

## Maths Planning and Ideas



**Week Commencing: Monday 18.05.2020**

**Year Group: Year 3**

	Monday 18.05.2020	Tuesday	Wednesday	Thursday	Friday
Area of Learning	<u>LC: Can you subtract money?</u>	<u>LC: Can you multiply and divide by 3?</u>	<u>LC: Can you multiply and divide by 4 and 8?</u>	<u>LC: Can you multiply 2 digits by 1 digit?</u>	<u>LC: Can you divide 2 digits by 1 digit?</u>
Activity	<p><b>Starter:</b> <a href="#">Times Table Rockstars</a></p> <p>Battle of the Bands have been set for Y3 children. Don't forget to use Rock Slam to individually challenge others in your class or year group.</p> <p><b>Main:</b> Go to the following website: <a href="https://whiterosemaths.com/homelearning/year-3/">https://whiterosemaths.com/homelearning/year-3/</a> <b>Select Summer Term - Week 3 (w/c 4th May)</b> <b>Lesson 3 - Subtract money</b></p> <p>Watch the video. Pause if you need to take notes or replay sections to help with understanding.</p>	<p><b>Starter:</b> <a href="#">Times Table Rockstars</a></p> <p>Battle of the Bands have been set for Y3 children. Don't forget to use Rock Slam to individually challenge others in your class or year group.</p> <p><b>Main:</b> Go to the following website: <a href="https://whiterosemaths.com/homelearning/year-3/">https://whiterosemaths.com/homelearning/year-3/</a> <b>Select Summer Term - Week 3 (w/c 4th May)</b> <b>Lesson 4 - Multiply and divide by 3</b></p> <p>Watch the video. Pause if you need to take notes or replay sections to help with understanding.</p>	<p><b>Starter:</b> <a href="#">Times Table Rockstars</a></p> <p>Battle of the Bands have been set for Y3 children. Don't forget to use Rock Slam to individually challenge others in your class or year group.</p> <p><b>Main:</b> Go to the following web address: <a href="https://vimeo.com/415086682">https://vimeo.com/415086682</a> <b>Multiply &amp; divide by 4 and 8</b></p> <p>Watch the video. Pause if you need to take notes or replay sections to help with understanding.</p>	<p><b>Starter:</b> <a href="#">Times Table Rockstars</a></p> <p>Battle of the Bands have been set for Y3 children. Don't forget to use Rock Slam to individually challenge others in your class or year group.</p> <p><b>Main:</b> Go to the following web address: <a href="https://vimeo.com/415086842">https://vimeo.com/415086842</a> <b>Multiply 2-digits by 1-digit</b></p> <p>Watch the video. Pause if you need to take notes or replay sections to help with understanding.</p>	<p><b>Starter:</b> <a href="#">Times Table Rockstars</a></p> <p>Battle of the Bands have been set for Y3 children. Don't forget to use Rock Slam to individually challenge others in your class or year group.</p> <p><b>Main:</b> Go to the following web address: <a href="https://vimeo.com/415087020">https://vimeo.com/415087020</a> <b>Divide 2-digits by 1-digit</b></p> <p>Watch the video. Pause if you need to take notes or replay sections to help with understanding.</p>

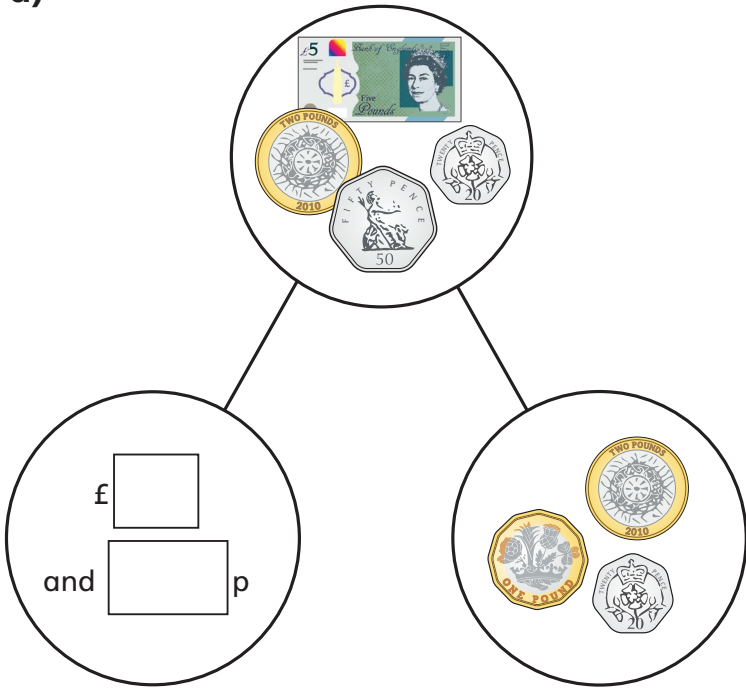
	<p><b>Independent Task:</b> Children to complete activity found here: <a href="https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-3-Subtract-money-2019.pdf">https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-3-Subtract-money-2019.pdf</a></p> <p>Answers can be found here: <a href="https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-3-Answers-Subtract-money-2019.pdf">https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-3-Answers-Subtract-money-2019.pdf</a></p>	<p><b>Independent Task:</b> Children to complete activity found here: <a href="https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-4-The-3-times-table-2019.pdf">https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-4-The-3-times-table-2019.pdf</a></p> <p>Answers can be found here: <a href="https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-4-Answers-The-3-times-table-2019.pdf">https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/05/Y3-Lesson-4-Answers-The-3-times-table-2019.pdf</a></p>	<p><b>Independent Task:</b> See resources for 20.05.2020</p> <p>Answers can be found here: See resources for 20.05.2020</p>	<p><b>Independent Task:</b> See resources for 21.05.2020</p> <p>Answers can be found here: See resources for 21.05.2020</p>	<p><b>Independent Task:</b> See resources for 22.05.2020</p> <p>Answers can be found here: See resources for 22.05.2020</p>
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**In this week's planning the children will be recapping previous learning from earlier this year. The idea behind this is to consolidate children's understanding of key concepts to help prepare them for next year. We are aware that some children may already have a sound understanding of some of these areas of learning, while others will still need to practise them. For any children who are very confident in working through the White Rose worksheet, I have attached some additional activities at the bottom of the planning to further deepen children's understanding.**

