

Name::

Date:

Score::

A Mystery Maths Game



The year 5 pupils of St David's Primary are currently going swimming every week this half term. It is something that they very much look forward to and enjoy their time away from the classroom and in the water.

Today is the day. Swimming bags are ready, teachers are pupils are excited and they all get onto the bus to take them to their local swimming pool.

They have a great time, learning how to tread water and float, with all them progressing really well.

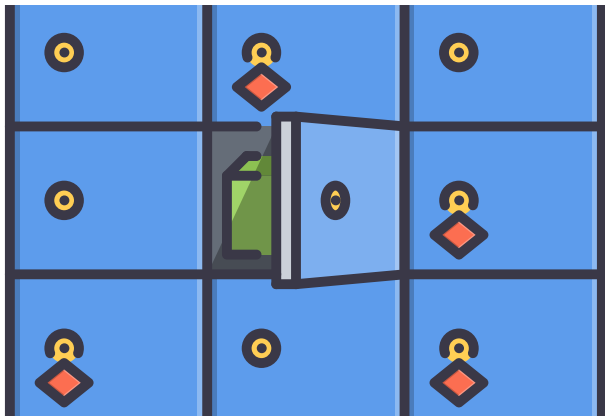
However, when they finish their lesson and get out of the pool, they find someone has moved their bags! Their bags are missing, and nowhere to be found!

Your task is to analyse all of the clues and solve the mystery of the bag taker of St David's Primary!





<i>Name</i>	<i>Height (cm)</i>	<i>Hair colour</i>	<i>Swimsuit Brand</i>	<i>Locker number</i>	<i>Colour of Goggles</i>
<i>Adam</i>	135	brown	Speedo	420	Yellow
<i>Byron</i>	140	black	Tyr	505	Black
<i>Celyn</i>	131	Blonde	Zoggs	130	Green
<i>Dafydd</i>	132	Red	DHB	500	Purple
<i>Elonwy</i>	133	Blonde	DHB	540	Yellow
<i>Freddie</i>	138	Black	Tyr	245	Black
<i>Gareth</i>	125	Brown	Tyr	666	Green
<i>Harrison</i>	130	Red	Zoggs	270	Yellow
<i>Idris</i>	132	Brown	Speedo	251	Purple
<i>Jac</i>	133	Blonde	Zoggs	010	Green
<i>Keeley</i>	122	Brown	Speedo	425	Purple
<i>Liberty</i>	138	Blonde	DHB	260	Yellow
<i>Manon</i>	135	Brown	Tyr	487	Black
<i>Nyree</i>	135	Brown	Tyr	160	Black
<i>Olivia</i>	132	Brown	Speedo	201	Purple
<i>Polly</i>	120	Red	Speedo	202	Yellow
<i>Rebecca</i>	136	Blonde	DHB	140	Black
<i>Steffan</i>	134	Brown	Zoggs	269	Yellow
<i>Tomos</i>	133	Brown	DHB	274	Green
<i>Kamaal</i>	141	Black	Zoggs	400	Yellow
<i>Vanessa</i>	132	Brown	Tyr	690	Black
<i>William</i>	132	Brown	Speedo	410	Purple
<i>Yuk</i>	137	Brown	DHB	131	Yellow
<i>Zoey</i>	132	Blonde	Speedo	150	Black
<i>Alison</i>	133	Red	Tyr	102	Green
<i>Beau</i>	135	Brown	Tyr	111	Green
<i>Cooper</i>	135	Blonde	Speedo	369	Purple
<i>Dele</i>	136	Black	Zoggs	625	Black
<i>Eden</i>	138	black	DHB	376	Yellow



Clue 1: More, Less and Multiples

Follow the instructions and fill in the empty circles with your answers. Then, look in the table below to find the numbers you've written in the last circles. Rearrange the words to form a sentence and reveal the first clue.

