



*Multiplication
and Division*



2 4.0 1. 2 2

LO: To divide a 2-digit number by a 1-digit number

I know that when I divide, I am sharing the number into equal groups.

I can partition the numbers into tens and ones to help me divide.

I understand that I must divide the tens first and then the ones.

back 4

Year 3 | Week 1 | Day 2

using $<$, $>$ or $=$

8 3×4



$38 \div 8?$


by 4

more than 475?

White
Rose
Maths

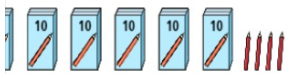
Flashback 4

Year 4

- 1) Work out 11×7
- 2) What is $63 \div 7?$
- 3) What is nine multiplied by zero?
- 4) Find the perimeter of the square.  4 cm

3

to be shared equally into 4 pots.



on a place value chart to show how they

number sentences.

tens 4 ones ÷ 4 = one

are in each pot?

start to work out the calculations.

b) $68 \div 2$

use a place value chart.

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

4

1 Rosie is working out $93 \div 3$ using a place value chart.

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

a) Talk about Rosie's method with a partner.

b) Work out the division.

2 Use place value counters to work out the divisions.

a) $66 \div 3$

c) $50 \div 5$

e) $39 \div 3$

b) $86 \div 2$

d) $48 \div 4$

f) $84 \div 4$

3 Dexter is working out $56 \div 4$ using a place value chart.

T	O
10	1
10	1
10	1
10	1



a)

I can't do it because I have counters left over.



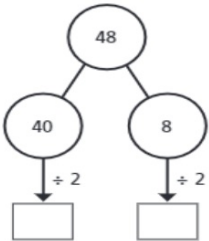
Do you agree with Dexter?

Explain your answer.

b) Work out $56 \div 4$ using place value counters.

3

Complete the part-whole model to show what Amir has done.

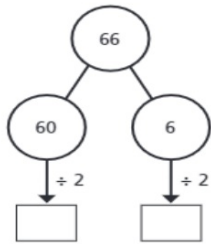
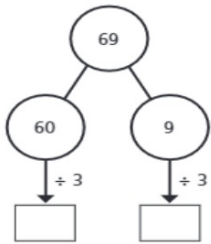


$$48 \div 2 = \square$$

Work out the divisions.

a) $69 \div 3 = \square$

b) $66 \div 2 = \square$

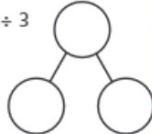
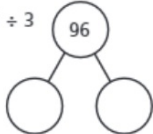
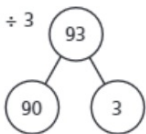


Work out the divisions.

a) $93 \div 3$

$96 \div 3$

$99 \div 3$



b) $82 \div 2$ $84 \div 2$ $86 \div 2$

4

4 Use place value counters to work out the divisions.

a) $72 \div 3$

c) $65 \div 5$

e) $45 \div 3$

b) $92 \div 4$

d) $48 \div 6$

f) $64 \div 4$

5 Teddy is working out $57 \div 3$

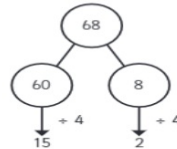
This division will need an exchange.



How does Teddy know this?

Talk about it with a partner.

6 Amir is working out $68 \div 4$



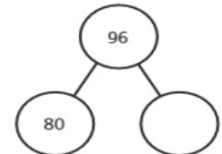
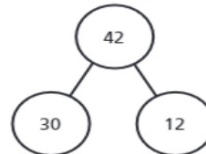
$$68 \div 4 = 17$$

Talk about Amir's method with a partner.

7 Use Amir's method to complete these calculations.

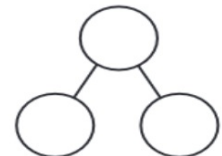
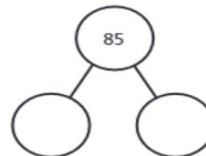
a) $42 \div 3 = \square$

b) $96 \div 4 = \square$



c) $85 \div 5 = \square$

d) $84 \div 6 = \square$



Extension Year 3

6



88 can be divided equally by 2 and by 4

Do you agree with Annie?

Explain why.

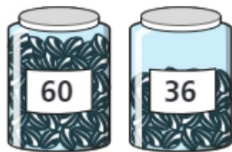
Can Annie divide 88 equally by any other 1-digit numbers?

7

Esther has 2 jars of mints.

Esther shares the mints equally between 3 bowls.

How many mints are in each bowl?



Extension Year 4

8

Kim has 92 beads.

She wants to share them equally between 4 friends.

How many beads will each friend get?

9

Write $<$, $>$ or $=$ to make the statements correct.

$96 \div 8$ $72 \div 6$ $95 \div 5$ $63 \div 3$

$51 \div 3$ $64 \div 4$ $98 \div 7$ $95 \div 5$

Plenary

True or False ?

Divide 2-digits by 1-digit (1)

$84 \div 2$ is equal to $80 \div 2 + 40 \div 2$

True or False ?

