Week 2
Multiplication and Division

Message to Parents:
The following slides are organised into three different levels of challenge (Bronze, Silver and Gold). If no level is provided it should be appropriate for everyone to access.
Please ensure your child chooses the appropriate level. It is okay for the children to change their level through out the week depending on the task.
These tasks can be done over the whole week and can be carried out at the child's own pace.
Feel free to provide additional questions for your child to complete.

Multiplication

Starter - Mental Maths

Times Tables Test
3 and 5

Hit The Button

Multiplication

How quickly can you answer these multiplication questions?

2 x 2 =		1 x 3 =		2 x 5 =		0 x 2 =		9 x 2 =	
0 x 4 =		8 x 5 =		10 x 3 =		5 x 2 =		3 x 5 =	
8 x 4 =		3 x 2 =		9 x 5 =		6 x 3 =		11 x 4 =	
11 x 4 =		10 x 5 =		2 x 5 =		1 x 4 =		0 x 3 =	
4 x 5 =		9 x 4 =		4 x 2 =		8 x 5 =		10 x 4 =	
1 x 5 =		2 x 3 =		9 x 5 =		6 x 2 =		3 x 4 =	
5 x 2 =		3 x 2 =		10 x 4 =		10 x 5 =		1 x 5 =	

Repeat the activity – Can you beat your time?
Can you beat Mrs Robert's time of 36 seconds (Mr Gray next week...)

Multiplication

The following method is how Year 3 are taught column multiplication in school.

$$\begin{array}{r} 36 \\ \times\ 15 \\ \hline 30 \quad (6\times5) \\ 60 \quad (6\times10) \\ 150 \quad (30\times5) \\ 300 \quad (30\times10) \\ \hline 540 \\ \hline \end{array}$$

30 ⊗ 6
10 ⊗ 5

$$\begin{array}{r} 54 \\ \times\ 6 \\ \hline 24 \\ +\ 300 \\ \hline 324 \end{array}$$

Multiplication

Video examples of multiplication methods. If your child finds the school method challenging, you may find this alternative method useful.

Multiplcation Level 1

Multiplcation Level 2

Multiplcation Level 3

Multiplcation Level 4

$$123 \times 5$$

1st Step

123
× 5
―――
5
―――
1

2nd Step

123
× 5
―――
15
―――
1 1

3rd Step

123
× 5
―――
615
―――
1 1

Multiplication

1)   3 2
   ×   3

2)   2 5
   ×   2

3)   1 3
   ×   4

4)   1 6
   ×   4

5)   2 5
   ×   3

6)   2 3
   ×   2

1.   822
   ×   9

2.   876
   ×   7

3.   899
   ×   6

4.   343
   ×   1

5.   216
   ×   2

6.   652
   ×   3

1.   2,586
   ×   7

2.   3,556
   ×   6

3.   5,453
   ×   7

4.   3,237
   ×   7

5.   1,343
   ×   5

6.   5,647
   ×   7

This is a good opportunity to practise some more calculations of your own!

Multiplication (one-step word problems)

1. There are 12 biscuits in a packet. Jane buys 4 packets for her party. How many biscuits does she have?

2. There are 16 fireworks in a box. Sam has 7 boxes. How many fireworks does he have altogether?

3. The teacher needs each table to have 13 pencils. There are 5 tables. How many pencils will she needs?

4. Ben wants to buy 4 lollies for each of his 12 friends. How many lollies will he need to buy?

5. Lucy has 36 CDs in each rack. She has 3 racks. How many CDs does she have in total?

Multiplication (two-step word problems)

1. Laura buys 5 gold stickers and 4 pink stickers. Stickers cost 8p each. How much does she spend?

2. Marta buys 5 boxes of 3 golf balls. She loses 7 golf balls. How many does she have left?

3. Tickets at the local cinema cost £8 for an adult and £4 for a child. How much would it cost for:

a) 3 adults and 1 child

b) 2 adults and 2 children

c) 6 children and 1 adult

CHEEKY CHALLENGES!

1. Ruby has 6 hutches each with 2 rabbits. She feeds each rabbit 3 carrot tops and 4 lettuce leaves.

A) How many carrot tops does Ruby need?

B) How many lettuce leaves does Ruby need?

2. A small bag contains 4 apples. A large bag contains 7 more apples than a small bag of apples. A crate contains 9 times as many apples as a large bag of apples. How many apples are in a crate?

