Fractions

2 8.02. 2 2

LO: To develop fluency with times table facts.

I know that times table equations are commutative.

I can use concrete resources and a counting stick to help me explain the key concepts of multiplication

I understand how to use known times table facts to help me develop my knowledge of those I don't know.

My speed on Times Table rockstars is

3 x table

0 1.0 2. 2 2

LO: To understand fractions of amounts as part of a whole.

I know that the top number of a fraction in the numerator and the bottom number is the denominator.

I can explain how many items I have, as part of a whole.

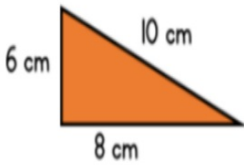I understand that the whole amount is equivalent to 1.

Flashback 4

What fraction of the shape is shaded?

Work out the perimeter of the triangle.

10 cm

6 cm

8 cm

Complete: ☐ millimetres = 7 centimetres

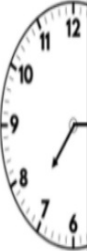What is 28 divided by 4?

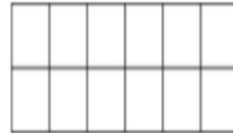1)   Draw a shape with an area of 4 squares.

2)   What is the area of the rectangle in squares?

3)   Find the product of 6 and 8

4)   Subtract 1,000 from 7,892

Fractions with smarties

Count how many Smarties of each colour you have in the tube. Draw the correct number of Smarties in each circle to show this.

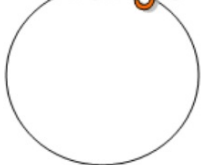**Red**

Yellow

Blue

Purple

Pink

Orange

Green
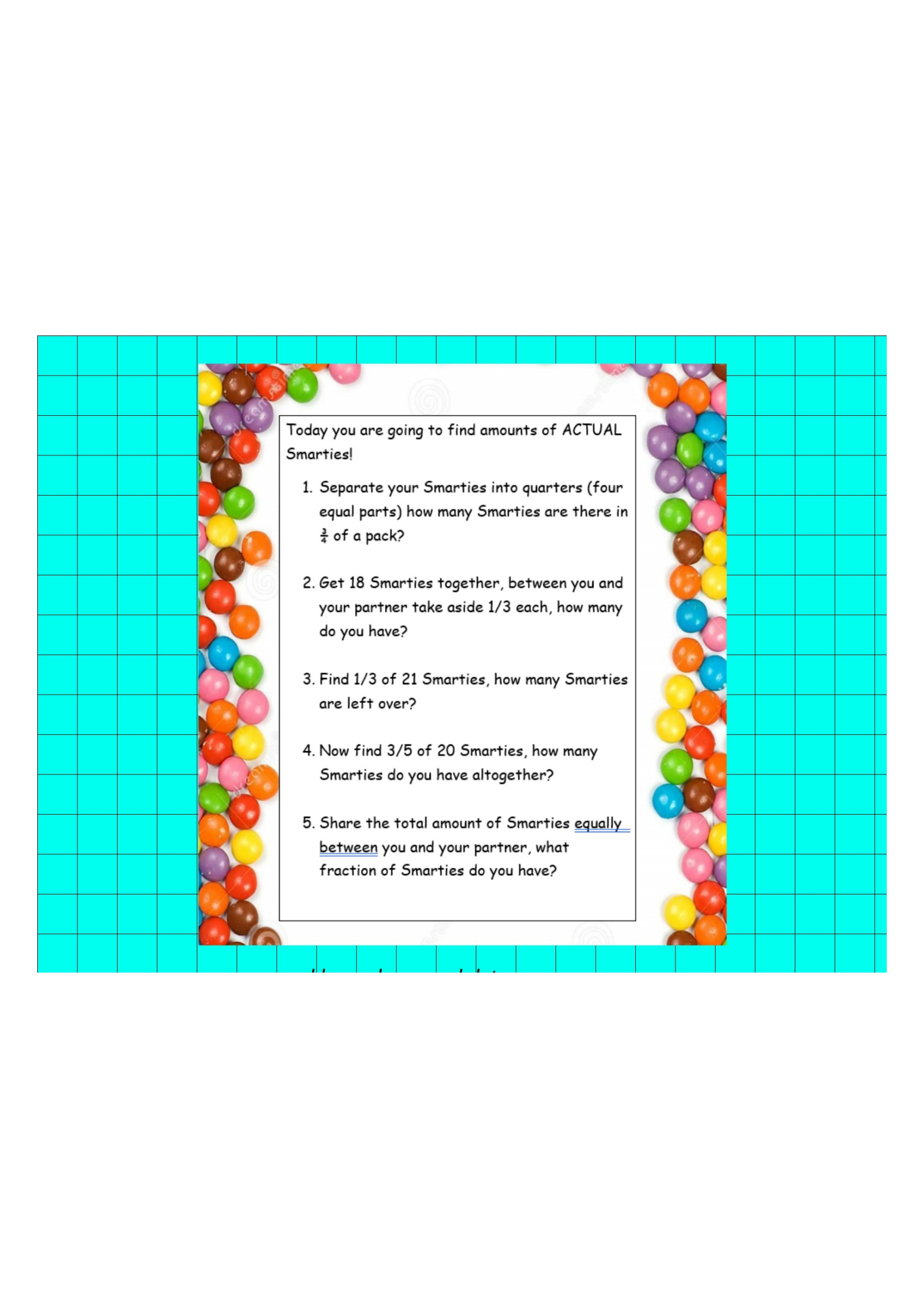
Brown

Fractions with smarties

Fill in the table below with the number and fraction of each colour of Smarties in the tube.

Colour of Smarties	Number in tube	Fraction in box
Blue		
Brown		
Green		
Orange		
Pink		
Purple		
Red		
Yellow		

Today you are going to find amounts of ACTUAL Smarties!

1. Separate your Smarties into quarters (four equal parts) how many Smarties are there in $\frac{3}{4}$ of a pack?

2. Get 18 Smarties together, between you and your partner take aside 1/3 each, how many do you have?

3. Find 1/3 of 21 Smarties, how many Smarties are left over?

4. Now find 3/5 of 20 Smarties, how many Smarties do you have altogether?

5. Share the total amount of Smarties equally between you and your partner, what fraction of Smarties do you have?

Plenary

True or False?