Divide 2-d

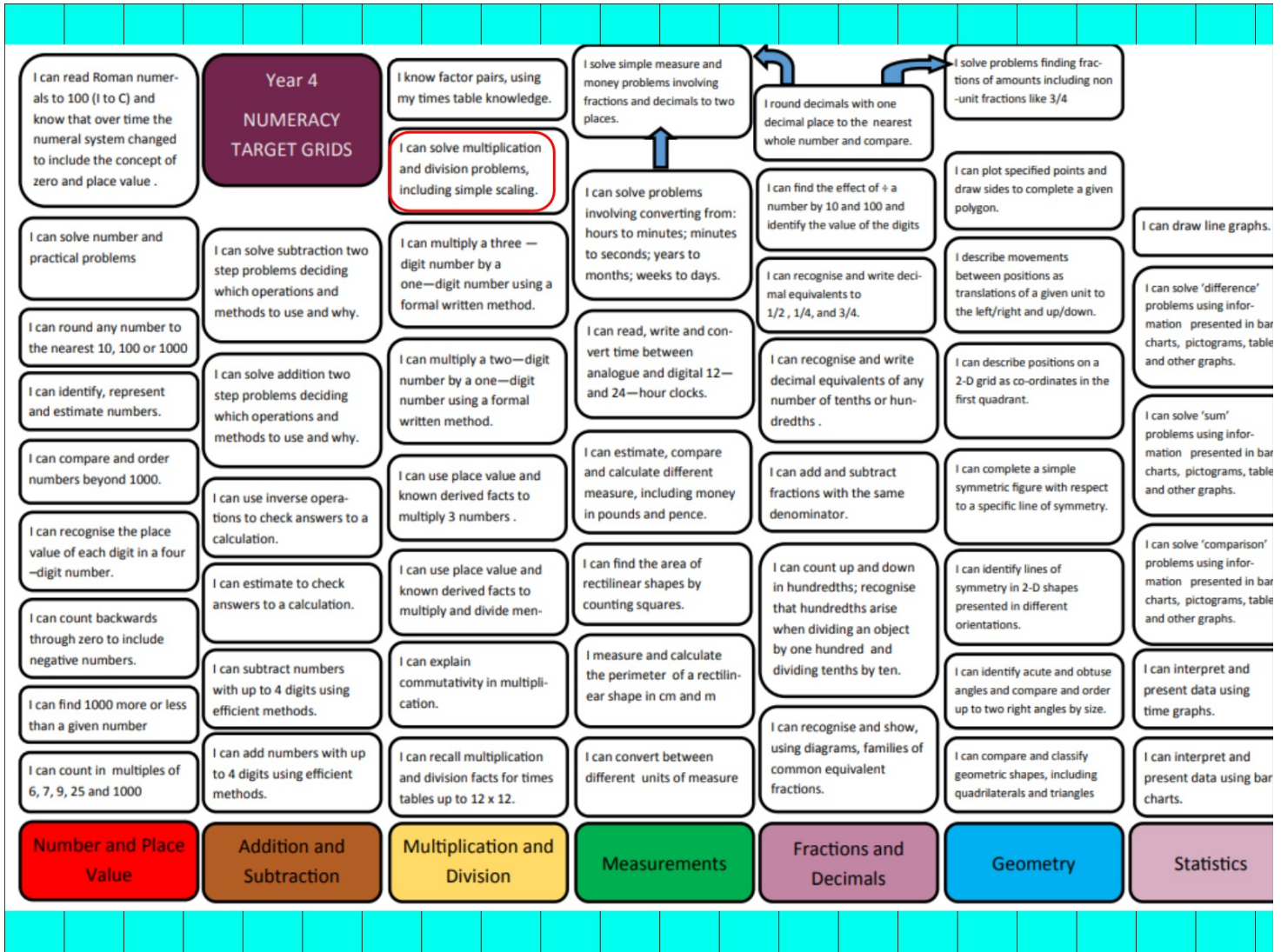
Each of these calculations have the same quotient.

$84 \div 7 =$

$36 \div 3 =$

$96 \div 8 =$

Year 3 NUMERACY TARGET GRIDS						
I can compare and order numbers up to 1000.	I can solve missing number problems.	I can solve multiplication and division problems, using scaling.	I can measure the perimeter of simple 2-D shapes	I can solve problems involving fractions	I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	I know how many seconds are in a minute, days in each month, year and leap year.
I can count from 0 in multiples of 4, 8, 50 and 100.	I can estimate the answer to a calculation and use inverse operations to check	I can solve multiplication and division problems.	I can estimate and read time to the nearest minute and compare times using appropriate vocabulary.	I can compare and order fractions, and fractions with the same denominator.	I identify whether angles are greater than or less than a right angle.	
I can identify, represent and estimate numbers in different contexts.	I can solve addition and subtraction problems.	I can use mental strategies to multiply a 2-digit number by a 1 digit number.	I can tell the time using Roman numerals from I to XII	I can add and subtract fractions with the same denominator within one whole. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$	I can recognise that two right angles make a half-turn. 3 make 3/4 of a turn and 4 make a complete turn.	I can solve two-step problems using presented data
I can find 10 or 100 more or less than a given number.	I can subtract numbers up to three digits using an efficient written method.	I can write and calculate statements for X and +. Using the multiplication tables that I know.	I can tell and write the time from an analogue clock and 12-hour and 24-hour clocks.	I can recognise and show, using diagrams, equivalent fractions.	I can identify right angles.	I can solve one-step problems using presented data
I can recognise the place value of each digit in a three-digit number.	I can add numbers up to three digits using an efficient written method.	I can recall and use multiplication and division facts for the 8 times table.	I can add and subtract amounts of money to give change using £ and p.	I can recognise and use fractions as numbers.	I can recognise angles as a property of shape or a description of a turn.	I can interpret and present data using tables.
I can solve number problems and practical problems.	I can add and subtract a 3 digit-number and hundreds mentally.	I can recall and use multiplication and division facts for the 4 times table.	I can measure and compare, add and subtract volume/capacity (l/ml)	I can find and write fractions for a set of objects.	I can recognise 3-D shapes in different orientations.	I can interpret and present data using pictograms.
I can read and write numbers to 100 in numerals and in words.	I can add and subtract a 3 digit-number and tens mentally.	I can recall and use multiplication and division facts for the 3 times table.	I can measure and compare, add and subtract mass (kg/g)	I recognise that tenths arise from dividing an object into 10 equal parts.	I can make 3-D shape using modelling materials.	I can interpret and present data using bar charts.
	I can add and subtract a 3 digit-number and ones mentally.	I can use efficient written methods to multiply a 2 digit and a 1 digit number.	I can measure and compare, add and subtract lengths (m/cm/mm)	I can count up and down in tenths.	I can draw 2-D shapes.	
Number and Place Value	Addition and Subtraction	Multiplication and Division	Measurements	Fractions	Geometry	Statistics