3. At a cafe a sandwich is £5 and a drink is £3. How much would it cost to buy 8 sandwiches and 4 drinks? Lucy spent £34 if she bought 3 drinks, how many sandwiches did she buy?

Multiplication - Deeper Learning

Bronze

Deeper Learning
Complete the following:

$$3 \times \boxed{} = 12$$

Deeper Learning
Roger has 24 slabs. Using all of the slabs find three different ways that he can arrange the slabs to form a rectangular patio.

Silver

Deeper Learning
Complete the following:

$$8 \times \boxed{} = 24$$

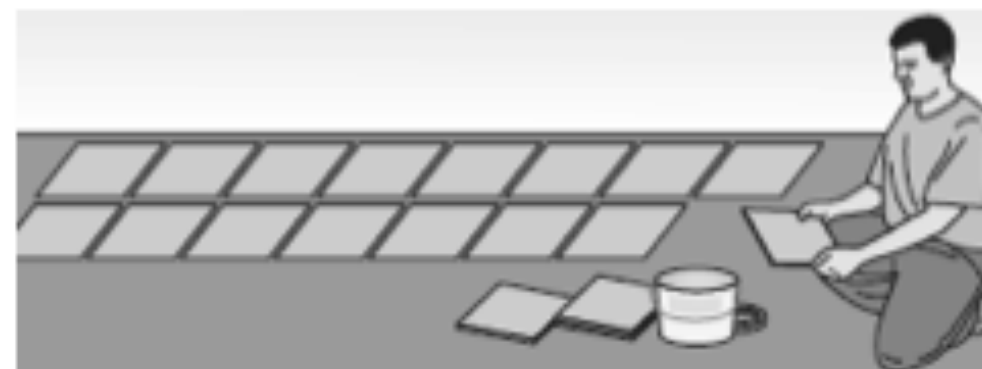### Deeper Learning
Roger has 48 slabs. Using all of the slabs find three different ways that he can arrange the slabs to form a rectangular patio.

Gold

Deeper Learning
Find the missing digits.
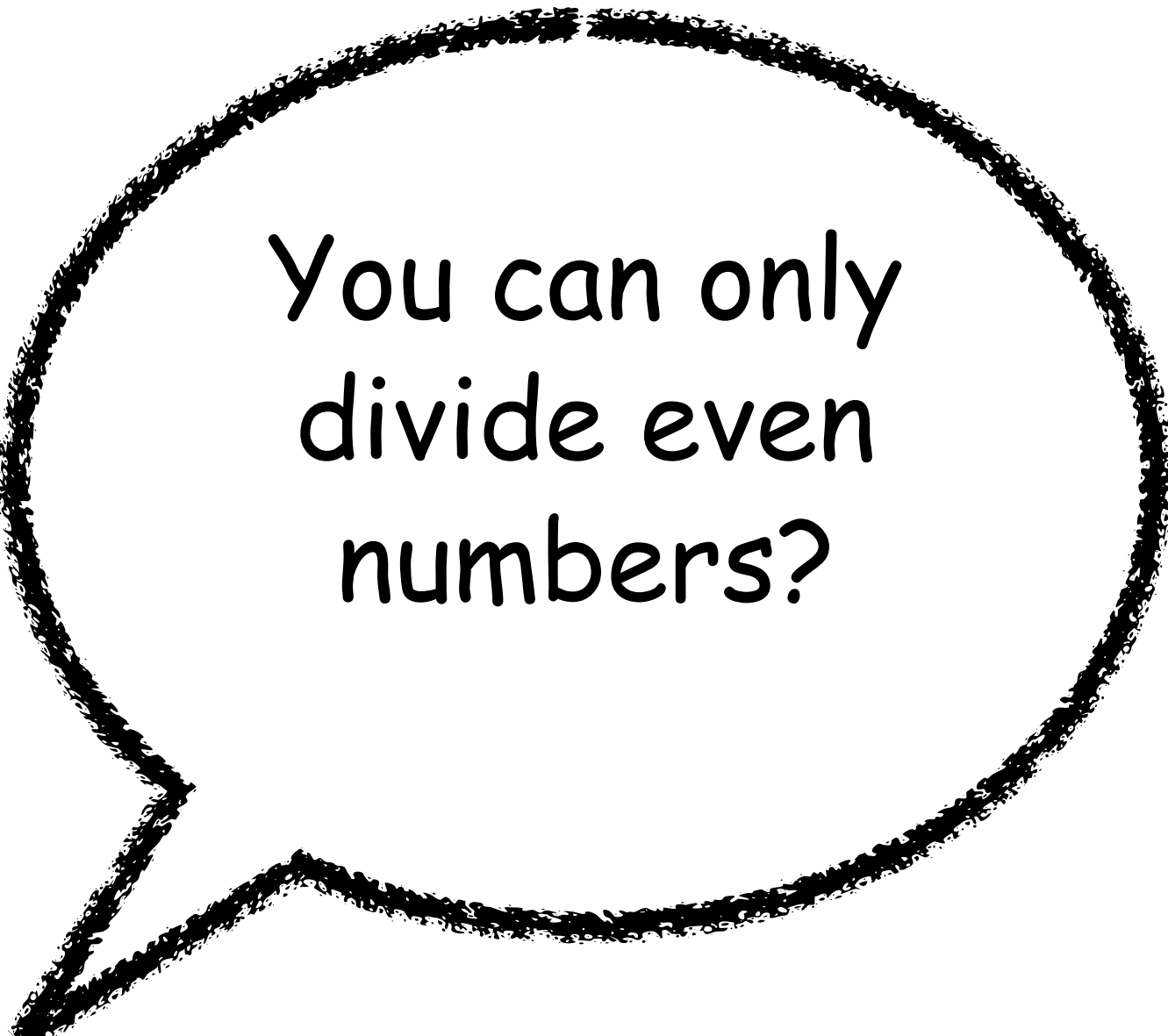
$$
\begin{array}{r}
1\ \boxed{}\ 4 \\
\times\ \ \boxed{} \\
\hline
5\ \ 3\ \ 6
\end{array}
$$

