

Escape the Beach Hut!

You have been enjoying a glorious day at the beach. The sun is setting and the barbecue is sizzling so you head back to the beach hut to pack away the buckets, spades and deck chairs. Just as you step inside the beach hut, a strong gust of wind slams the door shut. You are trapped!

Solve the clues and puzzles hidden around the room to discover the keypad code needed to unlock the door.

The clues could be anywhere so you need to keep your eyes peeled and your mind sharp!

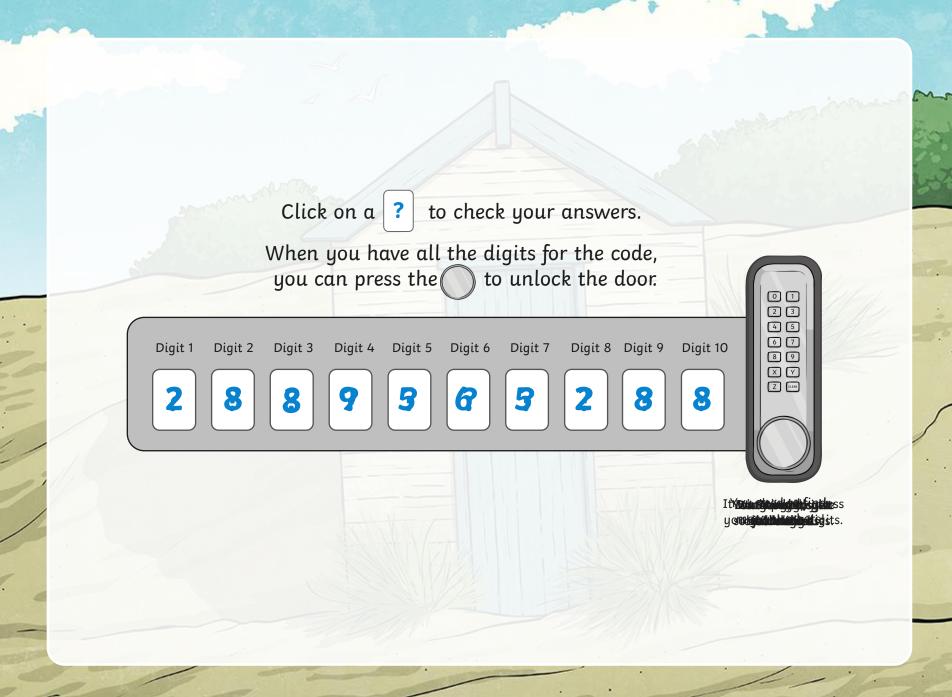
Good luck!



The Rules

- · You can work in small groups.
- When you find a clue that has been hidden, work together to find the answer and reveal one of the digits to the keypad code.
- Record your answers on the answer sheet.
- Once you have discovered the ten-digit code for the keypad, check it with your teacher and find out if you can escape the beach hut!







Round this number to the nearest 10.



Find the digit sum of this answer.

The tens digit of the digit sum will give you the first number needed to escape the hut.





What is the missing number in this part-whole model? Find the digit sum of this answer to reveal the second digit of the code needed to escape the hut.



$$5 + 3 = 8$$













Calculate the answer to this addition calculation:

Reveal answer

Reveal answer

	8			
+				50
	9	2	9	6

Add together the digits in the hundreds column and the ones column in the final answer. This will reveal the third digit of the code needed to escape the hut.





Calculate the answer to this subtraction calculation:

Reveal answer

	3			597
_				
	2	8	6	2

Reveal answer

Add together the digits of this answer until you are left with one number. This will reveal the fourth digit of the number needed to escape the hut.

2 Reveal answer
$$2 = 18 = 1 + 8 = 9$$



Solve the multiplication problems to complete the number cross.

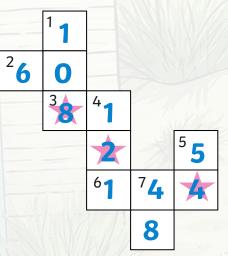
Reveal answer



Add together the numbers in the stars.

2 Reveal answer 4





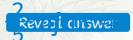
Add together the digits in this answer until you are left with one digit. This will reveal the fifth digit of the number needed to escape the hut.



Find $\frac{2}{5}$ of the number of ice creams.



The answer to this question gives you the sixth digit of the number you need to escape the hut.







One sunny day, a café sells between 150 to 180 ice creams.

Counted in fours, there are two left over. Counted in sevens, there are four left over.

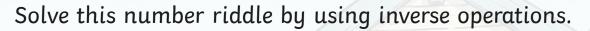
Numbers between 150 – 180 counted in 4s with two left over:	Numbers between 150 – 180 counted in 7s with four left over:
154, 1<u>5</u>8 , 162, 166, 170, 174, 178	151, 1<u>5</u>8 , 165, 172, 179

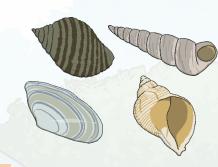
How many ice creams did the café sell?

The tens digit of this answer is the seventh digit of the number you need to escape the hut. Reveal answer

Tens digit = 5







I multiply the number of shells I have by 5.

190 ÷ 5 = **38**

I then subtract 50,

140 + 50 = 190

and divide by 2.

70 × 2 = 140 -

I end with the number 70.

70

How many shells did I collect?

Reveal answer

Add the digits of this answer together until you are left with one number.
This will reveal the eighth digit of the number needed to escape the hut.

$$38 = 3$$
 Reveal answer + 1 = 2

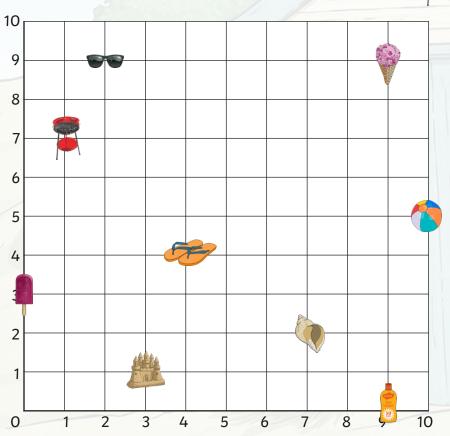


What is the coordinate position of the

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(7, 2)Reveal answer (1, 7)



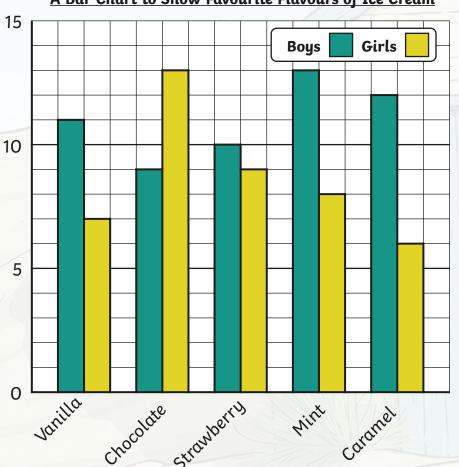
Add together the first number (x-axis position) in each coordinate answer.

This is the ninth digit of the number you need to escape the hut.









 How many boys voted for chocolate or mint as their favourite flavour of ice cream?

Reveal answer

2. How many girls voted for vanilla or caramel as their favourite flavour of ice cream?

Reveal answer

Add together the answers to each question.

Reveal answer

Find the digit sum of this total.

Reveal answer

This is the tenth digit of the number you need to escape the hut.