20.01.22

LO: To divide a 2-digit number by a 1-digit number

I know how to divide numbers that involve exchanging between the tens and ones


I can partition the numbers into tens and ones to help me divide.


I understand how to use times-tables to partition the number into multiples of the divisor.



3

- 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 a place value grid to share the pencils.
c) How many pencils are in each pot?
d) Did you have to make an exchange?

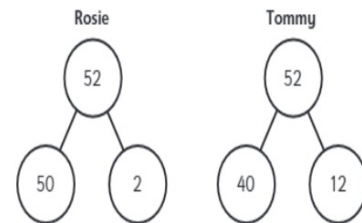
- 2 Eva has this money.

She wants to share the money equally between 3 people.
a) Use a place value chart to show how Eva can share the money.
b) How much money does each person get?

- 3 Divide 72 by 3

Use the place value counters to help you.
 $72 \div 3$

4

- 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.



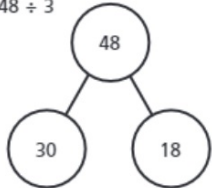
- a) Whose part-whole model will help them with the division?
How do you know?
- b) Use a part-whole model to work out $52 \div 4$

3

4

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

a) $48 \div 3$

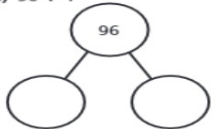


$30 \div 3 = \square$

$18 \div 3 = \square$

$48 \div 3 = \square$

b) $96 \div 4$



c) $65 \div 5$

d) $75 \div 3$

Extension

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.

$96 \div 8$ $96 \div 4$ $96 \div 2$

Plenary

True or False?

Divide 2-digits by 1-digit (2)

$$24 \div 2 > 12 \times 2$$

Year 3

NUMERACY
TARGET GRIDS

I can compare and order numbers up to 1000.

I can count from 0 in multiples of 4, 8, 50 and 100.

I can identify, represent and estimate numbers in different contexts.

I can find 10 or 100 more or less than a given number.

I can recognise the place value of each digit in a three-digit number.

I can solve number problems and practical problems.

I can read and write numbers to 100 in numerals and in words.

I can solve missing number problems.

I can estimate the answer to a calculation and use inverse operations to check

I can solve addition and subtraction problems.

I can subtract numbers up to three digits using an efficient written method.

I can add numbers up to three digits using an efficient written method.

I can add and subtract a 3 digit-number and hundreds mentally.

I can add and subtract a 3 digit-number and tens mentally.

I can add and subtract a 3 digit-number and ones mentally.

I can solve multiplication and division problems, using scaling.

I can solve multiplication and division problems.

I can use mental strategies to multiply a 2-digit number by a 1 digit number.

I can write and calculate statements for X and +. Using the multiplication tables that I know.

I can recall and use multiplication and division facts for the 8 times table.

I can recall and use multiplication and division facts for the 4 times table.

I can recall and use multiplication and division facts for the 3 times table.

I can use efficient written methods to multiply a 2 digit and a 1 digit number.

I can measure the perimeter of simple 2-D shapes

I can estimate and read time to the nearest minute and compare times using appropriate vocabulary.

I can tell the time using Roman numerals from I to XII

I can tell and write the time from an analogue clock and 12-hour and 24-hour clocks.

I can add and subtract amounts of money to give change using £ and p.

I can measure and compare, add and subtract volume/capacity (l/ml)

I can measure and compare, add and subtract mass (kg/g)

I can measure and compare, add and subtract lengths (m/cm/mm)

I can solve problems involving fractions

I can compare and order fractions, and fractions with the same denominator.

I can add and subtract fractions with the same denominator within one whole.
 $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$

I can recognise and show, using diagrams, equivalent fractions.

I can recognise and use fractions as numbers.

I can find and write fractions for a set of objects.

I recognise that tenths arise from dividing an object into 10 equal parts.

I can count up and down in tenths.

I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

I identify whether angles are greater than or less than a right angle.

I can recognise that two right angles make a half-turn. 3 make 3/4 of a turn and 4 make a complete turn.

I can identify right angles.

I can recognise angles as a property of shape or a description of a turn.

I can recognise 3-D shapes in different orientations.

I can make 3-D shape using modelling materials.

I can draw 2-D shapes.

I know how many seconds are in a minute, days in each month, year and leap year.

I can solve two-step problems using presented data

I can solve one-step problems using presented data

I can interpret and present data using tables.

I can interpret and present data using pictograms.

I can interpret and present data using bar charts.