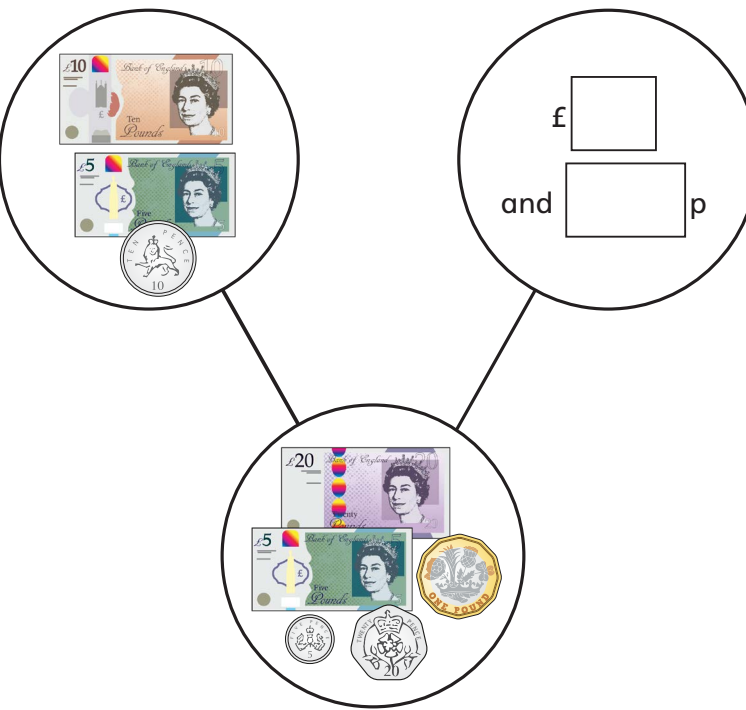
Subtract money

1 Complete the part-whole models.

a)



b)



2 Tommy has £5 and 75p in his pocket.



He puts £2 and 50p in his money box.  
How much is left in his pocket?

£  and  p

3 Whitney has £4 and 80p.

She buys this pair of socks.

How much money does Whitney have left?



