NORD ANGLIA EDUCATION

Maths

Year 5 and 6 Summer Maths Challenge

Complete all the sections of the challenge to solve the mystery of the Brilliant Breakfast!

When you have finished put the following on a piece of paper and hand this in to Ms Debs at the beginning of September.

Name:
Class:
Name of the Brilliant Breakfast:

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: _____

Be Ambitious

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 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%	$\frac{1}{5} \times 4$	$\frac{9}{15}$	$\frac{35}{60}$
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Clue 2: _____

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 _____.

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: _____