Number and Place Value

Addition and Subtraction

Multiplication and Division

Measurements

Fractions

Geometry

Statistics

**Year 4
NUMERACY
TARGET GRIDS**

I can read Roman numerals to 100 (I to C) and know that over time the numeral system changed to include the concept of zero and place value .

I know factor pairs, using my times table knowledge.

I solve simple measure and money problems involving fractions and decimals to two places.

I round decimals with one decimal place to the nearest whole number and compare.

I solve problems finding fractions of amounts including non-unit fractions like $\frac{3}{4}$

I can solve number and practical problems

I can solve subtraction two step problems deciding which operations and methods to use and why.

I can solve multiplication and division problems, including simple scaling.

I can solve problems involving converting from: hours to minutes; minutes to seconds; years to months; weeks to days.

I can find the effect of \div a number by 10 and 100 and identify the value of the digits

I can plot specified points and draw sides to complete a given polygon.

I can draw line graphs.

I can round any number to the nearest 10, 100 or 1000

I can solve addition two step problems deciding which operations and methods to use and why.

I can multiply a three — digit number by a one—digit number using a formal written method.

I can read, write and convert time between analogue and digital 12— and 24—hour clocks.

I can recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$.

I describe movements between positions as translations of a given unit to the left/right and up/down.

I can solve 'difference' problems using information presented in bar charts, pictograms, tables and other graphs.

I can identify, represent and estimate numbers.

I can solve addition two step problems deciding which operations and methods to use and why.

I can multiply a two—digit number by a one—digit number using a formal written method.

I can estimate, compare and calculate different measure, including money in pounds and pence.

I can recognise and write decimal equivalents of any number of tenths or hundredths .

I can describe positions on a 2-D grid as co-ordinates in the first quadrant.

I can solve 'sum' problems using information presented in bar charts, pictograms, tables and other graphs.

I can compare and order numbers beyond 1000.

I can use inverse operations to check answers to a calculation.

I can use place value and known derived facts to multiply 3 numbers .

I can estimate, compare and calculate different measure, including money in pounds and pence.

I can add and subtract fractions with the same denominator.

I can complete a simple symmetric figure with respect to a specific line of symmetry.

I can solve 'comparison' problems using information presented in bar charts, pictograms, tables and other graphs.

I can recognise the place value of each digit in a four —digit number.

I can estimate to check answers to a calculation.

I can use place value and known derived facts to multiply and divide men-

I can find the area of rectilinear shapes by counting squares.

I can count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

I can identify lines of symmetry in 2-D shapes presented in different orientations.

I can solve 'comparison' problems using information presented in bar charts, pictograms, tables and other graphs.

I can count backwards through zero to include negative numbers.

I can subtract numbers with up to 4 digits using efficient methods.

I can explain commutativity in multiplication.

I measure and calculate the perimeter of a rectilinear shape in cm and m

I can recognise and show, using diagrams, families of common equivalent fractions.

I can identify acute and obtuse angles and compare and order up to two right angles by size.

I can interpret and present data using time graphs.

I can find 1000 more or less than a given number

I can add numbers with up to 4 digits using efficient methods.

I can recall multiplication and division facts for times tables up to 12×12 .

I can convert between different units of measure

I can compare and classify geometric shapes, including quadrilaterals and triangles

I can interpret and present data using bar charts.

I can count in multiples of 6, 7, 9, 25 and 1000

I can add numbers with up to 4 digits using efficient methods.

I can recall multiplication and division facts for times tables up to 12×12 .

I can convert between different units of measure

I can compare and classify geometric shapes, including quadrilaterals and triangles

I can interpret and present data using bar charts.

Number and Place Value

Addition and Subtraction

Multiplication and Division

Measurements

Fractions and Decimals

Geometry

Statistics

2 6.01.22

LO: To solve division problems with a remainder

I know that when I divide an amount into equal groups, anything left over is called the remainder.

I can link division to repeated subtraction.

I understand that the remainder can never be more than the divisor.

Flashback 4

Year 3 | Week 1 | Day 5

4

8

two by four

on a game.

ay does he have left?



Flashback 4

Year 4

1) Work out $3 \times 3 \times 4$

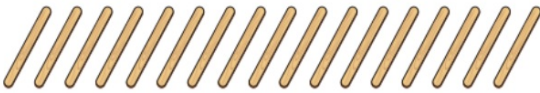
2) What is nine multiplied by eight?

3) $12 \div 1$ is equal to?

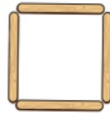
4) Work out $3,924 - 1,451$

Year 3

1 Mo has these lolly sticks.



He uses them to make squares.
How many squares can Mo make?
Complete the sentences.



There are 17 lolly sticks.

There are groups of 4

There is lolly stick remaining.

$17 \div 4 =$ remainder

Mo can make squares.

2 Mo now uses the lolly sticks to make triangles.

How many triangles can Mo make?
Complete the sentences.



There are 17 lolly sticks.

There are groups of 3

There are lolly sticks remaining.

$17 \div 3 =$ remainder

Mo can make triangles.

Year 4

Teacher

1 Jack is working out $844 \div 4$ using a place value chart.

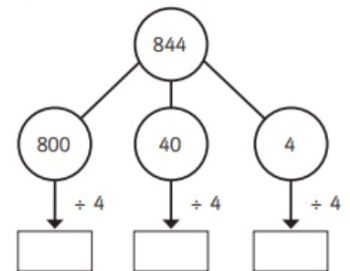
H		T	O
100	100	10	1
100	100	10	1
100	100	10	1
100	100	10	1

- a) Talk about Jack's method with a partner.
- b) Work out the division.

