Friday 19th June

Hello Year 6,

We can't believe that its already the middle of June!

As you probably are aware, things are starting to change at Howley Grange as some children are coming back to school. There are many of you who are still learning at home though, and we just want you to know that we miss you and hopefully will be able to see you at some point soon. In the meantime, keep working hard with the home-learning and know that we are thinking of you.

Here are the activities for this week for you to follow and complete. If you have some spare time or want to do some extra learning, you could visit https://www.bbc.co.uk/bitesize or https://www.thenational.academy/online-classroom where there are lots of lessons and activities to choose from.

As always, try to read for at least 20 minutes a day and take Accelerated Reader quizzes from home by using this link Howley Grange Renaissance at home and logging on as usual using your username and password. To check that the book you are reading has a quiz, you can check it using on Accelerated Reader Bookfinder.

Remember to take time to relax, exercise and be kind to yourselves and each other.

Take care and keep smiling,

Mrs Graham and Mrs North
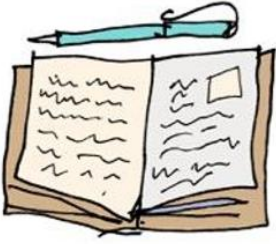
Are you ready to present your research and write your information text? Then write it, read it and check it! See you at the end!

Continue writing your information text about your own creature from yesterday.

Remember, there is a copy of the information text written by Ted Splorer that we used last week to use. Read this through before you continue to write as there are lots of ideas for language and sentence structures that you can use.

You also have your picture, your planning sheet and all of the work we have completed in this unit about sentence starters and building cohesion in your writing to help you.

Your information text about your new animal should be completed today. Remember to include a wide variety of Year 6 punctuation and make fantastic vocabulary choices to tell the reader all about your creature.

Once you have completed your writing, you need to edit and improve it. We attached a writing mat to yesterday's pack to help you to do this. Read your work through very carefully to find opportunities to make it even better than it already is!

When you have finished checking, editing and improving your information text, share it with a grown up at home. We are sure they will be amazed at this new creature roaming the earth!

Maths Activity 5a – Ten in ten

1. 1097 – 100 =
2. 146 x 2 =
3. 7.1 + 1.6 =
4. 3 x 6 x 4 =
5. $\frac{3}{6} + \frac{1}{6} =$
6. 420 ÷ 6 =
7. 12.8 x 10 =
8. 30% of 1,200 =
9. 1.23 x 5 =
10. 32 x 60 =

Challenge
11. $\frac{4}{5} \times \frac{5}{6} =$
12. 8 + 96 ÷ 2 =
13. $\frac{2}{3} \div 4 =$
14. 4928 ÷ 14 =
15. 12.6 – 7.77 =

# Maths Activity – Maths Mystery

Today you have a Maths Mystery to solve.

There's lots of different maths topics that will be used in the clues so you may need to look back at your previous learning possibly have your Revision Books close by if you think you'll need them.

The Mystery of the Brilliant Breakfast

Amelia and Osman have been busy in their lab researching the best breakfast to eat at the beginning of each day. After weeks of testing, they thought they had found the perfect breakfast.

Unfortunately, members of a rival science team have stolen their work! The sneaky suspects have left a series of clues for Osman and Amelia to solve in order to get their results back!