£  and  p



4 Complete the statements.

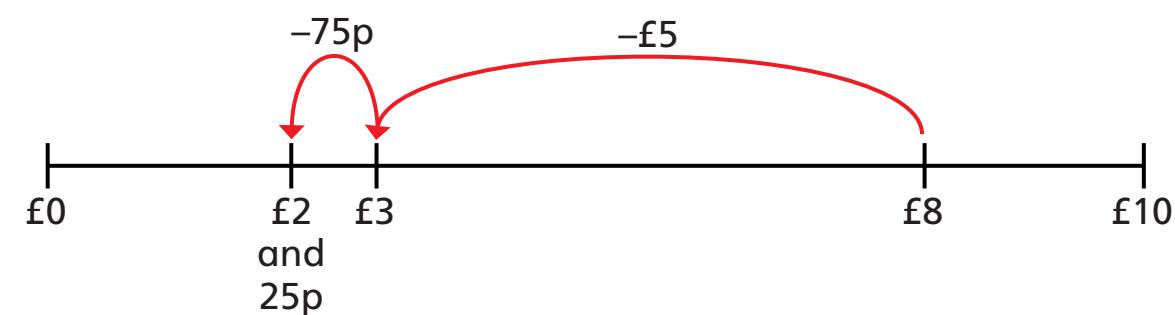
a) £8 and 65p – £5 and 25p = £  and  p

b) £8 and 65p – £5 and 65p = £  and  p

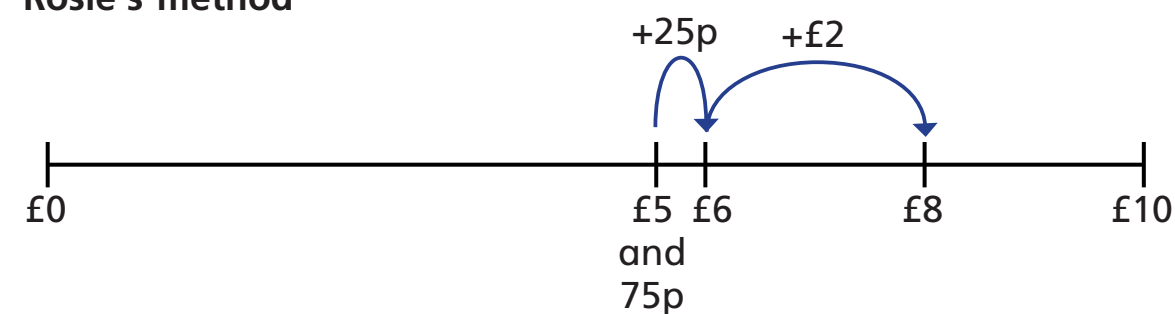
c) £8 and 65p – £8 and 30p = £  and  p

5 Amir and Rosie use a number line to subtract £5 and 75p from £8

**Amir's method**



**Rosie's method**



Amir and Rosie both get £2 and 25p as their answer.

a) Explain each of these methods to a partner.

b) Whose method do you prefer? \_\_\_\_\_

Explain why.

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6 Complete the number sentences.

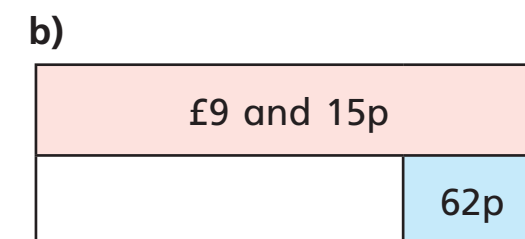
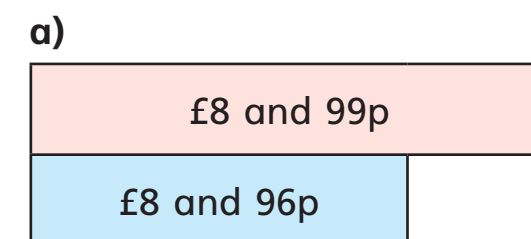
a) £3 and 50p – £1 and 20p = £  and  p

b) £3 – £1 and 50p = £  and  p

c) £6 and 15p – £2 and 85p = £  and  p

d) £8 and 7p – £3 and 54p = £  and  p

7 Complete the bar models.



Which answer?

$£10 - £7.90$

(a) £2.10

(b) £3.1

(c) £3.10

Explain your answer

Which picture?

I pay for four packs of stickers with a £5 note.

I get £1.80 change.

**What is the cost of a pack of stickers?**

*Which bar model represents the question correctly?*



OR



*Work out the cost of a pack of stickers.*

1 Complete the multiplications.

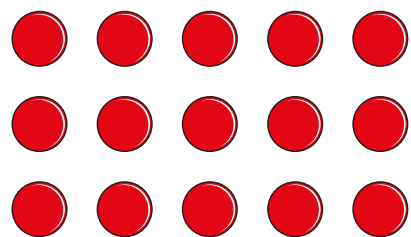


$$\square \times \square = \square$$



$$\square \times \square = \square$$

2 Dani makes an array using counters.



Write two multiplication and two division facts represented by the array.

$$\square \times \square = \square$$

$$\square \times \square = \square$$

$$\square \div \square = \square$$

$$\square \div \square = \square$$

3 Complete the number sentences.

a)  $6 \times 3 = \square$

d)  $\square \div 3 = 5$

b)  $3 \times \square = 27$

e)  $12 \times 3 = \square$

c)  $\square \div 11 = 3$

f)  $\square \times 3 = 0$

4 Complete the number sentences.

a)  $2 \times 3 = \square$

b)  $6 = 3 \times \square$

$4 \times 3 = \square$

$12 = 3 \times \square$

$8 \times 3 = \square$

$18 = 3 \times \square$

What patterns do you notice?

