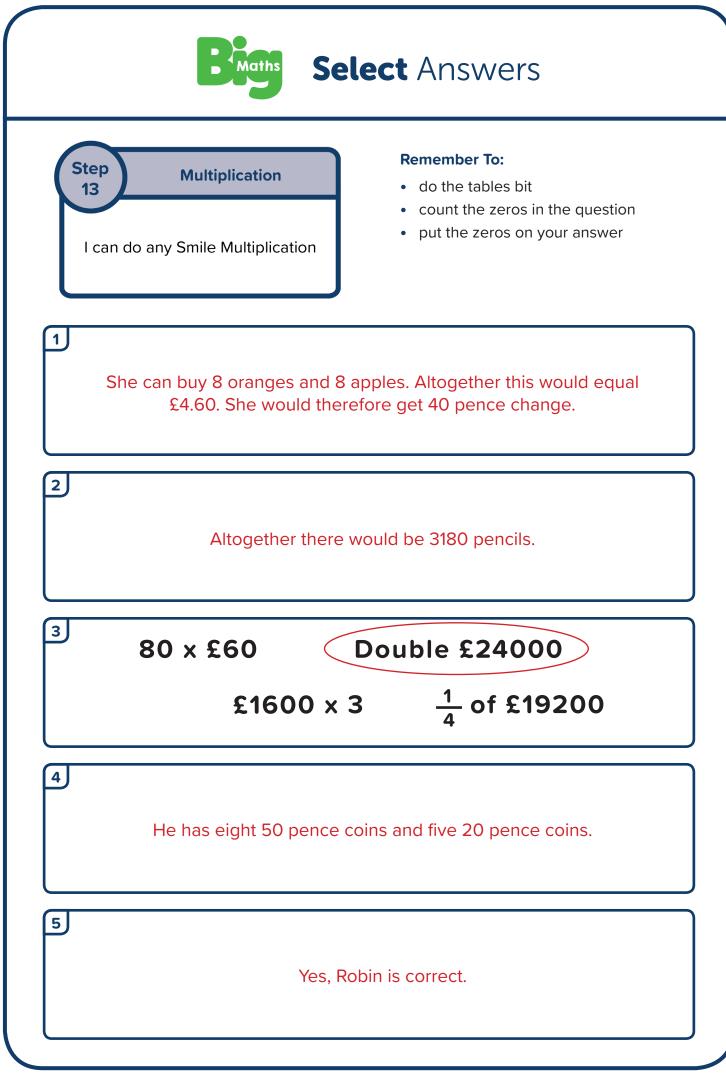




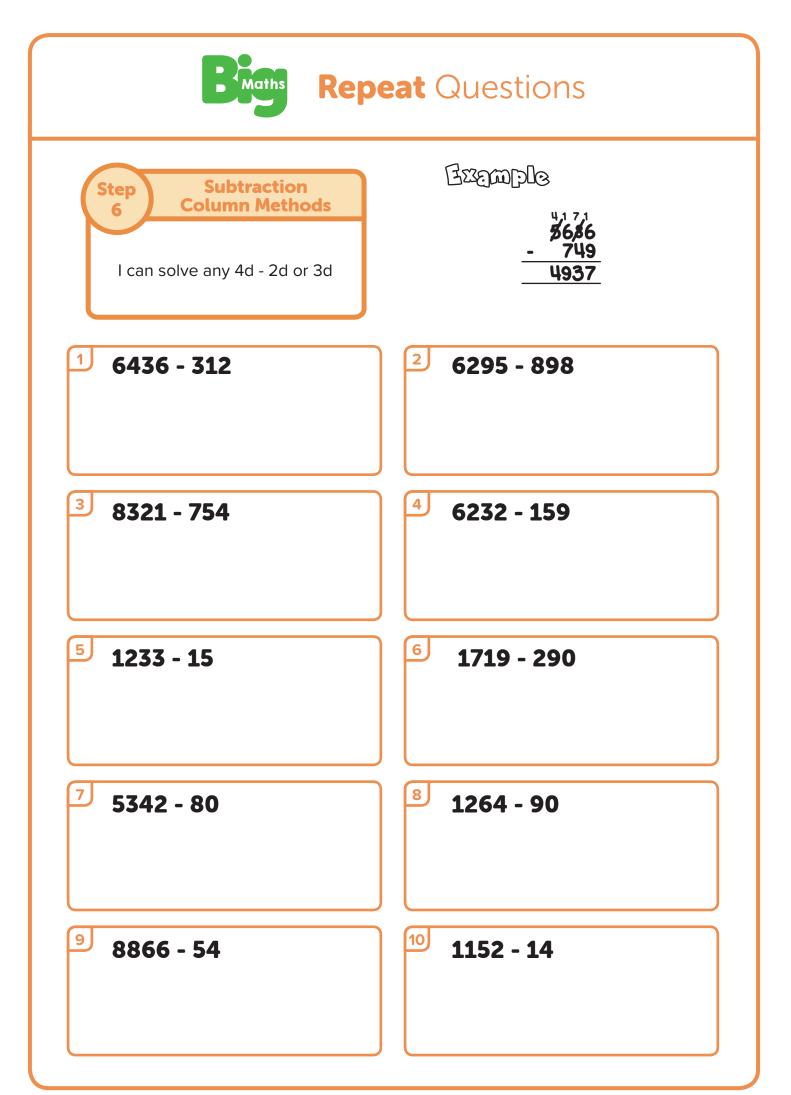


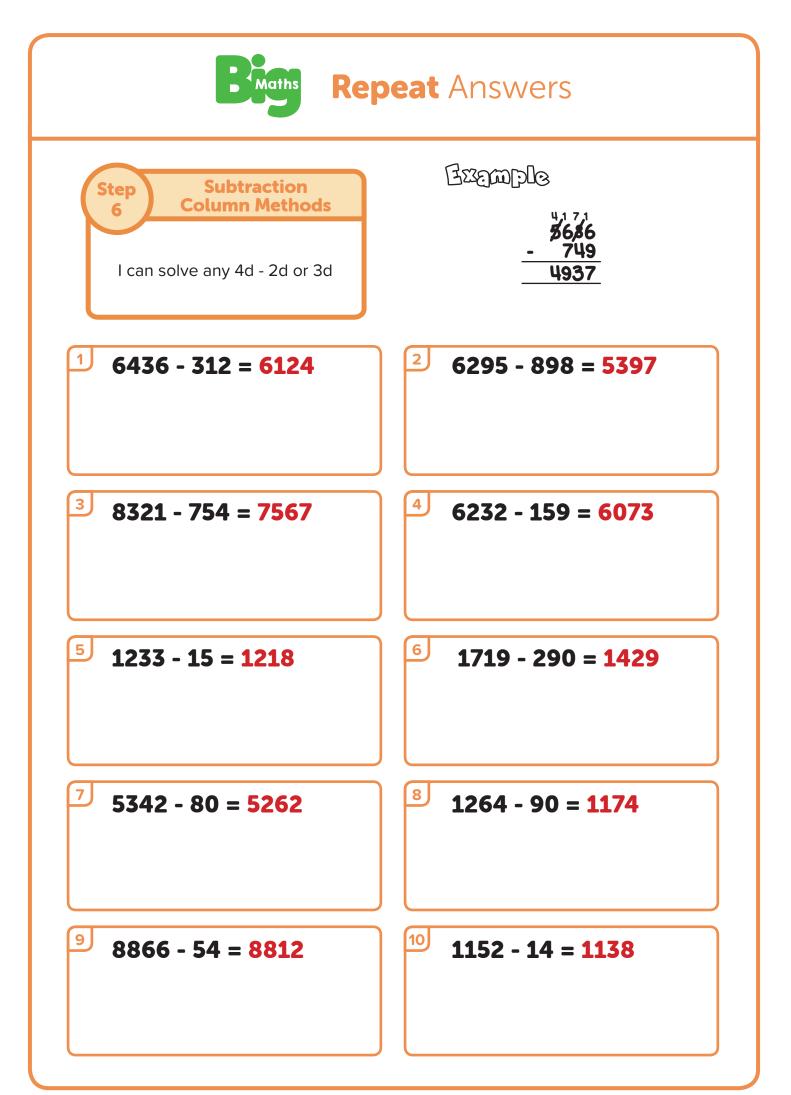






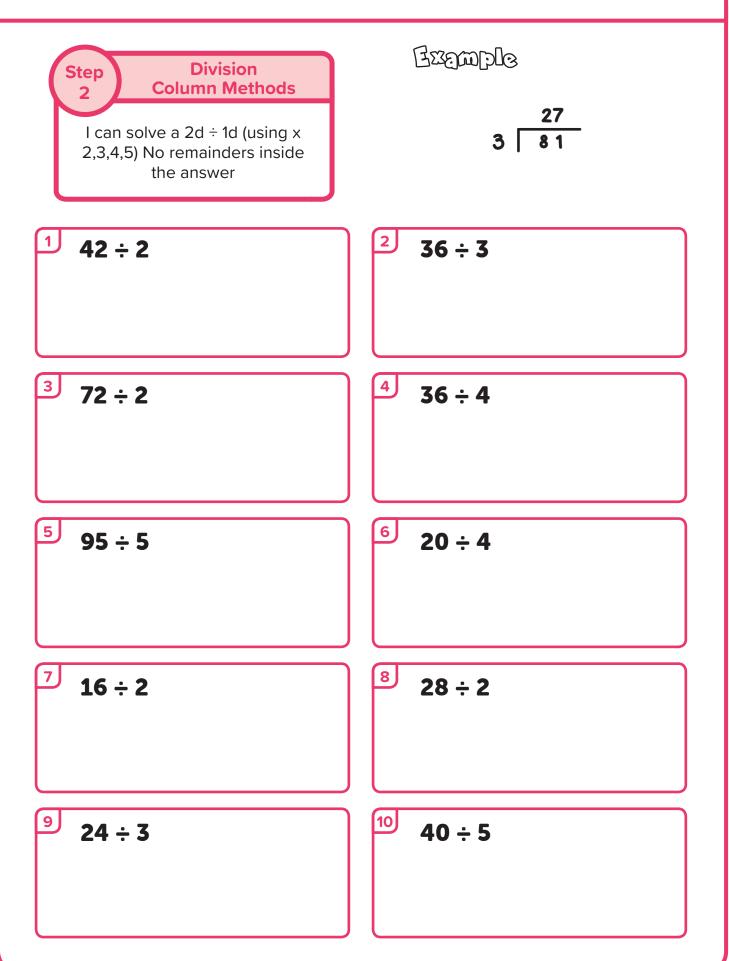
# Question 9 - I can solve any 4 digit - 2 digit or 4 digit - 3 digit





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







**Repeat** Answers