Can you help Amelia and Osman solve the problems and find the clues to discover the brilliant breakfast?
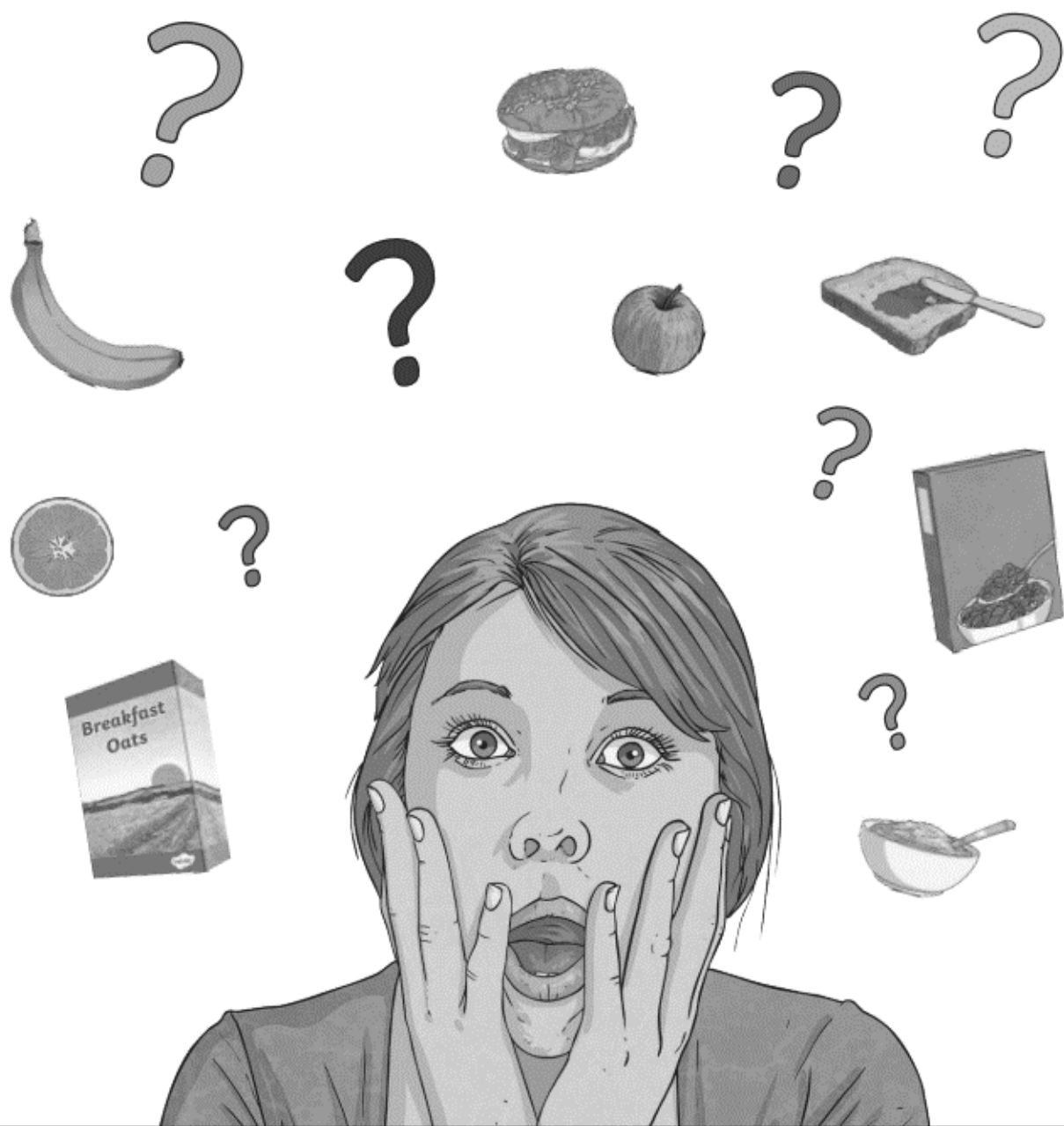
The Mystery of the Brilliant Breakfast

