## The Mystery of the Super Snack

Rosie and Toby have been busy in their lab researching the best snack to eat before their class quiz night to ensure they are at their very best to tackle the quiz questions. After weeks of testing, they thought they had found the perfect snack.

Unfortunately, members of a rival quiz team have stolen their work! The sneaky suspects have left a series of clues for Toby and Rosie to solve if they are to get their results back before the quiz night!

Can you help Toby and Rosie solve the problems and find the clues to rediscover the super snack in time for the quiz?


## The Mystery of the Super Snack

| Snack | Fruit or Vegetable? | Fibre Content | Good Source of Vitamin C? | Calories per 100g |
| :---: | :---: | :---: | :---: | :---: |
| Amazing Apple Bites | fruit | high | no | 52 |
| BBQ Beetroot Balls | vegetable | high | no | 43 |
| Crazy Celery Chunks | vegetable | high | no | 16 |
| Delicious Date Diamonds | fruit | high | no | 282 |
| Fabulous Fig Fingers | fruit | high | no | 107 |
| Giant Green Gherkins | vegetable | low | no | 11 |
| Happy Honeyed Parsnip Hoops | vegetable | high | yes | 75 |
| Iced Kiwi Ingots | fruit | high | yes | 61 |
| Jellied Juniper Drops | fruit | low | yes | 5 |
| Luscious Lemon Loops | fruit | high | yes | 29 |
| Marvellous Melon Mice | fruit | low | yes | 36 |
| Popping Pea Pods | vegetable | high | yes | 81 |
| Super Satsuma Slices | fruit | low | yes | 53 |
| Tasty Turnip Salsa | vegetable | low | yes | 28 |
| Vanishing Veg Mix | vegetable | low | no | 51 |
| Wonderful White Grape Wheels | fruit | low | no | 67 |



## The Mystery of the Super Snack

## Clue 1

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.

A Bar Chart to Show the Number of Vegetable


| 74 <br> $a$ | 11 <br> not | 55 <br> isn't | 13 <br> is |
| :---: | :---: | :---: | :---: |
| 44 <br> the | 45 <br> vegetable | 10 <br> snack | 65 <br> fruit |

How many portions of carrots were served?
How many more portions of broccoli were served than cauliflower?
How many fewer portions of cabbage were served than beans?
How many portions of sweetcorn and cabbage were served altogether?
How many portions of carrots and beans were served altogether?


Clue 1: $\qquad$

## The Mystery of the Super Snack

## Clue 2

Check these maths calculations. If a calculation is right, put a tick. If it is wrong, put a cross. Count up the number of ticks and crosses.

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 $V$ | Wrong $\times$ |
| :--- | :--- | :--- |
| $306+59<309+56$ |  |  |
| $96 \times 10=960$ |  |  |
| $231 \times 4=824$ |  |  |
| $\frac{1}{2}$ of 72 is 36 |  |  |
| $618-54=544$ |  |  |
| $£ 12.40 \div 4=£ 4.10$ |  |  |
| $7 \times 5 \times 2=70$ |  |  |
| $\frac{2}{3}$ of 21 is 14 |  |  |
| $12 \times 8=32 \times 3$ |  |  |
| Total |  |  |

## Clue 2:



## The Mystery of the Super Snack

## Clue 3

How many of these fractions are equal to 0.5 ?

| $\frac{1}{2}$ | $\frac{2}{4}$ | $\frac{5}{10}$ | $\frac{3}{4}$ | $\frac{4}{8}$ | $\frac{55}{90}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{5}{11}$ | $\frac{5}{8}$ | $\frac{7}{14}$ | $\frac{7}{12}$ | $\frac{60}{100}$ | $\frac{18}{38}$ |
| $\frac{25}{44}$ | $\frac{52}{100}$ | $\frac{9}{18}$ | $\frac{12}{24}$ | $\frac{50}{100}$ | $\frac{36}{72}$ |
| $\frac{22}{44}$ | $\frac{19}{36}$ | $\frac{30}{50}$ | $\frac{16}{30}$ | $\frac{25}{40}$ | $\frac{45}{90}$ |
| $\frac{30}{60}$ | $\frac{28}{56}$ | $\frac{100}{200}$ | $\frac{19}{38}$ | $\frac{11}{22}$ | $\frac{15}{30}$ |
| $\frac{35}{70}$ | $\frac{16}{30}$ | $\frac{12}{25}$ | $\frac{30}{56}$ | $\frac{40}{90}$ | $\frac{200}{500}$ |


| Number of Fractions equal to 0.5 | Clue |
| :---: | :---: |
| $<15$ | The snack is a good source of vitamin C. |
| $>15$ | The snack is not a good source of vitamin C. |