6. Find ¾ of 16 Smarties, how many do you have and how many are left?
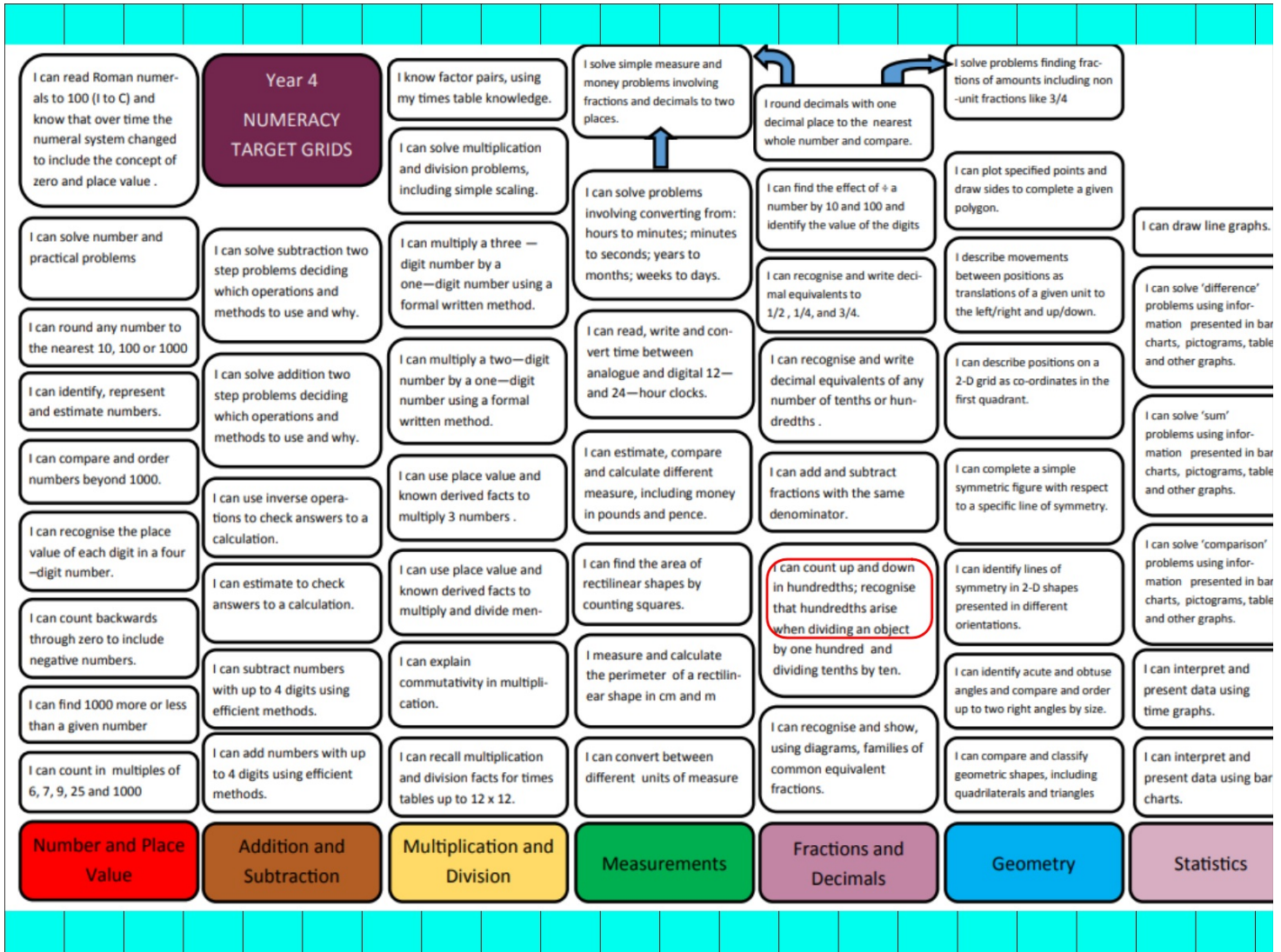
Jade looked at the above question. She said that the answer is 10. Is she correct?

Year 3 NUMERACY TARGET GRIDS

Number and Place Value	Addition and Subtraction	Multiplication and Division	Measurements	Fractions	Geometry	Statistics
			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 solve missing number problems.	I can solve multiplication and division problems, using scaling.	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 can compare and order numbers up to 1000.	I can estimate the answer to a calculation and use inverse operations to check	I can solve multiplication and division problems.			I identify whether angles are greater than or less than a right angle.	
I can count from 0 in multiples of 4, 8, 50 and 100.	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 identify, represent and estimate numbers in different contexts.	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 solve two-step problems using presented data
I can find 10 or 100 more or less than a given 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 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 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 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 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 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 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 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 count up and down in tenths.	I can draw 2-D shapes.	

Number and Place Value

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

Addition and Subtraction

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.

Multiplication and Division

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.

Measurements

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

Fractions and Decimals

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

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

I can recognise and write decimal equivalents to 1/2 , 1/4, and 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 3/4

Geometry

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

Statistics

I can draw line graphs.

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

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

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

I can interpret and present data using time graphs.

I can interpret and present data using bar charts.

0 2. 0 3. 2 2

LO: To use concrete resources to find fractions of amounts.

I know that I need to use the denominator to know how many equal groups I need.

I can use concrete resources to find a unit fraction of an amount.

I understand how to use my division skills to help divide amounts into equal groups.

Find $\frac{1}{5}$ of Eva's marbles.

I have divided the marbles into ☐ equal groups.

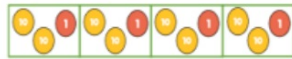There are ☐ marbles in each group.

$\frac{1}{5}$ of Eva's marbles is ☐ marbles.

Dexter has used a bar model and counters to find $\frac{1}{4}$ of 12

Use Dexter's method to calculate:

$\frac{1}{6}$ of 12 $\frac{1}{3}$ of 12 $\frac{1}{3}$ of 18 $\frac{1}{9}$ of 18

Amir uses a bar model and place value counters to find one quarter of 84

Use Amir's method to find:

$\frac{1}{3}$ of 36 $\frac{1}{3}$ of 45 $\frac{1}{5}$ of 65

Whitney has 12 chocolates.

On Friday, she ate $\frac{1}{4}$ of her chocolates and gave one to her mum.

On Saturday, she ate $\frac{1}{2}$ of her remaining chocolates, and gave one to her brother.

On Sunday, she ate $\frac{1}{3}$ of her remaining chocolates.

How many chocolates does Whitney have left?

Fill in the Blanks

$\frac{1}{3}$ of $60 = \frac{1}{4}$ of $\boxed{}$

$\frac{1}{\boxed{}}$ of $50 = \frac{1}{5}$ of 25

True or False?

Fractions of a set of objects (1)

$$\frac{4}{8}$$ of the cars are green.

Year 3 NUMERACY TARGET GRIDS

Number and Place Value	Addition and Subtraction	Multiplication and Division	Measurements	Fractions	Geometry	Statistics
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 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 identify right angles.	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 angles as a property of shape or a description of a turn.	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 recognise 3-D shapes in different orientations.	
	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 make 3-D shape using modelling materials. I can draw 2-D shapes.	I can interpret and present data using bar charts.

Year 4 NUMERACY TARGET GRIDS

Number and Place Value

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

Addition and Subtraction

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.