2 Use Jack's method to work out these divisions.

- a) $525 \div 5$ b) $636 \div 6$ c) $840 \div 8$ d) 90

3 Eva is working out $844 \div 4$ using a part-whole model.



Complete Eva's method. $844 \div 4 =$

4 A ball of string is 848 cm long.
It is cut into 4 equal pieces.
What is the length of one piece of string?

Year 3

3 Finally, Mo uses the lolly sticks to make pentagons.

How many pentagons can Mo make?

Complete the sentences.

There are 17 lolly sticks.



There are groups of 5

There are lolly sticks remaining.

$17 \div 5 =$ remainder

Mo can make pentagons.

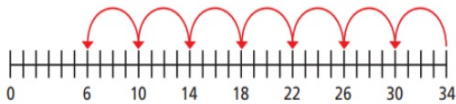
4 Use repeated subtraction to complete the divisions.

Use number lines to help you.

a) $23 \div 4 =$ remainder c) $23 \div 3 =$ remainder

b) $23 \div 5 =$ remainder

5 Eva works out $34 \div 4$



There is a remainder of 6

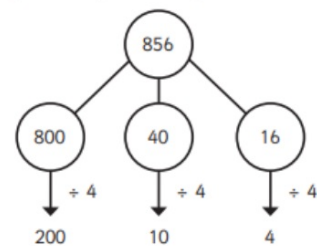


Is Eva correct?

How do you know?

Year 4

5 Whitney is using flexible partitioning to divide a 3-digit number.

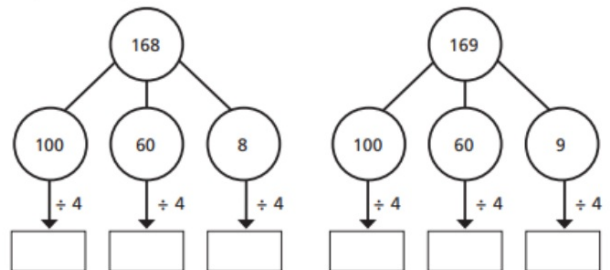


Could Whitney have partitioned her number another way?

Use Whitney's method to work out these divisions.

a) $585 \div 5$ b) $672 \div 6$ c) $648 \div 4$ d) $847 \div 7$

6 Complete the part-whole models and divisions.



$168 \div 4 =$

$169 \div 4 =$

What is the same and what is different about the calculations?

Talk about it with a partner.

Extension

How do you know there is no remainder when 75 is divided by 5?

Without doing the division, what is the remainder when 76 is divided by 5?

Extension

Eva has a piece of ribbon.



The ribbon measures 839 cm long.

How much ribbon would be left over if she cuts it into:

- a) 4 equal pieces
- b) 6 equal pieces
- c) 8 equal pieces

Can Eva cut the ribbon into equal pieces with no ribbon left over?

Explain your answer.

Plenary

False ?

Divide 2-digits by 1-digits (3)

calculation will have a remainder.

$$26 \div 5$$

$$30 \div 5$$



True or False ?

Divide 3-d

To divide 639 by 3 you need to use the short division method.

Year 3 NUMERACY TARGET GRIDS						
I can compare and order numbers up to 1000.	I can solve missing number problems.	I can solve multiplication and division problems, using scaling.	I can measure the perimeter of simple 2-D shapes	I can solve problems involving fractions	I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	I know how many seconds are in a minute, days in each month, year and leap year.
I can count from 0 in multiples of 4, 8, 50 and 100.	I can estimate the answer to a calculation and use inverse operations to check	I can solve multiplication and division problems.	I can estimate and read time to the nearest minute and compare times using appropriate vocabulary.	I can compare and order fractions, and fractions with the same denominator.	I identify whether angles are greater than or less than a right angle.	
I can identify, represent and estimate numbers in different contexts.	I can solve addition and subtraction problems.	I can use mental strategies to multiply a 2-digit number by a 1 digit number.	I can tell the time using Roman numerals from I to XII	I can add and subtract fractions with the same denominator within one whole. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$	I can recognise that two right angles make a half-turn. 3 make 3/4 of a turn and 4 make a complete turn.	I can solve two-step problems using presented data
I can find 10 or 100 more or less than a given number.	I can subtract numbers up to three digits using an efficient written method.	I can write and calculate statements for X and +. Using the multiplication tables that I know.	I can tell and write the time from an analogue clock and 12-hour and 24-hour clocks.	I can recognise and show, using diagrams, equivalent fractions.	I can identify right angles.	I can solve one-step problems using presented data
I can recognise the place value of each digit in a three-digit number.	I can add numbers up to three digits using an efficient written method.	I can recall and use multiplication and division facts for the 8 times table.	I can add and subtract amounts of money to give change using £ and p.	I can recognise and use fractions as numbers.	I can recognise angles as a property of shape or a description of a turn.	I can interpret and present data using tables.
I can solve number problems and practical problems.	I can add and subtract a 3 digit-number and hundreds mentally.	I can recall and use multiplication and division facts for the 4 times table.	I can measure and compare, add and subtract volume/capacity (l/ml)	I can find and write fractions for a set of objects.	I can recognise 3-D shapes in different orientations.	I can interpret and present data using pictograms.
I can read and write numbers to 100 in numerals and in words.	I can add and subtract a 3 digit-number and tens mentally.	I can recall and use multiplication and division facts for the 3 times table.	I can measure and compare, add and subtract mass (kg/g)	I recognise that tenths arise from dividing an object into 10 equal parts.	I can make 3-D shape using modelling materials.	I can interpret and present data using bar charts.
	I can add and subtract a 3 digit-number and ones mentally.	I can use efficient written methods to multiply a 2 digit and a 1 digit number.	I can measure and compare, add and subtract lengths (m/cm/mm)	I can count up and down in tenths.	I can draw 2-D shapes.	
Number and Place Value	Addition and Subtraction	Multiplication and Division	Measurements	Fractions	Geometry	Statistics

Year 4 NUMERACY TARGET GRIDS

I can read Roman numerals to 100 (I to C) and know that over time the numeral system changed to include the concept of zero and place value .