Clue 3: $\qquad$


## The Mystery of the Super Snack

## 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 100 g portion of the super snack.
1
4
5
8
10
15
20
40
55
80
100

| Even numbers | Multiples of 5 | Factors of 40 |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
| Less than 100 <br> calories per 100 g | Between 100 to 200 <br> calories per 100 g | More than 200 <br> calories per 100 g |

## Clue 4:

$\qquad$

The super snack is: $\qquad$


## The Mystery of the Super Snack Answers

## Clue 1

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.

| $\mathbf{7 4}$ <br> $a$ | 11 <br> not | 55 <br> isn't | 13 <br> is |
| :---: | :---: | :---: | :---: |
| $\mathbf{4 4}$ <br> the | 45 <br> vegetable | 10 <br> snack | $\mathbf{6 5}$ <br> fruit |

How many portions of carrots were served? 44
How many more portions of broccoli were served than cauliflower? 10

How many fewer portions of cabbage were served than beans? 13

How many portions of sweetcorn and cabbage were served altogether? 65

How many portions of carrots and beans were served altogether? 74

## Clue 1: <br> The snack is a fruit.

## Clue 2

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 $\times$ |
| :--- | :---: | :---: |
| $306+59<309+56$ |  | $\times$ |
| $96 \times 10=960$ | $\checkmark$ |  |
| $231 \times 4=824$ |  | $\times$ |
| $\frac{1}{2}$ of 72 is 36 | $\checkmark$ |  |
| $618-54=544$ |  | $\times$ |
| $£ 12.40 \div 4=£ 4.10$ |  | $\times$ |
| $7 \times 5 \times 2=70$ | $\checkmark$ |  |
| $\frac{2}{3}$ of 21 is 14 | $\checkmark$ |  |
| $12 \times 8=32 \times 3$ | $\boxed{5}$ |  |
| Total |  | 4 |

## Clue 2: . The snack is high in fibre.

## The Mystery of the Super Snack Answers

## Clue 3

How many of these fractions are equal to 0.5 ?

| $\frac{\mathbf{1}}{\mathbf{2}}$ | $\frac{\mathbf{2}}{\mathbf{4}}$ | $\frac{\mathbf{5}}{\mathbf{1 0}}$ | $\frac{3}{4}$ | $\frac{\mathbf{4}}{\mathbf{8}}$ | $\frac{55}{90}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{5}{11}$ | $\frac{5}{8}$ | $\frac{\mathbf{7}}{\mathbf{1 4}}$ | $\frac{7}{12}$ | $\frac{60}{100}$ | $\frac{18}{38}$ |
| $\frac{\mathbf{2 5}}{44}$ | $\frac{52}{100}$ | $\frac{\mathbf{9}}{\mathbf{1 8}}$ | $\frac{\mathbf{1 2}}{\mathbf{2 4}}$ | $\frac{\mathbf{5 0}}{\mathbf{1 0 0}}$ | $\frac{\mathbf{3 6}}{\mathbf{7 2}}$ |
| $\frac{\mathbf{2 2}}{\mathbf{4 4}}$ | $\frac{19}{36}$ | $\frac{30}{50}$ | $\frac{16}{30}$ | $\frac{25}{40}$ | $\frac{\mathbf{4 5}}{\mathbf{9 0}}$ |
| $\frac{\mathbf{3 0}}{\mathbf{6 0}}$ | $\frac{\mathbf{2 8}}{56}$ | $\frac{\mathbf{1 0 0}}{\mathbf{2 0 0}}$ | $\frac{\mathbf{1 9}}{38}$ | $\frac{\mathbf{1 1}}{\mathbf{2 2}}$ | $\frac{\mathbf{1 5}}{\mathbf{3 0}}$ |
| $\frac{\mathbf{3 5}}{\mathbf{7 0}}$ | $\frac{16}{30}$ | $\frac{12}{25}$ | $\frac{30}{56}$ | $\frac{40}{90}$ | $\frac{200}{500}$ |

Clue 3: The snack is not a good source of vitamin C .

## 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 100 g portion of the super snack.

| Even numbers | Multiples of 5 | Factors of 40 |
| :---: | :---: | :---: |
| $\mathbf{4 , 8 , 1 0}, \mathbf{2 0}, \mathbf{4 0}, \mathbf{8 0}, \mathbf{1 0 0}$ | $\mathbf{5}, \mathbf{1 0}, \mathbf{1 5}, \mathbf{2 0}, \mathbf{4 0}$, <br> $\mathbf{5 5}, \mathbf{8 0}, \mathbf{1 0 0}$ | $\mathbf{1 , 4 , 5 , \mathbf { 8 } , \mathbf { 1 0 } , \mathbf { 2 0 } , \mathbf { 4 0 }}$ |
| Less than 100 <br> calories per 100g | Between 100 to 200 <br> calories per 100 g | More than 200 <br> calories per 100 g |

Clue 4: The snack has between 100 to 200 calories per $\mathbf{1 0 0 g}$.

The super snack is: Fabulous Fig Fingers