Multiplication and Division

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.

Measurements

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

Fractions and Decimals

I solve problems finding fractions of amounts including non-unit fractions like 3/4

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

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

I can recognise and write decimal equivalents to 1/2 , 1/4, and 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.

Geometry

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.

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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

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I can draw line graphs.

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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.

LO: To find the unit fraction of an amount.

I know how to find the unit fraction of an amount, by dividing it into equal groups.

I can use counters and make an exchange when I need to, to divide the whole amount into equal groups.

I understand that if the denominator is 8, then I need to divide the whole amount by 8 to find the unit fraction.

Rosie, Amir and Alex each find a fraction of 24 using counters.

I have $\frac{1}{6}$ of 24

I have $\frac{1}{3}$ of 24

I have 6 counters.

Rosie

Alex

Amir

a) Order the children from least counters to most counters.

b) What fraction of the counters does Alex have?

c) Rosie and Amir put their counters together.

Write their total number of counters as a fraction of 24

Flashback 4

Write $\frac{3}{10}$ as a decimal.

Which fraction is equal to 1 whole?

$$\frac{3}{5} \qquad \frac{9}{9} \qquad \frac{10}{3} \qquad \frac{6}{7}$$
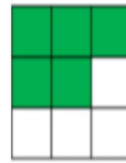
How many centimetres are equal to 8 metres?

Divide 48 by 2

1) What fraction of the shape is shaded?

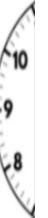2) Which shape has the smaller area?

A   B

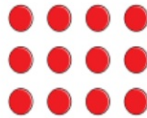3) Calculate $2 \times 5 \times 10$

4) What is 37 more than 849?

White Rose Maths

1 Here are some counters.

a) Circle $\frac{1}{4}$ of the counters.

b) How many counters did you circle? ☐

c) What is $\frac{1}{4}$ of 12? ☐

2 Draw counters in the bar models to help you complete each number sentence. The first one has been done for you.

a) $\frac{1}{2}$ of 8 = $\boxed{4}$

b) $\frac{1}{2}$ of 16 = ☐
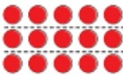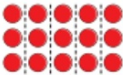
c) $\frac{1}{4}$ of 8 = ☐

d) $\frac{1}{4}$ of 16 = ☐

3

To find a half I need to divide by 2

Do you agree with Dexter?

4 Complete the table.

Fraction	Division	Example	Drawing
one half	divide by 2	$\frac{1}{2}$ of 6 = 3	●●● ●●●
one quarter		$\frac{1}{4}$ of 8 = 2	
			●●●●● ●●●●● ●●●●●
			●●●●● ●●●●●

5 Huan uses a bar model and base 10 to find $\frac{1}{3}$ of 36
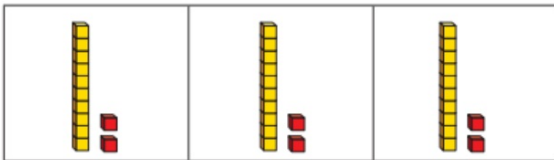
Use Huan's method to complete the calculations.

a) $\frac{1}{3}$ of 63   b) $\frac{1}{4}$ of 48   c) $\frac{1}{4}$ of 92

6 Nijah uses a bar model and place value counters to find $\frac{1}{3}$ of 36

| 10 | 1 | 1 | 10 | 1 | 1 | 10 | 1 | 1 |

Use Nijah's method to complete the calculations.

a) $\frac{1}{3}$ of 96   b) $\frac{1}{5}$ of 60   c) $\frac{1}{4}$ of 52

7 Which amount is greater?

$\frac{1}{3}$ of £75   or $\frac{1}{5}$ of £75   Show your workings.

8 Complete the number sentences.

a) $\frac{1}{2}$ of [ ] = 30   b) $\frac{1}{4}$ of [ ] = 20   c) $\frac{1}{5}$ of [ ] = 50

9 Rosie, Amir and Alex each find a fraction of 24 using counters.

I have $\frac{1}{6}$ of 24

I have $\frac{1}{3}$ of 24

Rosie

I have 6 counters.

Amir

Alex

a) Order the children from least counters to most counters.

b) What fraction of the counters does Alex have?
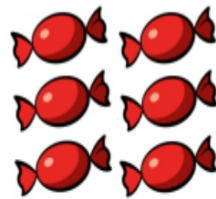
c) Rosie and Amir put their counters together.

Write their total number of counters as a fraction of 24

Plenary

True or False?   Fractions of a set of objects (2)

This shows 1 quarter of 12 sweets.

Year 3 NUMERACY TARGET GRIDS

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

Year 4 NUMERACY TARGET GRIDS

Number and Place Value

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

Addition and Subtraction

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.

Multiplication and Division

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.

Measurements

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.

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

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Fractions and Decimals

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

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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.

Geometry

I solve problems finding fractions of amounts including non-unit fractions like 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.

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Statistics

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.

LO: To find fractions of amounts.

I know that I need to use my division skills to divide the whole amount into equal groups.

I can use bar models to help me find fractions of amounts.

I understand that the denominator tells me how many parts the whole will be divided in to and the numerator tells me how many parts of the whole there are.

Times Tables up to 12
Hit the Question - Mixed Tables   Timer: 0:01   Score: 5/5   Topmarks

1 Draw counters in the bar models to help you complete each number sentence.

a) $\frac{2}{3}$ of 15 = ☐

b) $\frac{3}{4}$ of 8 = ☐

c) $\frac{2}{5}$ of 20 = ☐

2 Match the questions and answers.

$\frac{2}{3}$ of 9 = ?		9
$\frac{3}{5}$ of 15 = ?		6
$\frac{5}{6}$ of 12 = ?		15
$\frac{3}{4}$ of 20 = ?		10

3 What is $\frac{6}{6}$ of 18? ☐

How do you know?

4 Brett uses a bar model and base 10 to find $\frac{2}{3}$ of 36
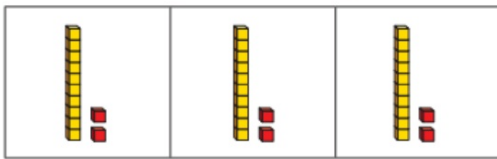
Use Brett's method to complete the number sentences.

a) $\frac{2}{3}$ of 63 = ☐

b) $\frac{3}{4}$ of 48 = ☐

c) $\frac{3}{4}$ of 92 = ☐

5 Kim uses a bar model and place value counters to find $\frac{2}{3}$ of 36

Use Kim's method to complete the number sentences.

a) $\frac{2}{3}$ of 96 = ☐

b) $\frac{3}{5}$ of 60 = ☐

c) $\frac{3}{4}$ of 52 = ☐

8 Dora, Whitney and Ron each find a fraction of 24 using counters.

I have $\frac{5}{6}$ of 24 — Dora

I have $\frac{2}{3}$ of 24 — Whitney

I have 18 counters. — Ron
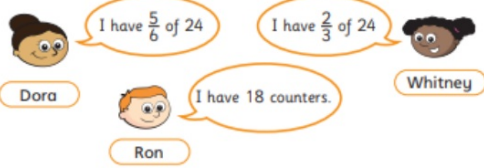
a) Who has the most counters? Show your workings.