5 Write  $<$ ,  $>$  or  $=$  to compare the statements.

a)  $33 \div 11 \bigcirc 3$

d)  $6 \times 3 \bigcirc 6 \div 3$

b)  $27 \bigcirc 30 \div 3$

e)  $3 \times 6 \bigcirc 18 \div 3$

c)  $9 \div 3 \bigcirc 3 \times 6$

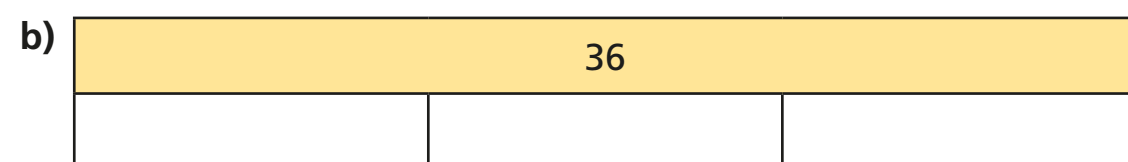
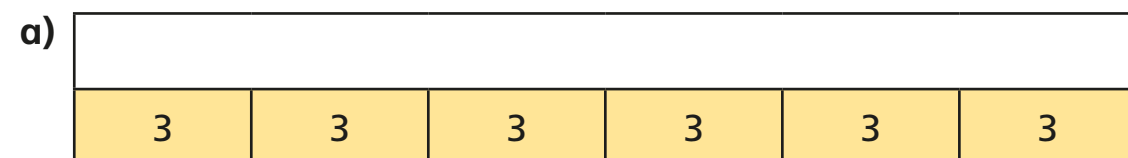
f)  $0 \times 3 \bigcirc 3 \div 3$

- 6 Colour all the numbers in the 3 times-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

What two patterns do you notice?

- 7 Work out the missing values in each bar model.



- 8 Mo has 7 packets of 3 stickers.

Eva has 3 packets of 9 stickers.

Who has the greatest number of stickers? \_\_\_\_\_



- 9 a) Complete the multiplications.

Are the answers odd or even? Tick your answer.

	odd	even
$1 \times 3 = 3$	<input type="checkbox"/>	<input type="checkbox"/>
$2 \times 3 = \square$	<input type="checkbox"/>	<input type="checkbox"/>
$3 \times 3 = \square$	<input type="checkbox"/>	<input type="checkbox"/>
$\square \times 3 = 12$	<input type="checkbox"/>	<input type="checkbox"/>

- b) What would the next multiplication be?

$$\square \times 3 = \square$$

- c) What do you notice about the products?

- d) Will the product of  $11 \times 3$  be odd or even? \_\_\_\_\_

- 10 Use the fact that  $12 \times 3 = 36$  to work out the calculations.

$$13 \times 3 = \square$$

$$3 \times 15 = \square$$

$$14 \times 3 = \square$$

$$24 \times 3 = \square$$

How did you work this out?

Did you find the answers in the same way as your partner?



Challenge question

Is it the same?

Circle the number sentences that are the same

Half of  $4 \times 12$

$9 + 9$

$9 \times 3$

$15 + 15 - 3$

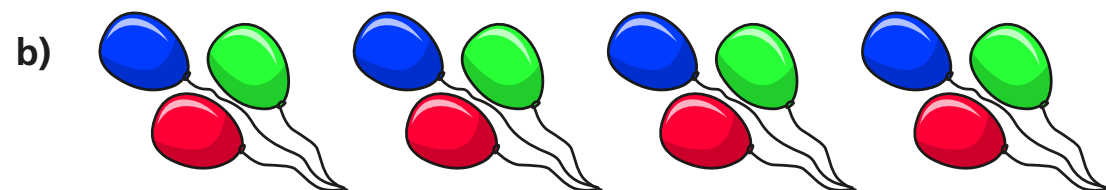
$8 \times 3 + 3$



1 Complete the multiplication.



$$\square \times \square = \square$$



$$\square \times \square = \square$$

2 Complete the number sentences.

a)  $6 \times 4 = \square$

g)  $24 \div 4 = \square$

b)  $4 \times 3 = \square$

h)  $8 \div 4 = \square$

c)  $\square = 7 \times 4$

i)  $0 \div 4 = \square$

d)  $4 \times \square = 48$

j)  $\square \div 11 = 4$

e)  $0 \times 4 = \square$

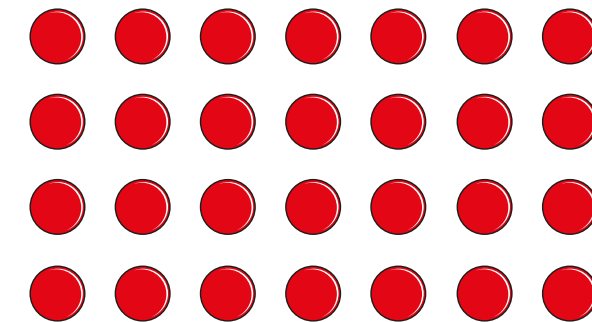
k)  $\square \div 4 = 5$

f)  $4 \times 9 = \square$

l)  $1 \times 4 = \square$

3 What multiplication and division statements does the array represent?

Complete the statements.



$$\square \times \square = \square$$

$$\square \times \square = \square$$

$$\square \div \square = \square$$

$$\square \div \square = \square$$

4 Complete the number sentences.

a)  $2 \times 4 = \square$

c)  $3 \times 4 = \square$

$4 \times 4 = \square$

$3 \times 8 = \square$

$8 \times 4 = \square$

$3 \times 12 = \square$

b)  $8 = 4 \times \square$

$16 = 4 \times \square$

$32 = 4 \times \square$

What patterns do you notice?