I can solve number and practical problems

I can round any number to the nearest 10, 100 or 1000

I can identify, represent and estimate numbers.

I can compare and order numbers beyond 1000.

I can recognise the place value of each digit in a four-digit number.

I can count backwards through zero to include negative numbers.

I can find 1000 more or less than a given number

I can count in multiples of 6, 7, 9, 25 and 1000

I know factor pairs, using my times table knowledge.

I can solve multiplication and division problems, including simple scaling.

I can multiply a three-digit number by a one-digit number using a formal written method.

I can multiply a two-digit number by a one-digit number using a formal written method.

I can use place value and known derived facts to multiply 3 numbers .

I can use place value and known derived facts to multiply and divide mentally.

I can explain commutativity in multiplication.

I can recall multiplication and division facts for times tables up to 12 x 12.

I solve simple measure and money problems involving fractions and decimals to two places.

I can solve problems involving converting from: hours to minutes; minutes to seconds; years to months; weeks to days.

I can read, write and convert time between analogue and digital 12- and 24-hour clocks.

I can estimate, compare and calculate different measure, including money in pounds and pence.

I can find the area of rectilinear shapes by counting squares.

I measure and calculate the perimeter of a rectilinear shape in cm and m

I can convert between different units of measure

I round decimals with one decimal place to the nearest whole number and compare.

I can find the effect of \times a number by 10 and 100 and identify the value of the digits

I can recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$.

I can recognise and write decimal equivalents of any number of tenths or hundredths .

I can add and subtract fractions with the same denominator.

I can count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

I can recognise and show, using diagrams, families of common equivalent fractions.

I solve problems finding fractions of amounts including non-unit fractions like $\frac{3}{4}$

I can plot specified points and draw sides to complete a given polygon.

I describe movements between positions as translations of a given unit to the left/right and up/down.

I can describe positions on a 2-D grid as co-ordinates in the first quadrant.

I can complete a simple symmetric figure with respect to a specific line of symmetry.

I can identify lines of symmetry in 2-D shapes presented in different orientations.

I can identify acute and obtuse angles and compare and order up to two right angles by size.

I can compare and classify geometric shapes, including quadrilaterals and triangles

I can draw line graphs.

I can solve 'difference' problems using information presented in bar charts, pictograms, tables and other graphs.

I can solve 'sum' problems using information presented in bar charts, pictograms, tables and other graphs.

I can solve 'comparison' problems using information presented in bar charts, pictograms, tables and other graphs.

I can interpret and present data using time graphs.

I can interpret and present data using bar charts.

Number and Place Value **Addition and Subtraction** **Multiplication and Division** **Measurements** **Fractions and Decimals** **Geometry** **Statistics**

2 7. 0 1. 2 2

Year 3

is involving scaling

concrete resources to help me.

is to help me visualise scaling problems.

scaling problems involving finding out 'how many times as many' there are

LO: To multiply 3 numbers

I know that when I multiply 3 numbers, the order doesn't matter

I can use concrete resources to build the calculation.

I understand that I can change the order of the numbers to multiply

Play hit the button

Year 3

Tom is comparing 2 pieces of ribbon.



Complete the sentences to describe the ribbon.

The spotty ribbon measures

The plain ribbon measures

The plain ribbon is times as long as the spotty ribbon.

Match the bar models to the statements.

Write the missing statement.



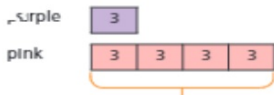
There are 4 times as many boys as girls.



There are 3 times as many boys as girls.



There are 3 purple balloons.



There are 4 times as many pink balloons.

Complete the bar model to show how many pink balloons there are.

The red rope is 8 m long.

The blue rope is 5 times as long.



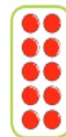
Label and complete the bar model.

How long is the blue rope?

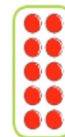
Year 4

1 Tommy is making arrays using counters.

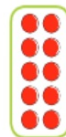
a) Complete the multiplications.



$2 \times 5 = \square$



$2 \times 5 = \square$



$2 \times 5 = \square$

b) Use your answer to part a) to complete the multiplication.

$3 \times 2 \dots 5 = \square \times 5 = \square$

2 Use counters or cubes to complete the calculations.

a) $2 \times 4 \times 5$

b) $3 \times 5 \times 4$

c) $2 \times 5 \times 8$

Is there a quick way to complete each calculation?

Talk about it with a partner.

3 Complete the multiplications.

a) $3 \times 4 \times 5$

d) $3 \times 5 \times 4$

b) $2 \times 3 \times 6$

e) $3 \times 6 \times 10$

c) $2 \times 4 \times 7$

f) $2 \times 5 \times 12$

4 Is each statement true or false?

$7 \times 8 = 7 \times 4 \times 2$

$3 \times 2 \times 8 = 5 \times 8$

$12 \times 4 = 2 \times 4 \times 6$

$2 \times 7 \times 4 = 4 \times 7 \times 2$

Year 3

- 6 Ron has 5 bananas.
Esther has 6 times as many bananas as Ron.
Draw a bar model to work out how many bananas Esther has got.