Deeper Learning
Putting the digits 1, 2 and 3 in the empty boxes, how many different calculations can you make? Which one gives the largest answer?
Which one gives the smallest answer?
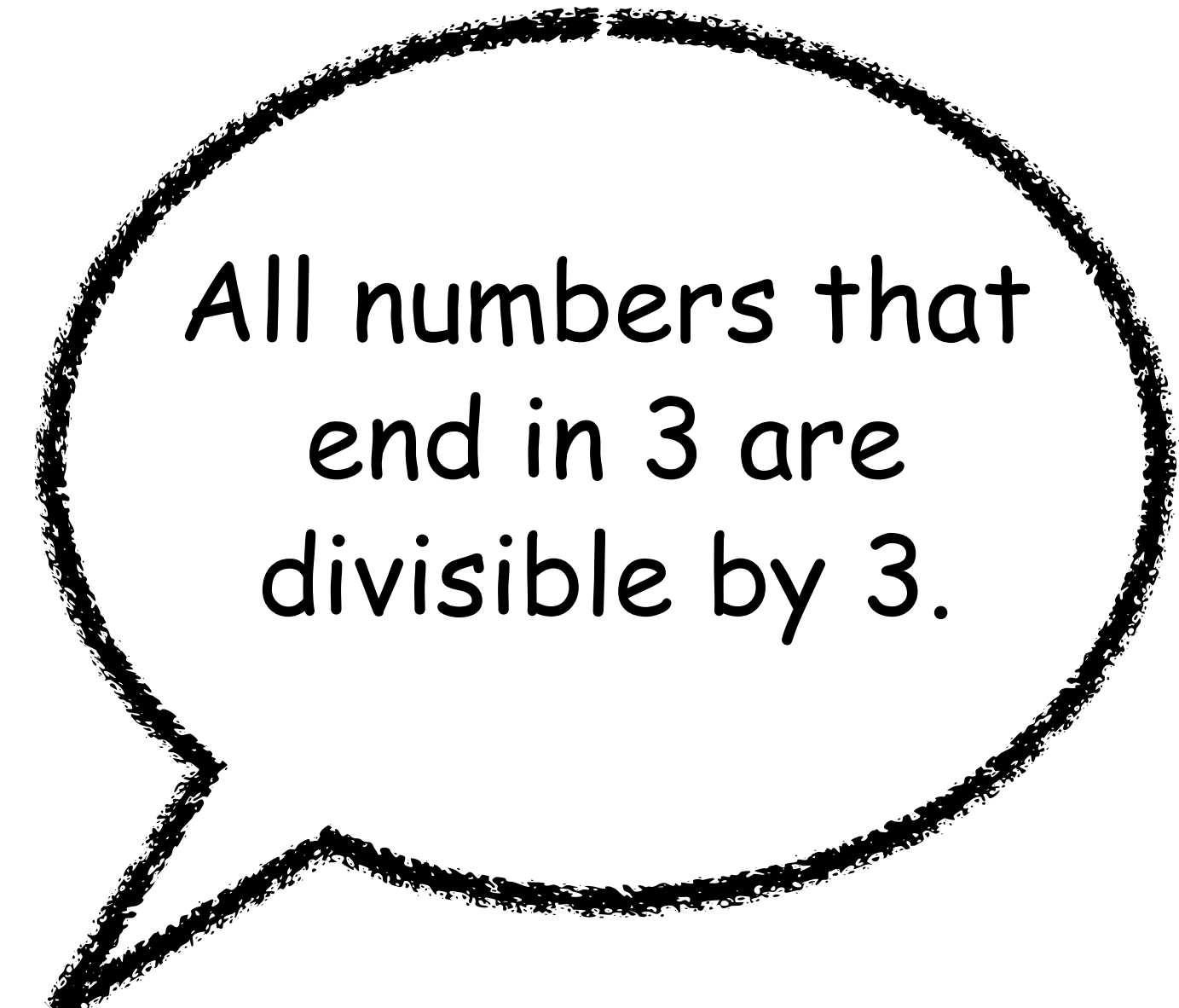
$$\boxed{}\,\boxed{} \times \boxed{} = ?$$
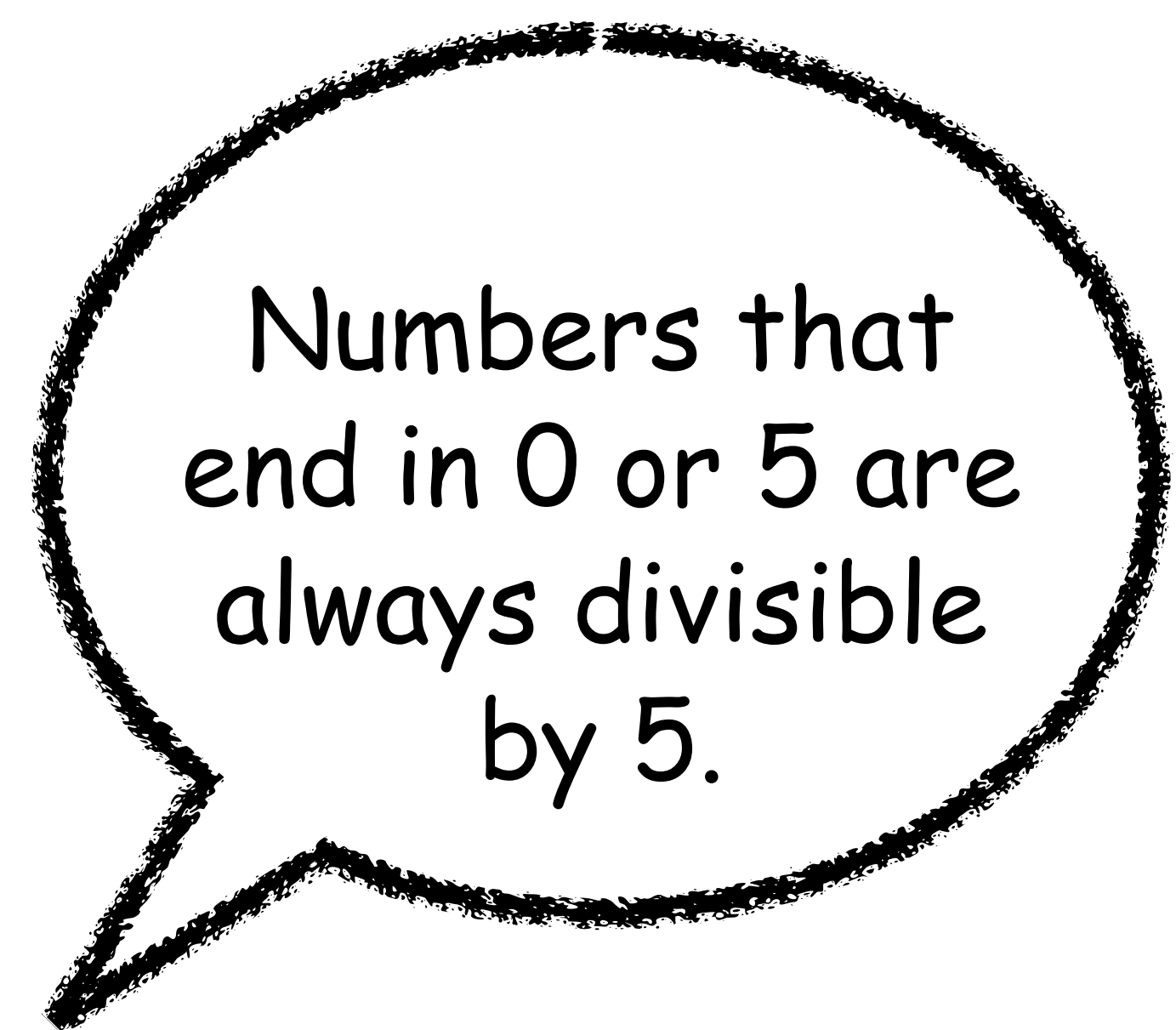
Division