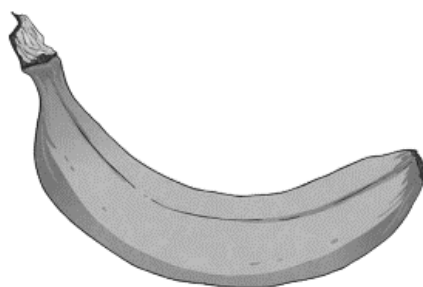| Breakfast	Packaging	Fibre Content	Sugar Content	Serving Weight or Capacity
Cornflakes	Box	Medium	Medium	30g
Orange Juice	Carton	Low	High	122ml
Rice Snaps	Box	Medium	Medium	30g
Milk	Bottle	Low	Medium	125ml
Chocolate Rice Snaps	Box	Low	High	30g
Toast	Bag	Medium	Low	80g
Banana	Bag	High	Medium	120g
Honey Cornflakes	Box	Medium	High	30g
Peanut Butter	Jar	Medium	Low	15g
Frosted Flakes	Box	Medium	High	30g
Jam	Jar	Low	High	15g
Bran Flakes	Box	High	Medium	30g
Chocolate Spread	Jar	Low	High	15g
Porridge Oats	Box	High	Low	30g
Blueberries	Carton	Medium	Medium	75g
Muesli	Box	Medium	Medium	30g
Apple	Bag	Medium	Medium	55g

The Mystery of the Brilliant Breakfast

Clue 1

Check these maths calculations. If a calculation is right, put a tick. If it is wrong, put a cross.

Count the number of ticks and crosses.

If there are more ticks than crosses, the snack isn't low in fibre.

If there are more crosses than ticks, the snack is low in fibre.

	Right ✓	Wrong ✗
3 + (12 × 6) = 90		
35% of 28 = 9.8		
926 × 14 = 12 864		
$\frac{3}{4}$ of 140 is 105		
9107 - 5432 = 3635		
£29.40 ÷ 5 = £5.83		
0.7 × 5 = 3.5		
$\frac{9}{10}$ of 21 = 18.9		
11 × 11 = 250 - 129		
Total		

Clue 1: _____

twinkl

The Mystery of the Brilliant Breakfast

Clue 2

Identify how many of these fractions, percentages and calculations are equivalent to 0.6 to discover a clue about the serving weight of the brilliant breakfast.

$\frac{3}{5}$	$\frac{24}{40}$	60%	$\frac{1}{5} \times 4$	$\frac{9}{15}$	$\frac{35}{60}$
$\frac{5}{11}$	$\frac{6}{8}$	0.06×100	$\frac{2}{12}$	$\frac{50}{100}$	$\frac{45}{75}$
$\frac{30}{50}$	$\frac{55}{100}$	$\frac{42}{70}$	$\frac{12}{20}$	$\frac{1}{5} \times 3$	$\frac{200}{500}$
0.006×10	$\frac{21}{33}$	$\frac{30}{40}$	$\frac{1}{10} \times 6$	$\frac{25}{40}$	$\frac{54}{90}$
30%	0.06×10	$\frac{120}{200}$	$\frac{12}{30}$	$\frac{48}{80}$	$\frac{18}{30}$
$\frac{36}{60}$	$\frac{16}{30}$	$\frac{15}{25}$	$\frac{30}{60}$	$\frac{50}{90}$	$\frac{18}{3}$

| Equivalent to 0.6	Clue
< 15	The breakfast has a serving weight of 50g or more.
> 15	The breakfast has a serving weight of less than 50g.

Clue 2: _____

The Mystery of the Brilliant Breakfast

Clue 3

Answer the questions about the bar chart and colour in the boxes with the correct answers.

Use the words in the boxes to work out the next clue.