5 Write  $<$ ,  $>$  or  $=$  to compare the statements.

- a)  $48 \div 12$   4      d)  $4 \div 4$    $4 \times 4$
- b) 36   $40 \div 4$       e)  $1 \times 4$    $4 \times 1$
- c)  $16 \div 4$    $4 \times 4$       f)  $4 \times 2$    $32 \div 4$

6 A paper clip is 4 cm long.



How long are 6 of these paper clips?

7 Dexter buys 10 mugs and 4 key rings.  
How much money does he spend in total?




8 The pictogram shows the animals a group of children have as pets.

Complete the pictogram.

Animal	Pictogram	Number of animals
cat		
dog		28
bird		
mouse		

= 4 animals

9

Teddy

Some of the numbers in the 4 times-table are even, but not all of them.

Eva

All numbers in the 4 times-table are even.

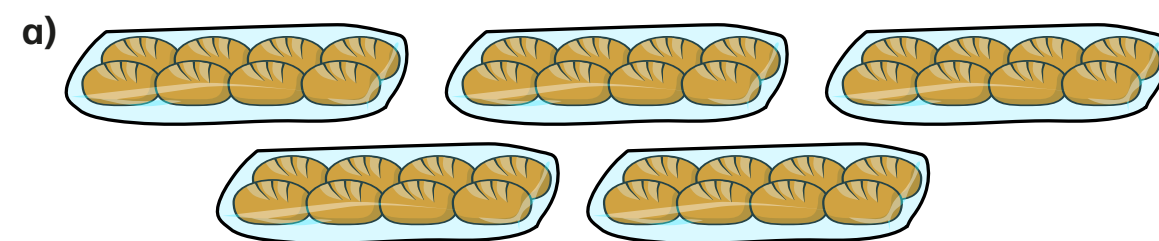
Who is correct? \_\_\_\_\_

How do you know? Talk about it with a partner.

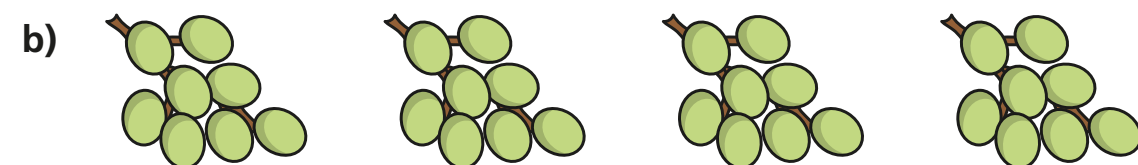
# The 8 times-table

1 How many are there in total?

Complete the multiplications.



$$\square \times \square = \square$$



$$\square \times \square = \square$$

2 Complete the number tracks.

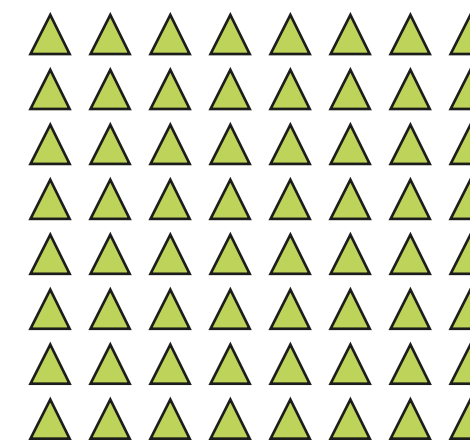
a)

0	8	16	24				
---	---	----	----	--	--	--	--

b)

96	88	80					
----	----	----	--	--	--	--	--

3 Here is an array made up of triangles.



a) What multiplication sentence can you see?

$$\square \times \square = \square$$

b) What division sentence can you see?

$$\square \div \square = \square$$

4 Complete the calculations.

Try to do the calculations in your head.

a)  $6 \times 8 = \square$

e)  $72 \div 8 = \square$

b)  $8 \times \square = 56$

f)  $\square \div 11 = 8$

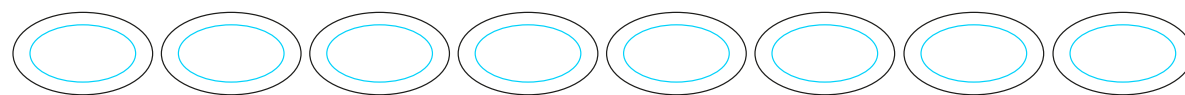
c)  $10 \times 8 = \square$

g)  $\square \div 8 = 5$

d)  $\square = 8 \times 4$

h)  $8 \times 1 = \square$

- 5 What multiplication can you see?