_____

b) How many more counters does Dora have than Whitney?

☐

9 Write fractions to make the statements correct.

☐ of 36 < 18

☐ of 36 = 18

☐ of 36 > 18

How many different answers can you find for each?
Compare with a partner.

Plenary

True or False?

Oranges weigh 50 g each.

I quarter of the fruit weighs 100 g.

Year 3 NUMERACY TARGET GRIDS

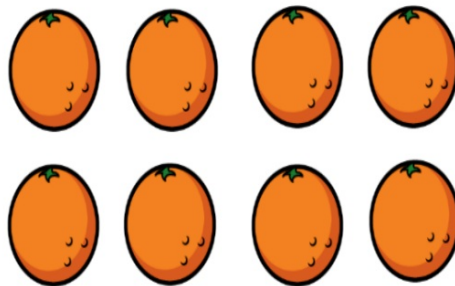| Number and Place Value	Addition and Subtraction	Multiplication and Division	Measurements	Fractions	Geometry	Statistics
I can compare and order numbers up to 1000.	I can solve missing number problems.	I can solve multiplication and division problems, using scaling.	I can measure the perimeter of simple 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 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 identify right angles.	I can solve one-step problems using presented data
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 angles as a property of shape or a description of a turn.	I can interpret and present data using tables.
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 recognise 3-D shapes in different orientations.	I can interpret and present data using pictograms.
	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 make 3-D shape using modelling materials.	I can interpret and present data using bar charts.
					I can draw 2-D shapes.	

Year 4 NUMERACY TARGET GRIDS

Number and Place Value

- 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

Addition and Subtraction

- 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.

Multiplication and Division

- 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.

Measurements

- 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

Fractions and Decimals

- I round decimals with one decimal place to the nearest whole number and compare.
- I can find the effect of ÷ a number by 10 and 100 and identify the value of the digits
- I can recognise and write decimal equivalents to 1/2 , 1/4, and 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 3/4

Geometry

- 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

Statistics

- 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.

Year 3
NUMERACY
TARGET GRIDS

I can solve missing number problems.

I can compare and order numbers up to 1000.

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

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

I can solve addition and subtraction problems.

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

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

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

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

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

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

I can solve number problems and practical problems.

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

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I can solve multiplication and division problems, using scaling.

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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.

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

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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.