A Bar Chart to Show the Amount of Sugar in a 30g Serving of Cereal
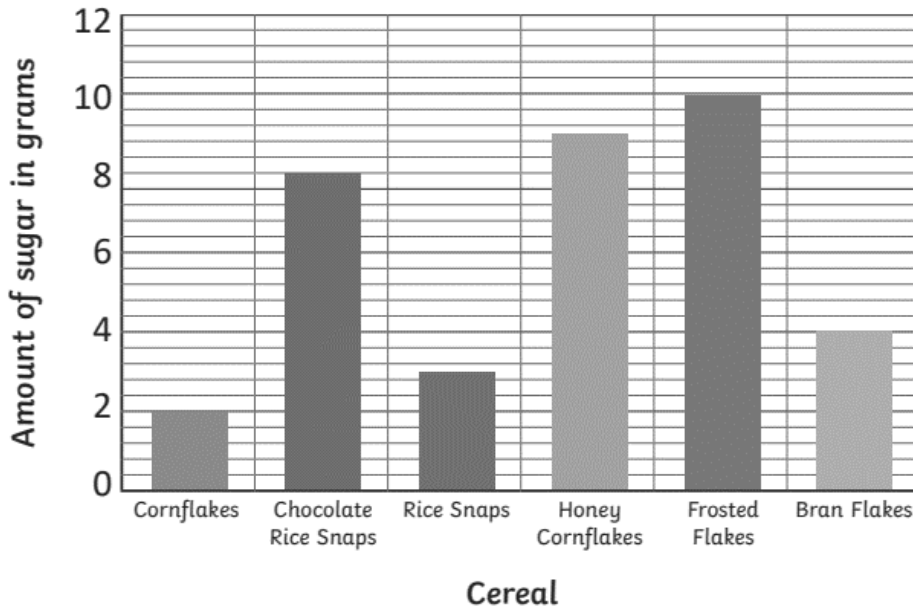
9g	5g	8g	7g
a	packaging	breakfast	is
2g	30g	20g	40g
the	bar	box	drink

1. How many grams of sugar are there in a serving of chocolate rice snaps?

2. How many grams of sugar are there in a serving of cornflakes?

3. How many more grams of sugar is there in a serving of honey cornflakes than bran flakes?

4. How many grams of sugar is there in a 60g serving of frosted flakes?

5. How many fewer grams of sugar is there in a serving of rice snaps than frosted flakes?

6. How many grams of sugar is there in a 90g serving of rice snaps?

Clue 3: _____

twinkl

The Mystery of the Brilliant Breakfast

Clue 4

Sort the numbers into the correct boxes. Some numbers will belong in more than one box. The box with the most numbers will give you a clue about the breakfast's content.
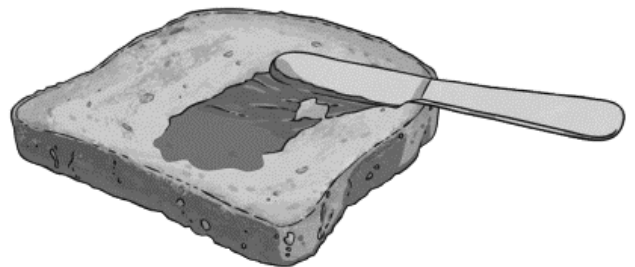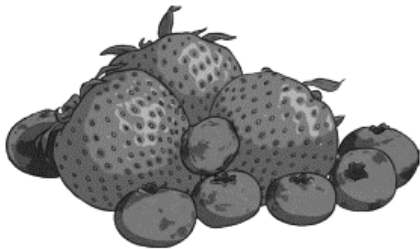
1	2	3	8	9	11

16	17	27	36	43	59	64

Square Numbers	Cube Numbers	Prime numbers
Medium amount of sugar	Medium amount of fibre	High amount of fibre

Clue 4: The breakfast has a _____.

twinkl

The Mystery of the Brilliant Breakfast

Clue 5

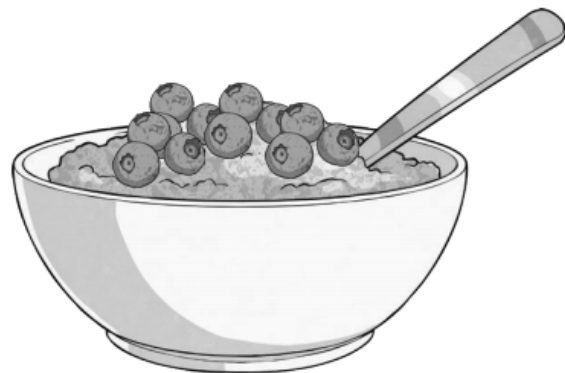Solve the maths calculations to crack the code and solve the final clue.