- 6 Complete the multiplications.

a)  $2 \times 8 = \square$

b)  $8 = 8 \times \square$

$4 \times 8 = \square$

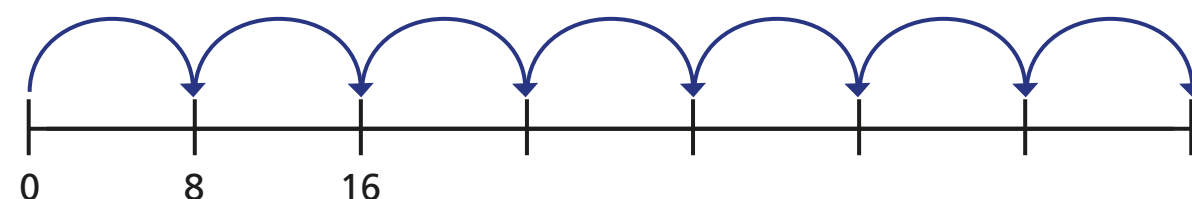
$16 = 8 \times \square$

$8 \times 8 = \square$

$32 = 8 \times \square$

What patterns do you notice?

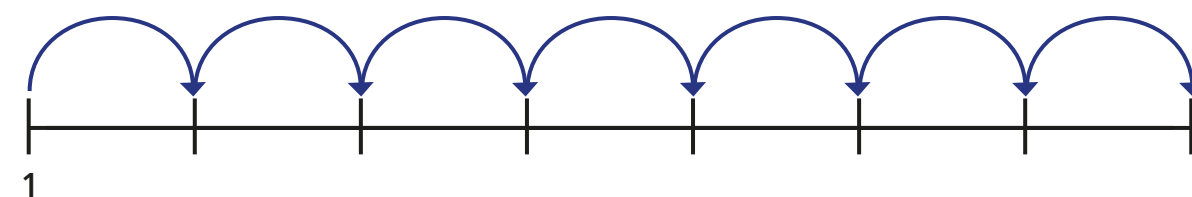
- 7 a) Amir draws 7 jumps of 8 on a number line.



What number does Amir end on?

Explain how you worked it out.

- b) This time, Amir makes 7 jumps of 8, but starts from 1



What number does Amir end on this time?

Explain how you know.

- 8 Boats can be hired on a lake.

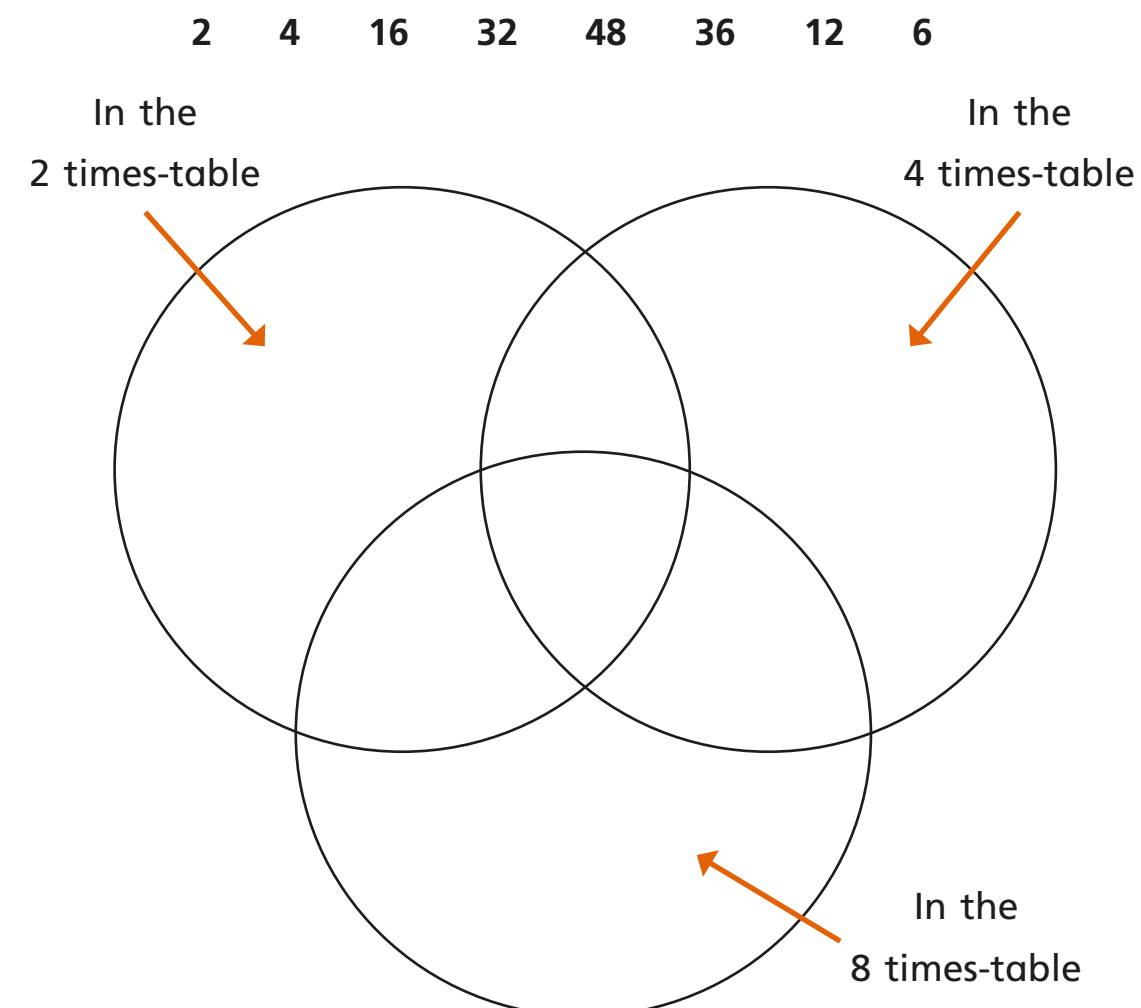
There are 5 large boats and 8 small boats on the lake.