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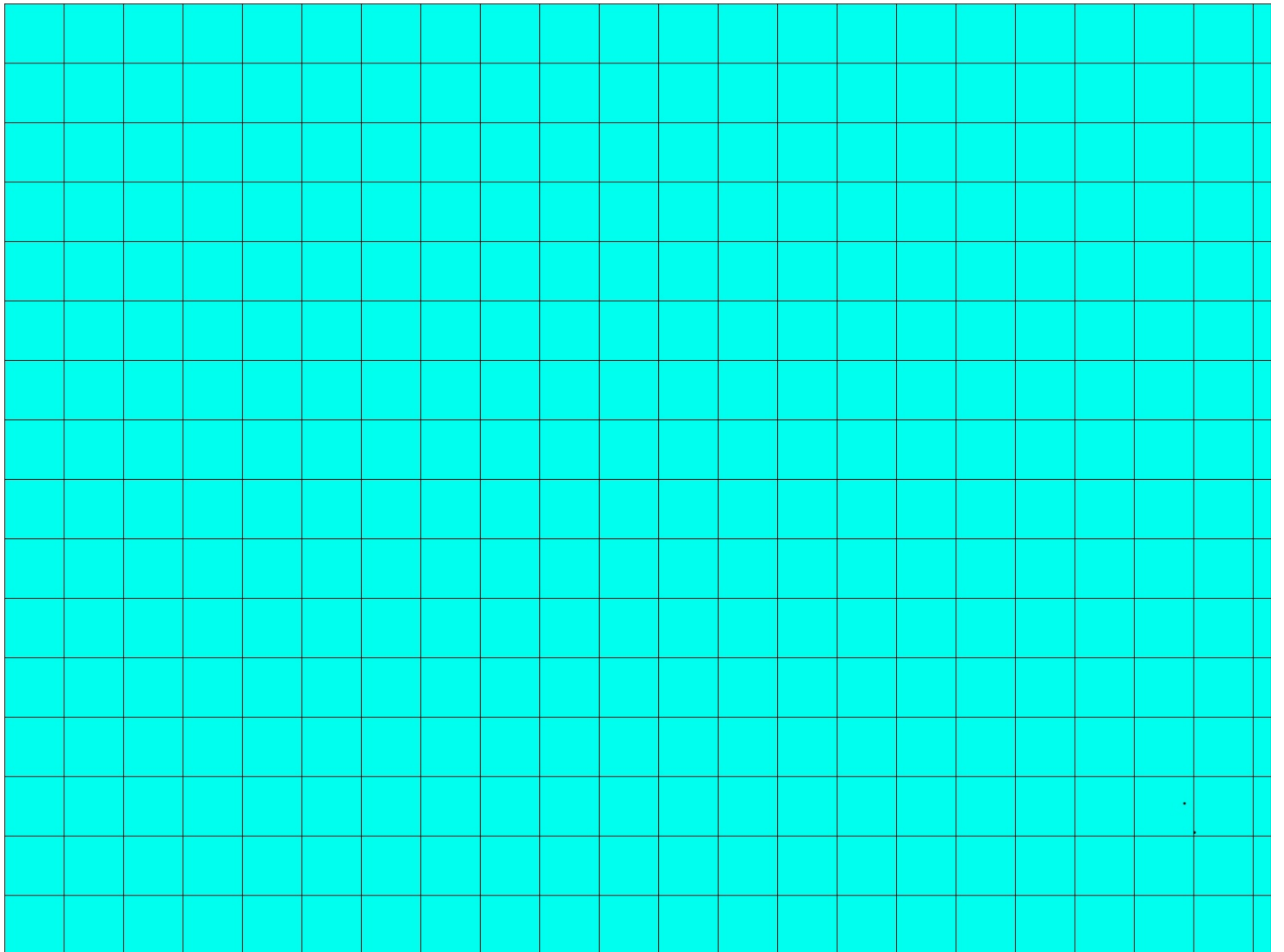
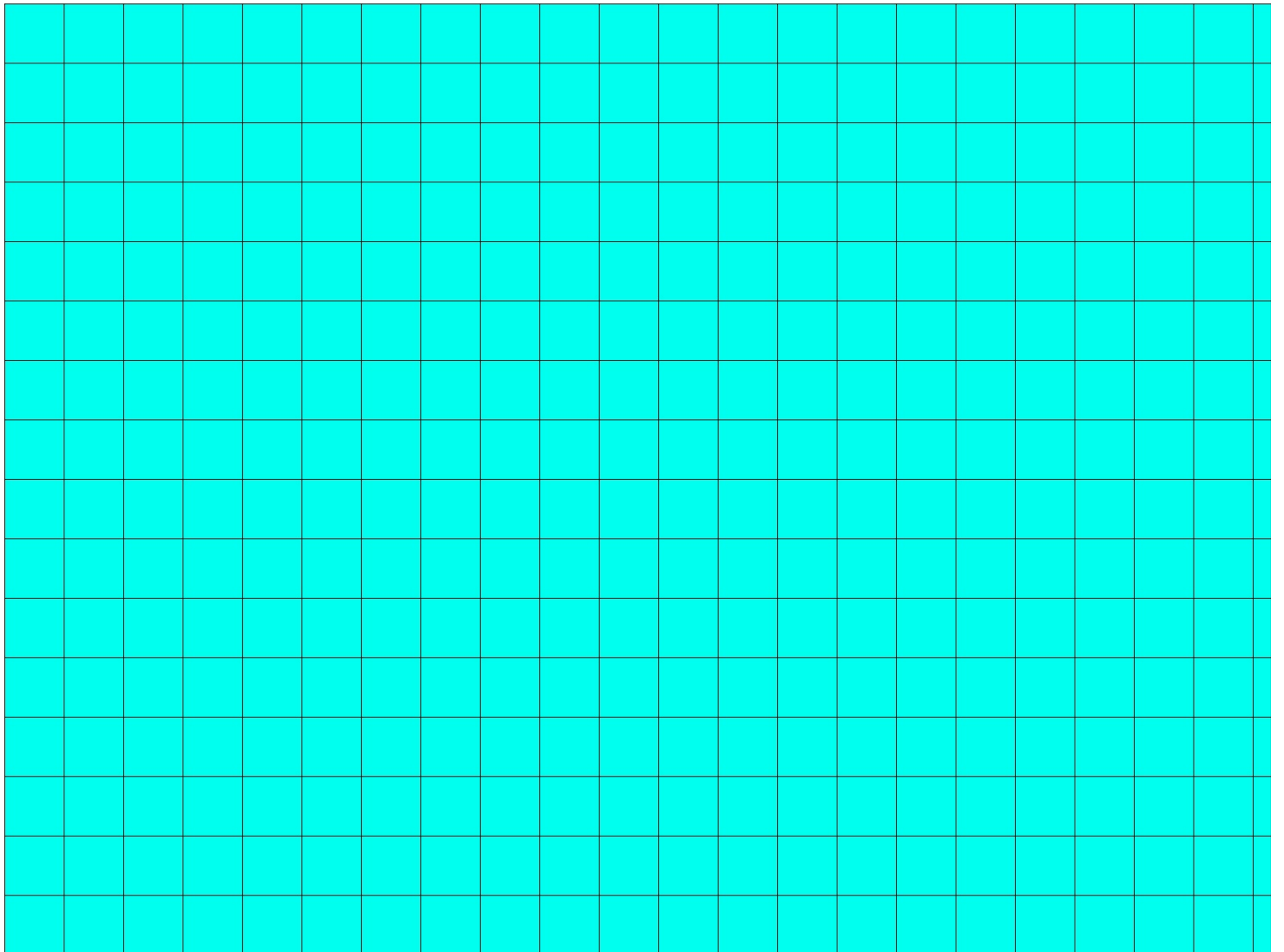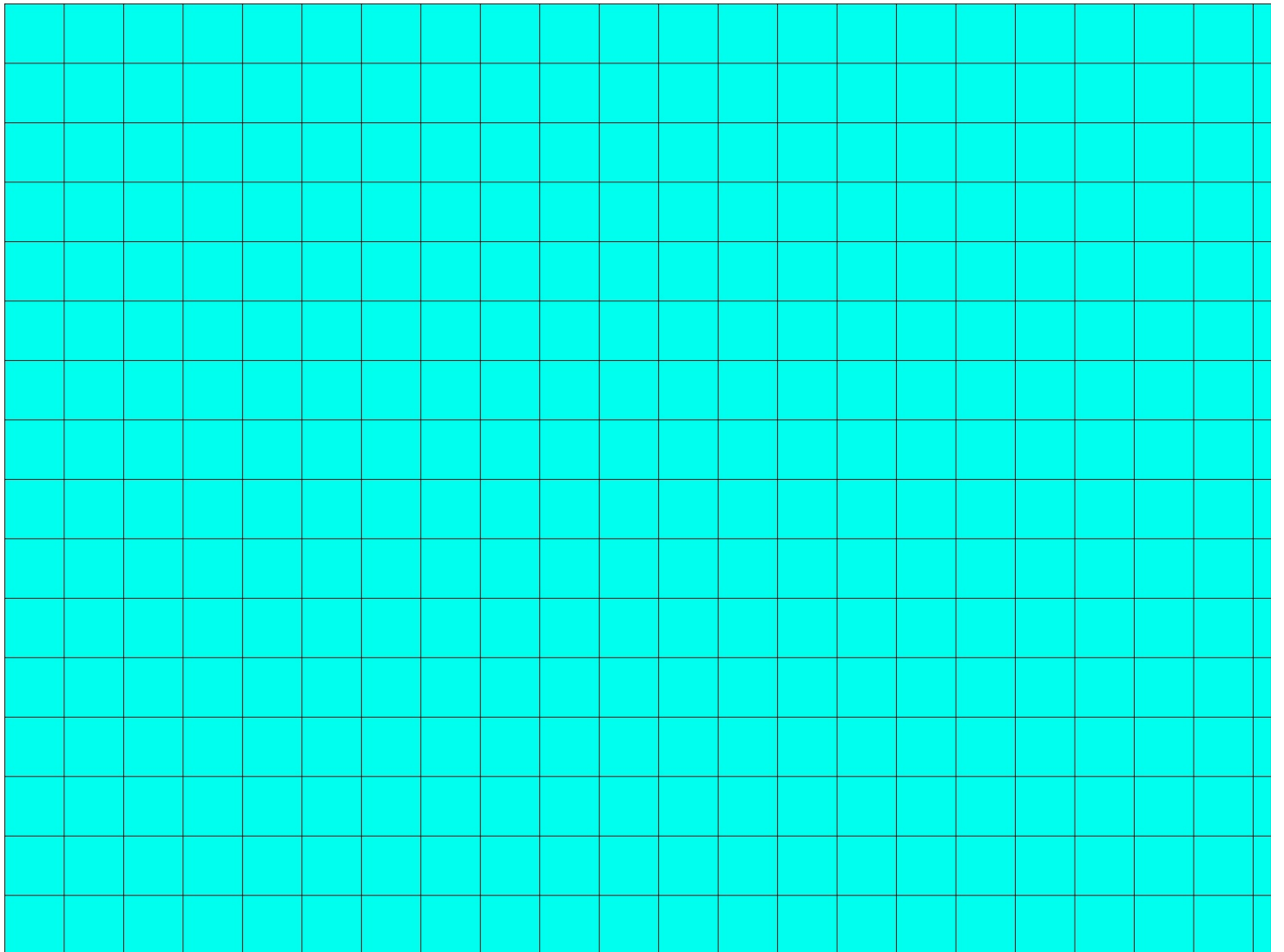