a	b	c	d	e	f	g	h	i	j	k	l	m
26	25	24	23	22	21	20	19	18	17	16	15	14

n	o	p	q	r	s	t	u	v	w	x	y	z
13	12	11	10	9	8	7	6	5	4	3	2	1

	Answer	Letter
0.8×10		
$\frac{1}{12}$ of 72		
$200 \div 10$		
0.026×1000		
$\frac{1}{3}$ of 27		

	Answer	Letter
$\frac{1}{2}$ of 30		
$120 \div 10$		
$\frac{1}{5}$ of 20		

	Answer	Letter
$\frac{1}{3}$ of 54		
$8000 \div 1000$		

Clue 5: _____.

The brilliant breakfast is: _____.

Puzzle time

Four lines

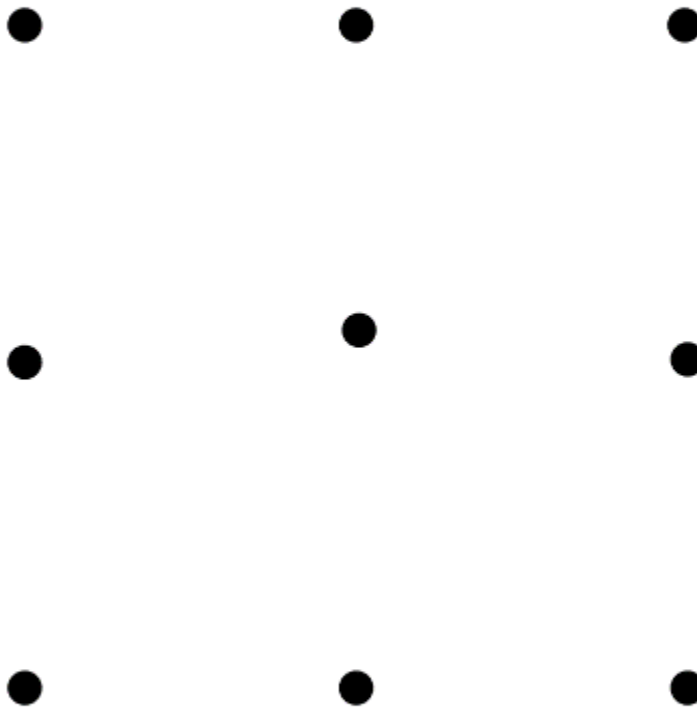Now this really does need some imaginative thinking - but it is possible!!