Extension

Complete the sentences.

45 is times greater than 5

$$\square \times 5 = 45$$

5 is times smaller than 45

$$45 \div 5 = \square$$

Year 4

- 5 Here are some digit cards.
- a) Use the digit cards to create a multiplication and work out the answer. \times \times =
- b) How many different multiplications can you create?
What do you notice about all of your answers?
- 6 Eggs are put in boxes in arrays of 2×3
Dani buys 12 boxes.
How many eggs does she buy altogether?
Dani buys 5 more boxes.
How many eggs does she have now?



Extension

In the library there are 5 bookcases.
Each bookcase has 4 shelves.
On each shelf there are 12 books.
How many books are there in the library?



Year 3
NUMERACY
TARGET GRIDS

I can compare and order numbers up to 1000.

I can count from 0 in multiples of 4, 8, 50 and 100.

I can identify, represent and estimate numbers in different contexts.

I can find 10 or 100 more or less than a given number.

I can recognise the place value of each digit in a three-digit number.

I can solve number problems and practical problems.

I can read and write numbers to 100 in numerals and in words.

I can solve missing number problems.

I can estimate the answer to a calculation and use inverse operations to check

I can solve addition and subtraction problems.

I can subtract numbers up to three digits using an efficient written method.

I can add numbers up to three digits using an efficient written method.

I can add and subtract a 3 digit-number and hundreds mentally.

I can add and subtract a 3 digit-number and tens mentally.

I can add and subtract a 3 digit-number and ones mentally.

I can solve multiplication and division problems, using scaling.

I can solve multiplication and division problems.

I can use mental strategies to multiply a 2-digit number by a 1 digit number.

I can write and calculate statements for X and +. Using the multiplication tables that I know.

I can recall and use multiplication and division facts for the 8 times table.

I can recall and use multiplication and division facts for the 4 times table.

I can recall and use multiplication and division facts for the 3 times table.

I can use efficient written methods to multiply a 2 digit and a 1 digit number.

I can measure the perimeter of simple 2-D shapes

I can estimate and read time to the nearest minute and compare times using appropriate vocabulary.

I can tell the time using Roman numerals from I to XII

I can tell and write the time from an analogue clock and 12-hour and 24-hour clocks.

I can add and subtract amounts of money to give change using £ and p.

I can measure and compare, add and subtract volume/capacity (l/ml)

I can measure and compare, add and subtract mass (kg/g)

I can measure and compare, add and subtract lengths (m/cm/mm)

I can solve problems involving fractions

I can compare and order fractions, and fractions with the same denominator.

I can add and subtract fractions with the same denominator within one whole.
$$\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$$

I can recognise and show, using diagrams, equivalent fractions.

I can recognise and use fractions as numbers.

I can find and write fractions for a set of objects.

I recognise that tenths arise from dividing an object into 10 equal parts.

I can count up and down in tenths.

I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

I identify whether angles are greater than or less than a right angle.

I can recognise that two right angles make a half-turn. 3 make 3/4 of a turn and 4 make a complete turn.

I can identify right angles.

I can recognise angles as a property of shape or a description of a turn.

I can recognise 3-D shapes in different orientations.

I can make 3-D shape using modelling materials.

I can draw 2-D shapes.

I know how many seconds are in a minute, days in each month, year and leap year.

I can solve two-step problems using presented data

I can solve one-step problems using presented data

I can interpret and present data using tables.

I can interpret and present data using pictograms.

I can interpret and present data using bar charts.

Number and Place Value

Addition and Subtraction

Multiplication and Division

Measurements

Fractions

Geometry

Statistics

**Year 4
NUMERACY
TARGET GRIDS**

I can read Roman numerals to 100 (I to C) and know that over time the numeral system changed to include the concept of zero and place value .

I can solve number and practical problems

I can round any number to the nearest 10, 100 or 1000

I can identify, represent and estimate numbers.

I can compare and order numbers beyond 1000.

I can recognise the place value of each digit in a four -digit number.

I can count backwards through zero to include negative numbers.

I can find 1000 more or less than a given number

I can count in multiples of 6, 7, 9, 25 and 1000

I can solve subtraction two step problems deciding which operations and methods to use and why.

I can solve addition two step problems deciding which operations and methods to use and why.

I can use inverse operations to check answers to a calculation.

I can estimate to check answers to a calculation.

I can subtract numbers with up to 4 digits using efficient methods.

I can add numbers with up to 4 digits using efficient methods.

I know factor pairs, using my times table knowledge.

I can solve multiplication and division problems, including simple scaling.

I can multiply a three -digit number by a one—digit number using a formal written method.

I can multiply a two—digit number by a one—digit number using a formal written method.

I can use place value and known derived facts to multiply 3 numbers .

I can use place value and known derived facts to multiply and divide men-

I can explain commutativity in multiplication.

I can recall multiplication and division facts for times tables up to 12 x 12.

I solve simple measure and money problems involving fractions and decimals to two places.

I can solve problems involving converting from: hours to minutes; minutes to seconds; years to months; weeks to days.

I can read, write and convert time between analogue and digital 12— and 24—hour clocks.