1. Count on, adding 8 each time

24 ○ ○ ○ ○

2. Count on, adding 10 each time.

244 ○ ○ ○ ○

3. Count on, adding 4 each time.

28 ○ ○ ○ ○

4. Count on, adding 100 each time.

475 ○ ○ ○ ○

5. +100, -10, +100, -10

547 ○ ○ ○ ○

6. Count back, subtracting 8 each time

56 ○ ○ ○ ○

7. Count back, subtracting 4 each time

32 ○ ○ ○ ○

8. +10, +10, -100, +5

502 ○ ○ ○ ○

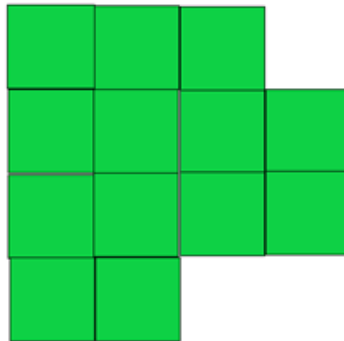
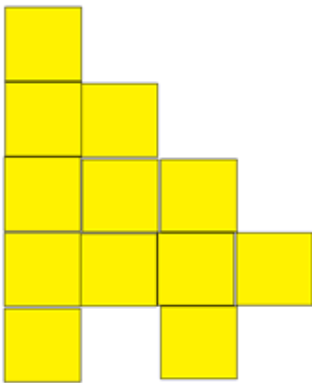
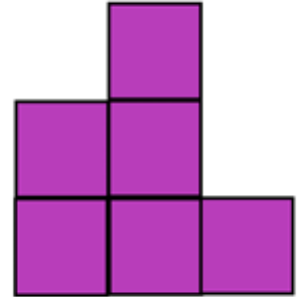
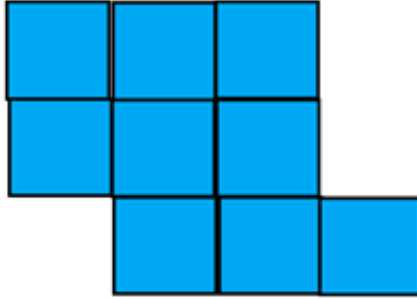
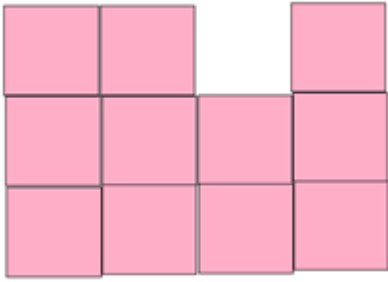
56 was	284 swimsuit	816 yellow	28 the
254 TYR	44 purple	875 speedo	577 blonde
221 lost	627 on	42 towell	678 DHB
44 found	264 red	427 floor	16 a

Answer:

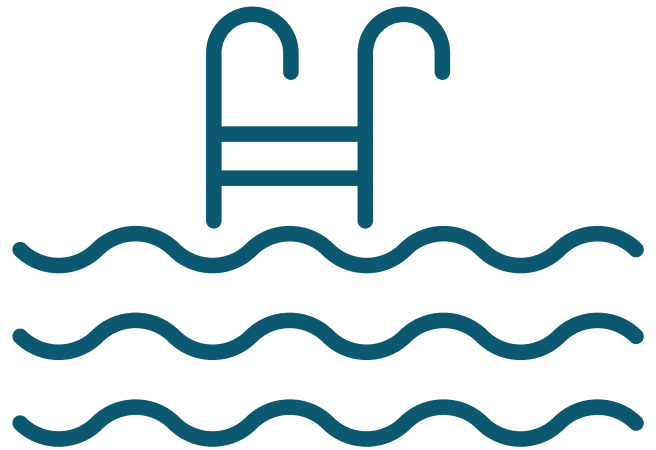
Clue 2: Big Pools, Big Area

Workout the area of these unusually shaped swimming pools.

Find the number in the table below and rearrange the words to solve the second clue.



10cm ² Black	13cm ² Brown	4cm ² Found
9cm ² Had	6cm ² Taker	8cm ² Tallest
11cm ² Hair	15cm ² Strands	3cm ² Goggles
12cm ² Bag	14cm ² Height	7cm ² Blonde



Answer:

Clue 3: How Tall?

Complete these columnar addition and subtraction equations and whichever answer is the most common will give the height of the towel taker!

 537 $-$ 403 $=$ 81 $+$ 53 $=$ 387 $-$ 252 $=$ 99 $+$ 37 $=$ 85 $+$ 47 $=$ 447 $-$ 309 $=$ 77 $+$ 54 $=$ 687 $-$ 555 $=$ 113 $-$ 19 $=$

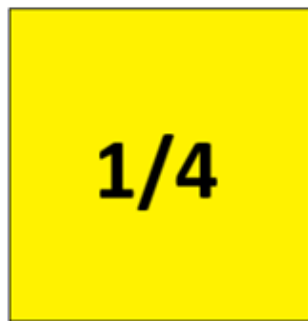
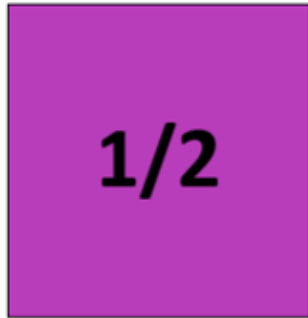
The troublesome bag taker is _____ cm tall.

Clue 4: What's the colour?

A pair of goggles belonging to the bag taker were found in the changing rooms!
Follow these instructions to find out what colour they were...

Here are 4 boxes labelled $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{5}$.

Sort the fractions below into the correct box, depending on which fraction they are equivalent to.



$\frac{2}{6}$	$\frac{2}{4}$	$\frac{3}{12}$	$\frac{3}{9}$	$\frac{4}{12}$
$\frac{3}{6}$	$\frac{2}{10}$	$\frac{4}{8}$	$\frac{5}{10}$	$\frac{7}{14}$



If there are more fractions equivalent to $\frac{1}{4}$ then the goggles were green.

If there are more fractions equivalent to $\frac{1}{5}$ then the goggles were yellow.

If there are more fractions equivalent to $\frac{1}{2}$ then the goggles were purple.

If there are more fractions equivalent to $\frac{1}{3}$ then the goggles were black.

Clue 5: Locker Number

Follow the pathway...

Begin with 30



X2

Add double 8

Subtract 3x4

Divide by 2

+200

Double it

-31

Answer:

If your answer is less than 500, the perpetrator's locker number is a multiple of 10. If your answer is more than 500, their locker number is not a multiple of 10.

The perpetrator is



A Mystery Maths Game Answers

Clue 1: More, Less and Multiples

A Speedo swimsuit was found on the floor.

Clue 2: Big Pools, Big Area

Bag taker had brown hair

Clue 3: How Tall?

The troublesome bag taker is 132 cm tall.

Clue 4: What's the colour?

There are more fractions equivalent to $\frac{1}{2}$: the goggles were purple

Clue 5: Locker Number

The answer is 533. This is more than 500, so the locker number is not a multiple of 10.

The perpetrator is IDRIS