●   ●   ●

●   ●   ●

●   ●   ●

Can you join all nine dots with four straight lines, without taking your pencil off the paper?
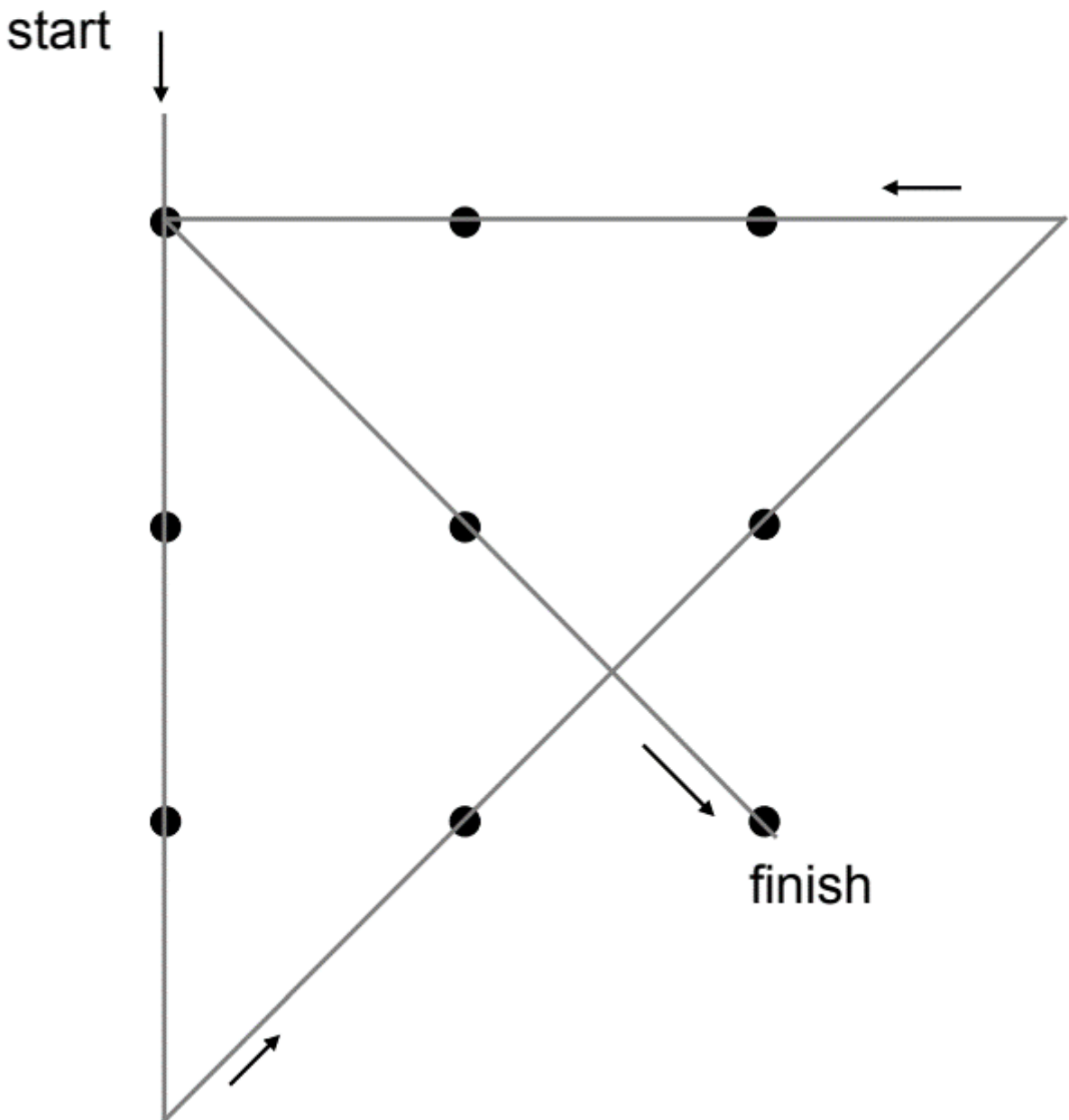You can not go over any line twice.

Puzzle time

Four lines. The answer

start

finish

ANSWERS Maths Activity 5a – Ten in ten

1. 1097 – 100 = 997
2. 146 x 2 = 292
3. 7.1 + 1.6 = 8.7
4. 3 x 6 x 4 = 72
5. $\frac{3}{6} + \frac{1}{6} = \frac{4}{6}$ or equivalent
6. 420 ÷ 6 = 70
7. 12.8 x 10 = 128
8. 30% of 1,200 = 360
9. 1.23 x 5 = 6.15
10. 32 x 60 = 1920

Challenge
11. $\frac{4}{5} \times \frac{5}{6} = \frac{20}{30}$ or equivalent
12. 8 + 96 ÷ 2 = 56
13. $\frac{2}{3} \div 4 = \frac{2}{12}$ or equivalent
14. 4928 ÷ 14 = 352
15. 12.6 – 7.77 = 4.83

The Mystery of the Brilliant Breakfast
Answers

Clue 1

If there are more ticks than crosses, the snack is high in fibre.

If there are more crosses than ticks, the snack is low in fibre.