I can estimate, compare and calculate different measure, including money in pounds and pence.

I can find the area of rectilinear shapes by counting squares.

I measure and calculate the perimeter of a rectilinear shape in cm and m

I can convert between different units of measure

I round decimals with one decimal place to the nearest whole number and compare.

I can find the effect of \div a number by 10 and 100 and identify the value of the digits

I can recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$.

I can recognise and write decimal equivalents of any number of tenths or hundredths .

I can add and subtract fractions with the same denominator.

I can count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

I can recognise and show, using diagrams, families of common equivalent fractions.

I solve problems finding fractions of amounts including non -unit fractions like $\frac{3}{4}$

I can plot specified points and draw sides to complete a given polygon.

I describe movements between positions as translations of a given unit to the left/right and up/down.

I can describe positions on a 2-D grid as co-ordinates in the first quadrant.

I can complete a simple symmetric figure with respect to a specific line of symmetry.

I can identify lines of symmetry in 2-D shapes presented in different orientations.

I can identify acute and obtuse angles and compare and order up to two right angles by size.

I can compare and classify geometric shapes, including quadrilaterals and triangles

I can draw line graphs.

I can solve 'difference' problems using information presented in bar charts, pictograms, tables and other graphs.

I can solve 'sum' problems using information presented in bar charts, pictograms, tables and other graphs.

I can solve 'comparison' problems using information presented in bar charts, pictograms, tables and other graphs.

I can interpret and present data using time graphs.

I can interpret and present data using bar charts.

Number and Place Value

Addition and Subtraction

Multiplication and Division

Measurements

Fractions and Decimals

Geometry

Statistics

2 8. 0 1. 2 2

LO: To use column multiplication with an exchange

I know how to record an exchange on the column multiplication.

I can set out column multiplication using my knowledge of place value.

I understand that when the column totals 10 or more, I need to make an exchange.

Flashback 4

back 4

Year 3 | Week 2 | Day 3

15×3

$8 = 5$, what is $400 \div 8$?



has 8 legs.

How many legs do 9 spiders have?

using $<$, $>$ or $=$

2 724

Flashback 4

Year

- 1) Complete the factors of 15
1, 3, ,
- 2) What is 7×3 ?
- 3) Work out fifty-four divided by six
- 4) 9 kilometres = metre

$$\begin{array}{r} \text{T O} \\ 43 \\ \times \quad 2 \\ \hline 86 \end{array}$$

$$\begin{array}{r} \text{T O} \\ 56 \\ \times \quad 3 \\ \hline 168 \\ 1 \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 234 \\ \times \quad 4 \\ \hline 936 \\ 11 \end{array}$$

Year 3
NUMERACY
TARGET GRIDS

I can compare and order numbers up to 1000.

I can count from 0 in multiples of 4, 8, 50 and 100.

I can identify, represent and estimate numbers in different contexts.

I can find 10 or 100 more or less than a given number.

I can recognise the place value of each digit in a three-digit number.

I can solve number problems and practical problems.

I can read and write numbers to 100 in numerals and in words.

I can solve missing number problems.

I can estimate the answer to a calculation and use inverse operations to check

I can solve addition and subtraction problems.

I can subtract numbers up to three digits using an efficient written method.

I can add numbers up to three digits using an efficient written method.

I can add and subtract a 3 digit-number and hundreds mentally.

I can add and subtract a 3 digit-number and tens mentally.

I can add and subtract a 3 digit-number and ones mentally.

I can solve multiplication and division problems, using scaling.

I can solve multiplication and division problems.

I can use mental strategies to multiply a 2-digit number by a 1 digit number.

I can write and calculate statements for X and +. Using the multiplication tables that I know.

I can recall and use multiplication and division facts for the 8 times table.

I can recall and use multiplication and division facts for the 4 times table.

I can recall and use multiplication and division facts for the 3 times table.

I can use efficient written methods to multiply a 2 digit and a 1 digit number.

I can measure the perimeter of simple 2-D shapes

I can estimate and read time to the nearest minute and compare times using appropriate vocabulary .

I can tell the time using Roman numerals from I to XII

I can tell and write the time from an analogue clock and 12 -hour and 24-hour clocks.

I can add and subtract amounts of money to give change using £ and p.

I can measure and compare, add and subtract volume/capacity (l/ml)

I can measure and compare, add and subtract mass (kg/g)

I can measure and compare, add and subtract lengths (m/cm/mm)

I can solve problems involving fractions

I can compare and order fractions, and fractions with the same denominator.

I can add and subtract fractions with the same denominator within one whole.
 $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$

I can recognise and show, using diagrams, equivalent fractions.

I can recognise and use fractions as numbers.

I can find and write fractions for a set of objects.

I recognise that tenths arise from dividing an object into 10 equal parts.

I can count up and down in tenths.

I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

I identify whether angles are greater than or less than a right angle.

I can recognise that two right angles make a half-turn. 3 make 3/4 of a turn and 4 make a complete turn.

I can identify right angles.

I can recognise angles as a property of shape or a description of a turn.

I can recognise 3-D shapes in different orientations.

I can make 3-D shape using modelling materials.

I can draw 2-D shapes.

I know how many seconds are in a minute, days in each month, year and leap year.

I can solve two-step problems using presented data

I can solve one-step problems using presented data

I can interpret and present data using tables.

I can interpret and present data using pictograms.

I can interpret and present data using bar charts.

Number and Place Value

Addition and Subtraction

Multiplication and Division

Measurements

Fractions

Geometry

Statistics