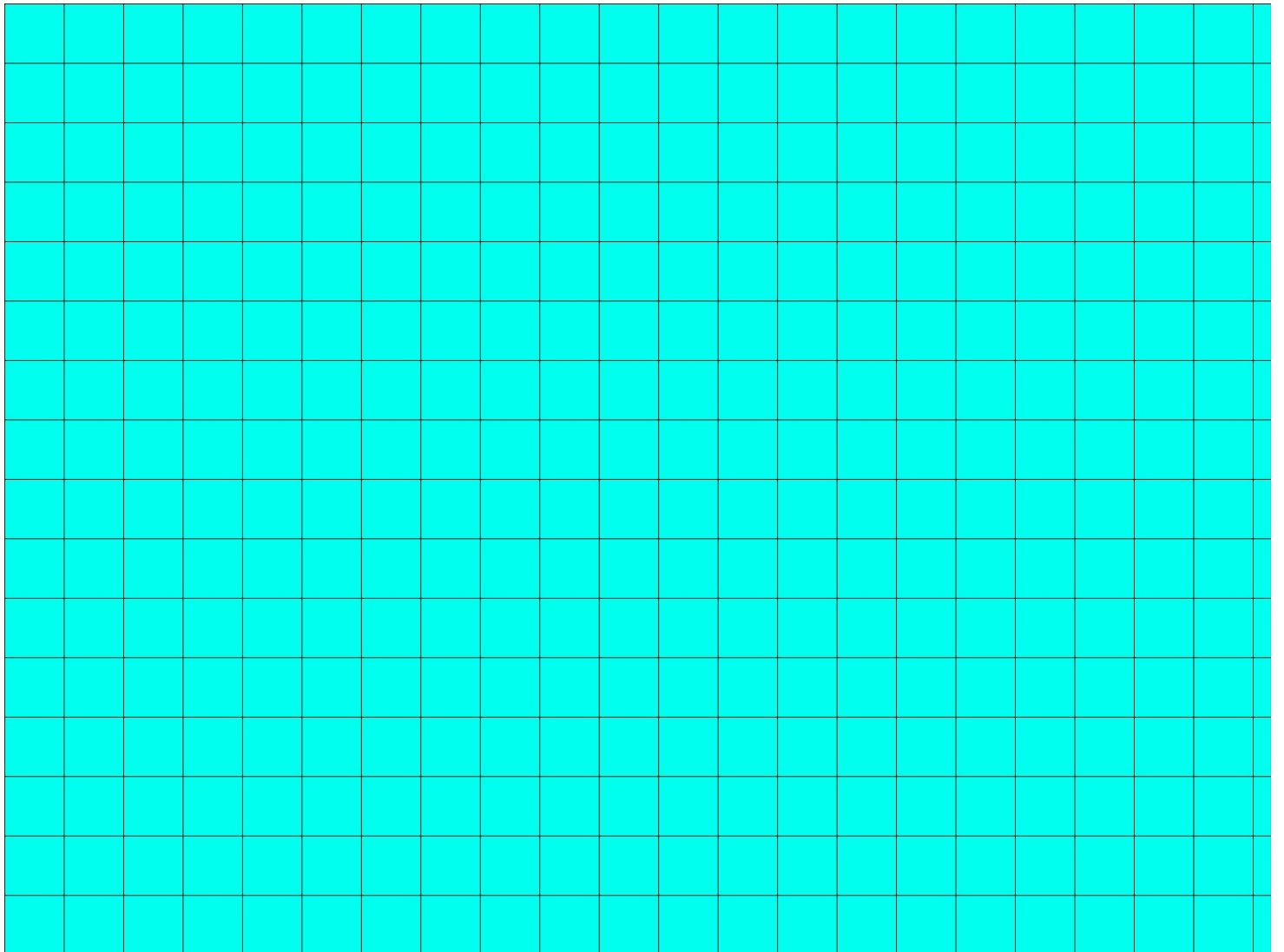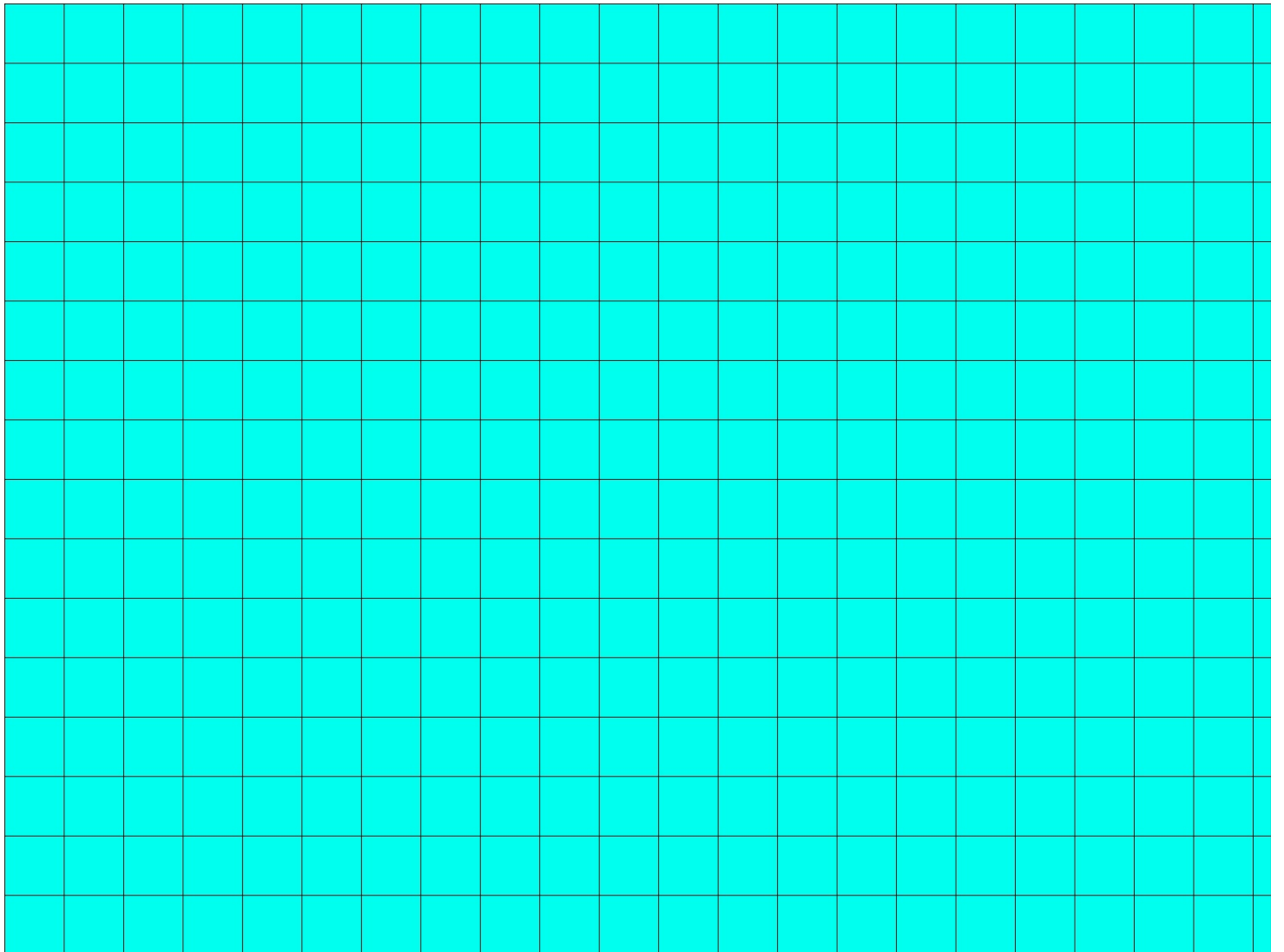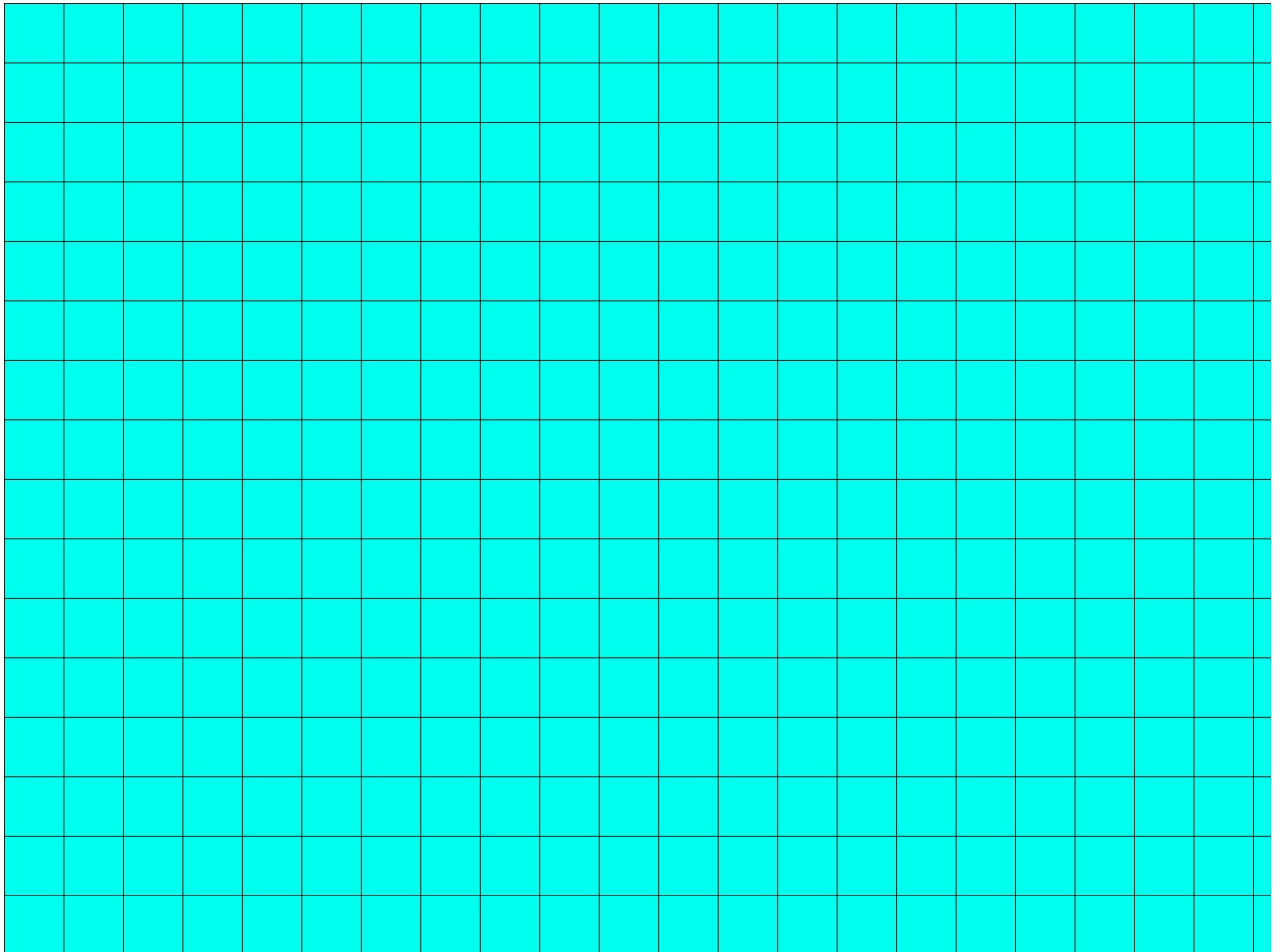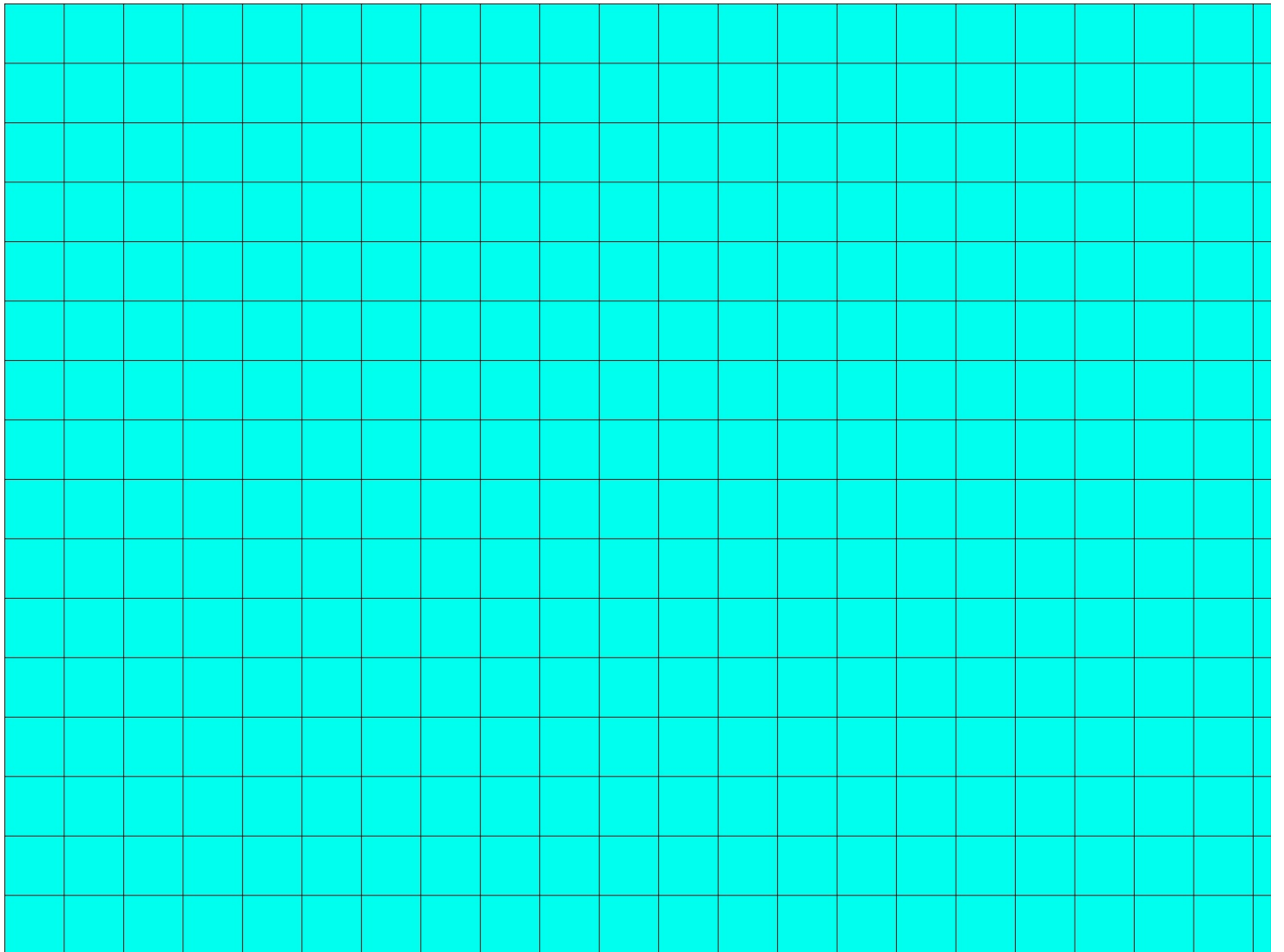