	Right ✓	Wrong ✗
3 + (12 × 6) = 90		✗
35% of 28 = 9.8	✓	
926 × 14 = 12 864		✗
$\frac{3}{4}$ of 140 is 105	✓	
9107 - 5432 = 3635		✗
£29.40 ÷ 5 = £5.83		✗
0.7 × 5 = 3.5	✓	
$\frac{9}{10}$ of 21 = 18.9	✓	
11 × 11 = 250 - 129	✓	
Total	5	4

Clue 1: **The snack isn't low in fibre.**

Clue 2

How many of these fractions are equivalent to 0.6?

$\frac{3}{5}$	$\frac{24}{40}$	60%	$\frac{1}{5}$ × 4	$\frac{9}{15}$	$\frac{35}{60}$
$\frac{5}{11}$	$\frac{6}{8}$	0.06 × 100	$\frac{2}{12}$	$\frac{50}{100}$	$\frac{45}{75}$
$\frac{30}{50}$	$\frac{55}{100}$	$\frac{42}{70}$	$\frac{12}{20}$	$\frac{1}{5}$ × 3	$\frac{200}{500}$
0.006 × 10	$\frac{21}{33}$	$\frac{30}{40}$	$\frac{1}{10}$ × 6	$\frac{25}{40}$	$\frac{54}{90}$
30%	0.06 × 10	$\frac{120}{200}$	$\frac{12}{30}$	$\frac{48}{80}$	$\frac{18}{30}$
$\frac{36}{60}$	$\frac{16}{30}$	$\frac{15}{25}$	$\frac{30}{60}$	$\frac{50}{90}$	$\frac{18}{3}$

Clue 2: **The breakfast has a serving weight of less than 50g.**

twinkl

Clue 3

Answer the questions about the bar chart and colour in the boxes with the correct answers.

Use the words to work out the next clue.

9g	5g	8g	7g
a	packaging	breakfast	is
2g	30g	20g	40g
the	bar	box	drink

Clue 3: **The breakfast packaging is a box.**

1. How many grams of sugar are there in a serving of chocolate rice snaps? **8g**

2. How many grams of sugar are there in a serving of cornflakes? **2g**

3. How many more grams of sugar is there in a serving of honey cornflakes than bran flakes? **5g**

4. How many grams of sugar is there in a 60g serving of frosted flakes? **20g**

5. How many fewer grams of sugar is there in a serving of rice snaps than frosted flakes? **7g**

6. How many grams of sugar is there in a 90g serving of rice snaps? **9g**

Clue 4

Sort the numbers into the correct box. Some numbers will belong in more than one box.

The box with the most numbers will give you a clue about the calorie content in a 100g portion of the super snack.

Square Numbers	Cube Numbers	Prime numbers
1, 9, 16, 36, 64	1, 8, 27, 64	2, 3, 11, 17, 43, 59
Medium amount of sugar	Medium amount of fibre	High amount of fibre

Clue 4: The breakfast has a **high amount of fibre.**

Clue 5

Solve the maths calculations to crack the code and solve the final clue.

a	b	c	d	e	f	g	h	i	j	k	l	m
26	25	24	23	22	21	20	19	18	17	16	15	14

n	o	p	q	r	s	t	u	v	w	x	y	z
13	12	11	10	9	8	7	6	5	4	3	2	1

	Answer	Letter
0.8×10	8	s
$\frac{1}{12}$ of 72	6	u
$200 \div 10$	20	g
0.026×1000	26	a
$\frac{1}{3}$ of 27	9	r

	Answer	Letter
$\frac{1}{12}$ of 30	15	l
$120 \div 10$	12	o
$\frac{1}{5}$ of 20	4	w

	Answer	Letter
$\frac{1}{3}$ of 54	18	i
$8000 \div 1000$	8	s

Clue 5: **The breakfast is low in sugar.**

The brilliant breakfast is: **Porridge Oats**