Each boat is full.

How many people are on the lake?



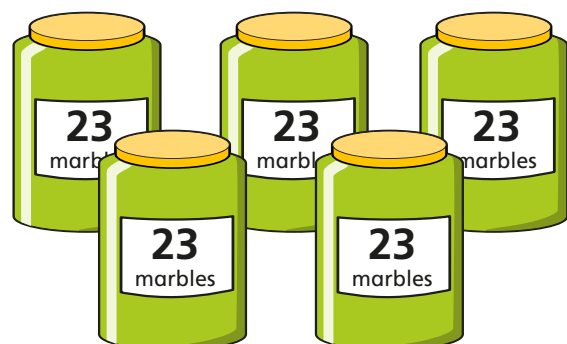
- 9 Put the numbers into the sorting diagram.



Are any of the parts empty? Why?

Talk about it with a partner.

- 1 There are 23 marbles in a jar.  
There are 5 jars.



Tens	Ones

How many marbles are there in total?

$$5 \times 3 \text{ ones} = \square$$

$$5 \times 2 \text{ tens} = \square$$

$$\square + \square = \square$$

$$5 \times 23 = \square$$

There are  $\square$  marbles in total.

- 2 Work out  $4 \times 15$

Tens	Ones

$$4 \times 5 = \square$$

$$4 \times 10 = \square$$

$$4 \times 15 = \square$$

- 3 Complete the multiplications.

a)  $4 \times 24 = \square$

b)  $3 \times 17 = \square$

c)  $3 \times 25 = \square$

d)  $34 \times 4 = \square$

- 4 Complete the column multiplications.

Tens	Ones

		T	O	
		2	4	
	x		3	

Tens	Ones
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1

			T	O	
			3	5	
	x			4	

5 Work out the multiplications.

a)  $25 \times 5$

			T	O	
			2	5	
	x			5	

c)  $5 \times 26$


b)  $35 \times 6$

			T	O	
			3	5	
	x			6	

d)  $4 \times 36$




6 Tommy works out  $37 \times 2$

			T	O	
			3	7	
	x			2	
		6	1	4	


What mistake has Tommy made? Work out the correct answer.

7 Find the missing numbers.

			2	2	
	x				
			8	8	

				1	
	x				
			1	2	4

8 Here are some digit cards. 1 2 3 4 5 8

a) Use the digit cards to create a multiplication and work out the answer.

$$\square \square \times \square = \square$$

b) Work with a partner to find calculations that have:

- an odd product
- an even product
- an exchange in the ones column
- an exchange in the ones and tens columns.

## Challenge Question

Rank by difficulty

$$15 \times 6$$

$$23 \times 3$$

$$18 \times 5$$

Explain your reasoning

1 Rosie has 56 pencils.

a) Draw base 10 to represent the pencils.

Rosie shares the 56 pencils equally between 4 pots.

b) Draw base 10 on the place value grid to share the pencils.

Tens	Ones

c) How many pencils are in each pot?

d) Did you have to make an exchange?



2 Eva has this money.



She wants to share the money equally between 3 people.

a) Use the place value chart to show how Eva can share the money.

Tens	Ones

b) How much money does each person get?

3 Divide 72 by 3



Tens	Ones

Use the place value counters to help you.

$$72 \div 3 = \boxed{\phantom{00}}$$





4 Use base 10 or counters to work out the divisions.

a)  $45 \div 3 =$

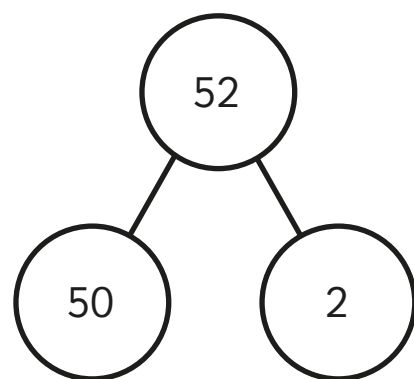
b)  $57 \div 3 =$

c)  $92 \div 4 =$

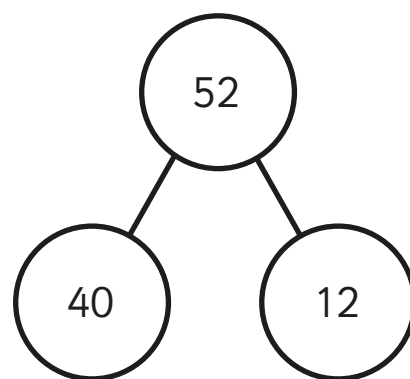
5 Rosie and Tommy are working out  $52 \div 4$

They both use a part-whole model.