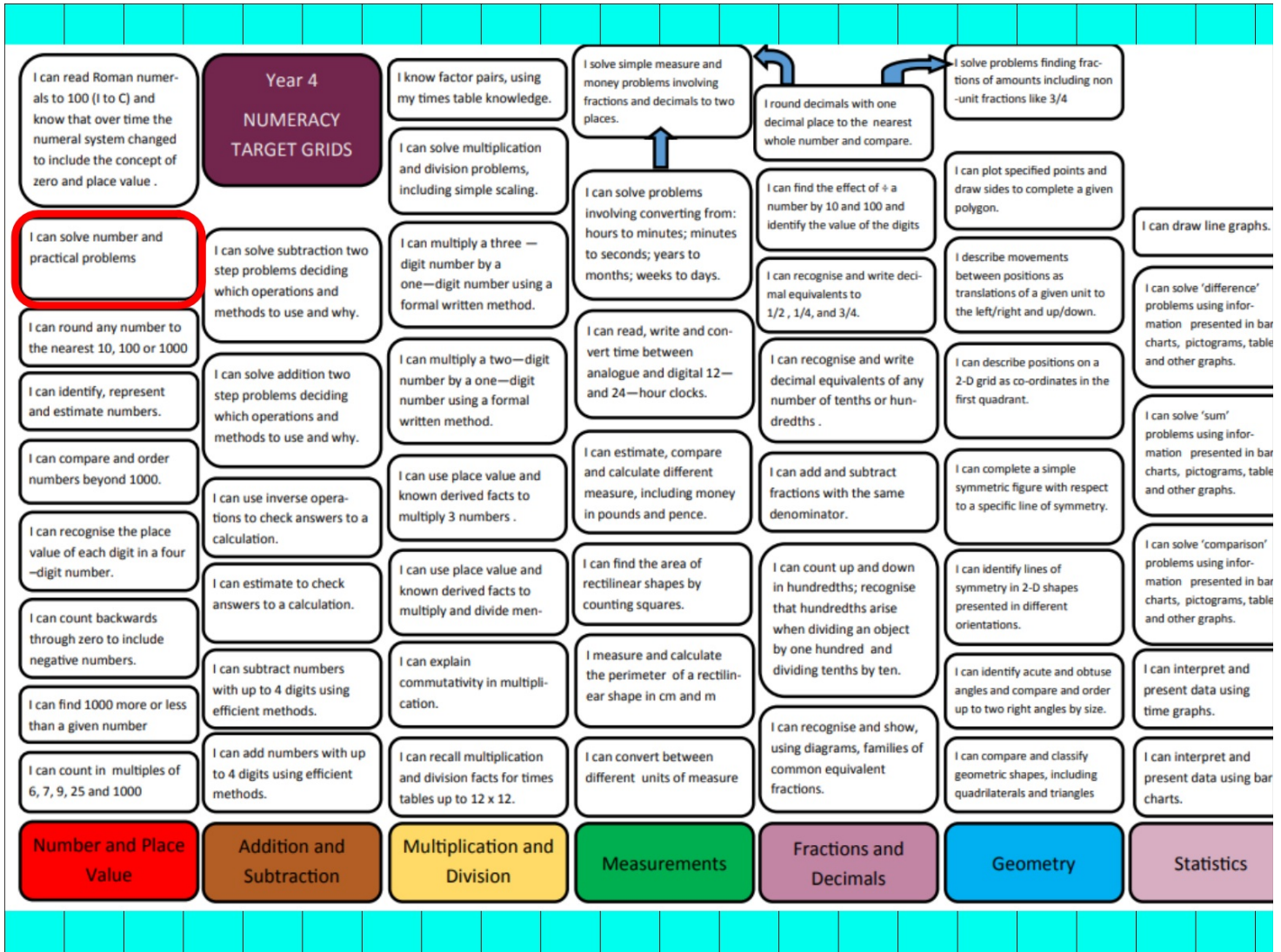| Number and Place Value | Addition and Subtraction | Multiplication and Division | Measurements | Fractions | Geometry | Statistics |

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I can interpret and present data using bar charts.

$\frac{4}{8}$ of the cars are green.