True or False? Explain your answer.

You can only divide even numbers?

All numbers that end in 3 are divisible by 3.

Numbers that end in 0 or 5 are always divisible by 5.

Division

Division Test
3 and 5

Hit The Button

Division

How quickly can you answer these division questions?

4 ÷ 2 =		24 ÷ 2 =		40 ÷ 10 =		55 ÷ 5 =		14 ÷ 2 =	
8 ÷ 2 =		20 ÷ 10 =		45 ÷ 5 =		10 ÷ 5 =		50 ÷ 10 =	
25 ÷ 5 =		30 ÷ 5 =		14 ÷ 2 =		120 ÷ 10 =		15 ÷ 5 =	
50 ÷ 5 =		90 ÷ 10 =		100 ÷ 10 =		18 ÷ 2 =		20 ÷ 10 =	
35 ÷ 5 =		100 ÷ 10 =		8 ÷ 2 =		25 ÷ 5 =		22 ÷ 2 =	
45 ÷ 5 =		16 ÷ 2 =		60 ÷ 10 =		40 ÷ 10 =		12 ÷ 2 =	

Repeat the activity – Can you beat your time?
Can you beat Mrs Robert's time of 37 seconds (Mr Gray next week...)

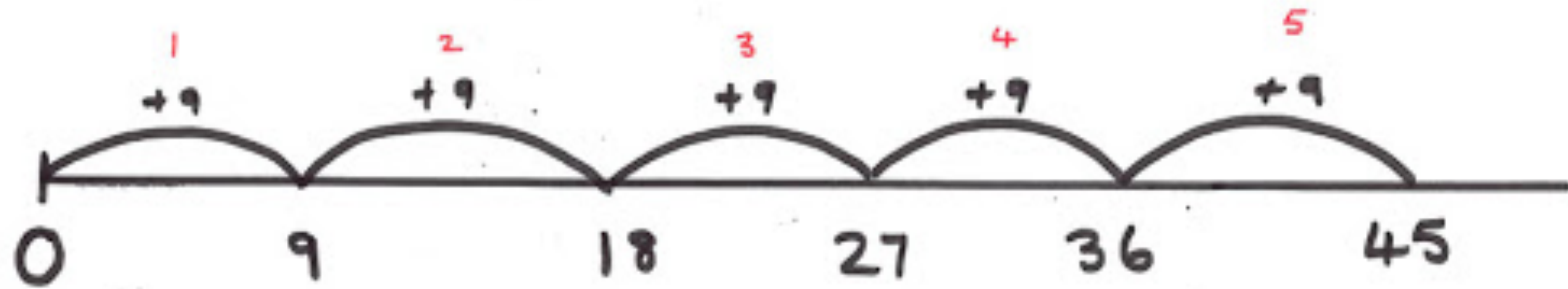# Example of division methods (Home Learning links)