Rosie



Tommy



a) Whose part-whole model will help them with the division?

\_\_\_\_\_

How do you know?

\_\_\_\_\_

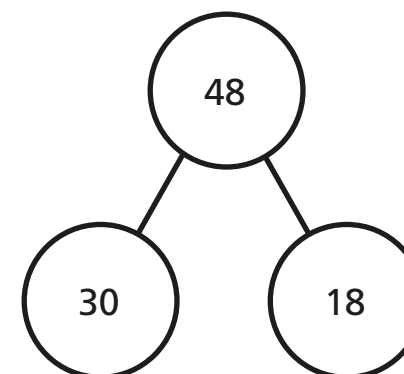
\_\_\_\_\_

b) Use a part-whole model to work out  $52 \div 4$



6 Use the part-whole models to complete the divisions.

a)  $48 \div 3 =$

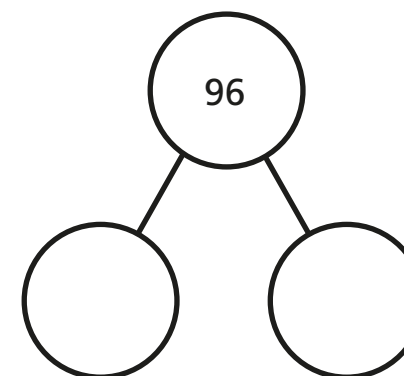


$30 \div 3 =$

$18 \div 3 =$

$48 \div 3 =$

b)  $96 \div 4 =$



c)  $65 \div 5 =$

d)  $75 \div 3 =$

7 Here are 3 divisions.

$96 \div 8$

$96 \div 4$

$96 \div 2$

a) What is the same about the questions? What is different?

b) Complete the divisions.

$96 \div 8 =$

$96 \div 4 =$

$96 \div 2 =$

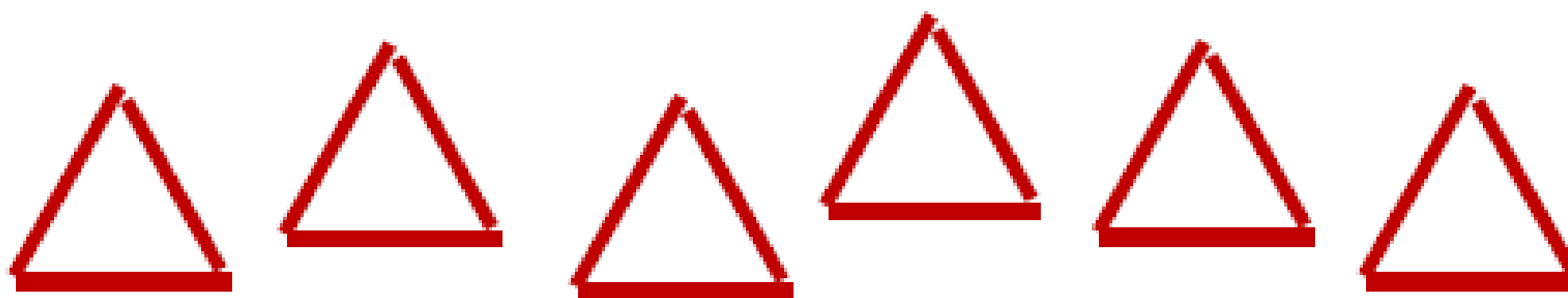
c) What do you notice? Talk about it with a partner.



Challenge question

## Explore

There are  triangles and  left over.



***Rearrange the same number of matchsticks.***

There are  squares and  left over.

There are  \_\_\_\_\_ and  left over.

### **Where can I complete further work?**

[Twinkl](#) – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, powerpoints and interactive games to support all areas of learning.

[Classroom Secrets](#) – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

[White Rose Maths](#) – Free Maths home learning resources for all ages. Watch the videos and try the questions.

[Primary Stars](#) – Free Maths home learning packs for Year 1 and 2.

[BBC Bitesize Primary](#) – Free learning resources available for KS1 and KS2 across all subjects.

[I See Maths](#) – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

[Top Marks](#) – Free educational resources and games for English and Maths.

[ICT Games](#) – Free educational resources and games for English and Maths.