Divison on a numberline

Division

$$45 \div 9 = 5$$
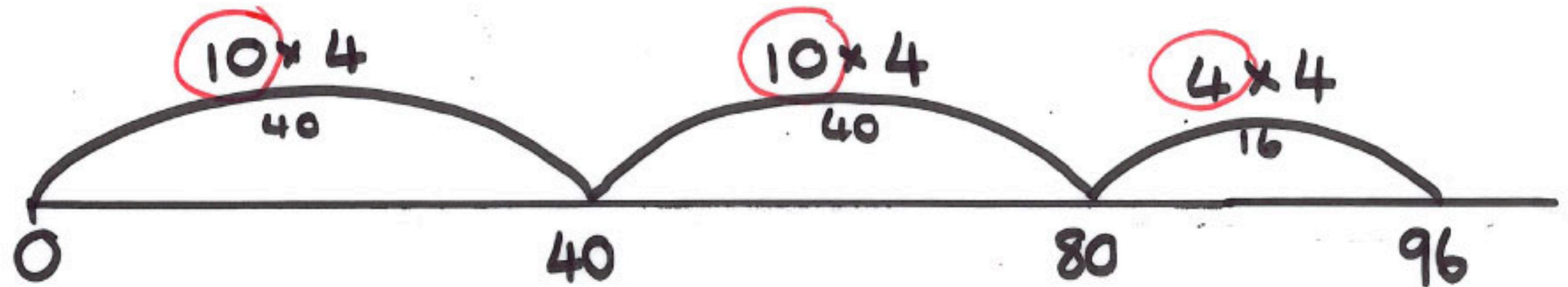

How many lots of 9 make 45?

Division

division by chunking on a numberline

$$96 \div 4 = 24$$

make sure that the number you have multiplied by go in the same position each time

10 × 4
40

10 × 4
40

4 × 4
16

0   40   80   96

How many lots of 4 altogether?

10 + 10 + 4 = 24

Division

BRONZE

$10 \div 2 = \_\_\_$

$7 \div 2 = \_\_\_$

$16 \div 2 = \_\_\_$

$24 \div 5 = \_\_\_$

$58 \div 5 = \_\_\_$

$11 \div 5 = \_\_\_$

$30 \div 3 = \_\_\_$

$24 \div 3 = \_\_\_$

$27 \div 3 = \_\_\_$

SILVER

$44 \div 4 = \_\_\_$

$20 \div 4 = \_\_\_$

$48 \div 4 = \_\_\_$

$48 \div 6 = \_\_\_$

$54 \div 6 = \_\_\_$

$60 \div 6 = \_\_\_$

$35 \div 7 = \_\_\_$

$63 \div 7 = \_\_\_$

$77 \div 7 = \_\_\_$

GOLD

$24 \div 8 = \_\_\_$

$72 \div 8 = \_\_\_$

$24 \div 8 = \_\_\_$

$45 \div 9 = \_\_\_$

$81 \div 9 = \_\_\_$

$27 \div 9 = \_\_\_$

This is a good opportunity to practise some more calculations of your own!

Division (word problems)

1. Kian has 25 football stickers. He shares them between his 5 friends. How many stickers do they get each?

2. Lottie has 27 sweets. She shares them between 3 children. How many sweets does each child get?

3. Katie has 12 dolls. She shares them between 3 of her friends. How many dolls do they have each?

4. There are 30 books in total and they are packed in boxes of 10. How many boxes are there?

5. 25 flowers are shared between 5 vases. How many flowers go in each vase?

6. The milkman has 20 bottles of milk, if he delivers 4 bottles to each house, how many houses will he deliver to?

Division (word problems with remainders)

Example: There are 22 children in Emerald class, and 5 tables for the children to work on. How many children can fit on each table?

22 ÷ 5 = 4 remainder 2 (you can write either remainder or just R)

1. In my piggy bank I have £42 pounds. I decided to share my money between 10 friends, how much will they each get?
2. I want to share my 7 pencils between my 2 best friends, how many pencils will they each have
3. My rabbit eats 10 carrots in 3 days, how many does she eat each day?
4. I need to share my 16 cubes between 5 different groups. How many cubes will each group have?
5. Mrs Evans decided to give out 21 Smarties to 4 children in her class. How many Smarties does each child get?

Division - Deeper Learning

Deeper Learning
Complete the following:

12 ÷ ____ = 4

Deeper Learning
Complete the following:

16 ÷ ____ = 4

Deeper Learning
Complete the following:

36 ÷ ____ = 6

Deeper Learning
Complete the following:

48 ÷ ____ = 8

Deeper Learning
Complete the following:

132 ÷ ____ = 12

Deeper Learning
The following problems can be solved by using the calculation 8 ÷ 2. True or false?

There are 2 bags of bread rolls that have 8 rolls in each bag. How many rolls are there altogether?

<u>Multiplication and Division Games</u>

<u>https://www.topmarks.co.uk/maths-games/5-7-years/multiplication-and-division</u>

<u>https://www.topmarks.co.uk/maths-games/hit-the-button</u>

<u>https://www.multiplication.com/games/all-games</u>

<u>https://www.multiplication.com/games/division-games</u>

<u>https://nrich.maths.org/8956</u>

<u>https://www.effectivemaths.com/27april</u> *(HOME LEARNING (Summer 1) tab - 27th April, 4th April and the11th May have more multiplication resources and quizzes)*

Education City