

Maths with Castell Coch



Fairy-tale castle was a plaything for the rich and powerful

What happens when a patron of unlimited wealth meets an architect of boundless imagination? Here's your answer.

Castell Coch, or the 'Red Castle', rises up from the ancient beech woods of Fforest Fawr like a vision from a fairy tale. Yet these great towers with their unmistakable conical roofs only hint at the splendor within.

Given free rein by the third Marquess of Bute, architect William Burges didn't hold back. The highly decorated interiors and rich furnishings of Castell Coch make it a dazzling masterpiece of the High Victorian era.

But it's no exotic folly. Underneath the mock-medieval trappings you can still trace the impressive remains of a 13th-century castle, once used as a hunting lodge by the ruthless Marcher lord Gilbert de Clare.

Castell Coch has been a plaything of the rich and powerful for over 700 years. Having lavished huge sums on it neither Gilbert de Clare nor the Marquess of Bute spent much time here.

But it remains a magnificent vision of an imaginary medieval world – regularly voted by the public as their favourite building in Wales.

SUKOKU

Complete the grids. Each box and each line needs to contain the numbers 1 to 4.

3			2					2			3			
	4	1		2	3	4	1	1	4					
	3	2		3	4	1	2		3					2
4			1								4			1
	4		1	3	4	1				1				3
3					2			4			3	2	4	
						2				2		4	3	2
			4	1	4	3		3			2			

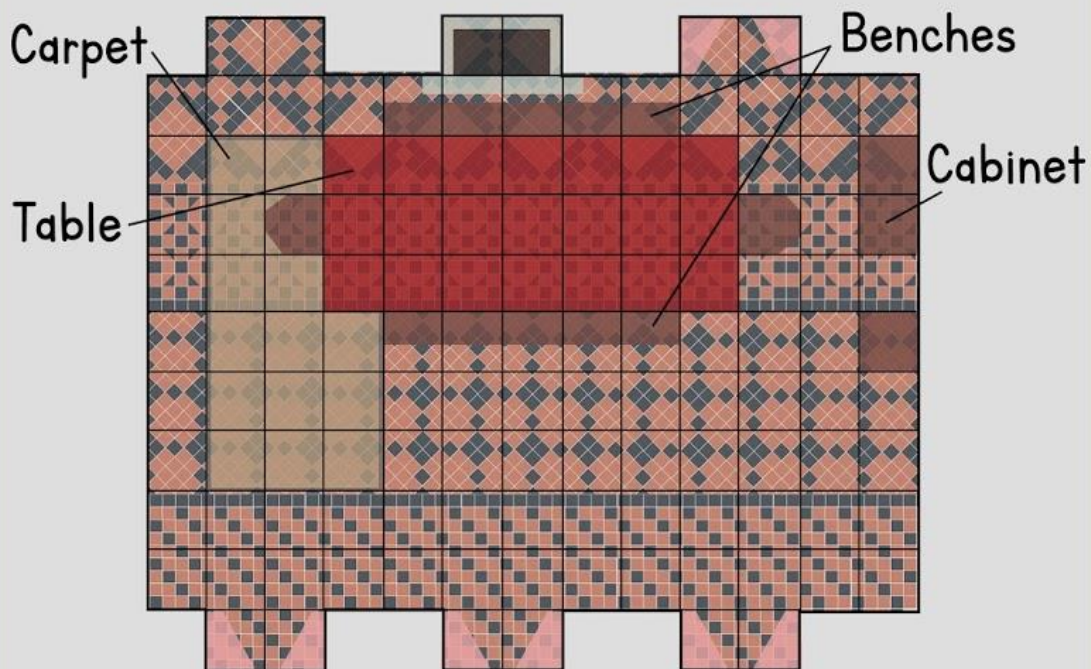


Complete the grids. Each box and each line needs to contain the numbers 1 to 9.

	4			2		1	9	1	4		5	6	3				
			3	5	1		8	6	3						8		
3	1			9	4	7		9	8	2	4	1	3				
	9	4					7				8					9	
						8	9		7	6	3			1	2		
2								8				1					
		9	5	2			4	1				2	3	7	8	1	5
4	2		1	6	9				5								6
1	6		8				7			8	6		5			3	4

CALCULATING AREA

Use the image of the Banqueting Hall to answer the questions on area.
1 square = 1 metre.

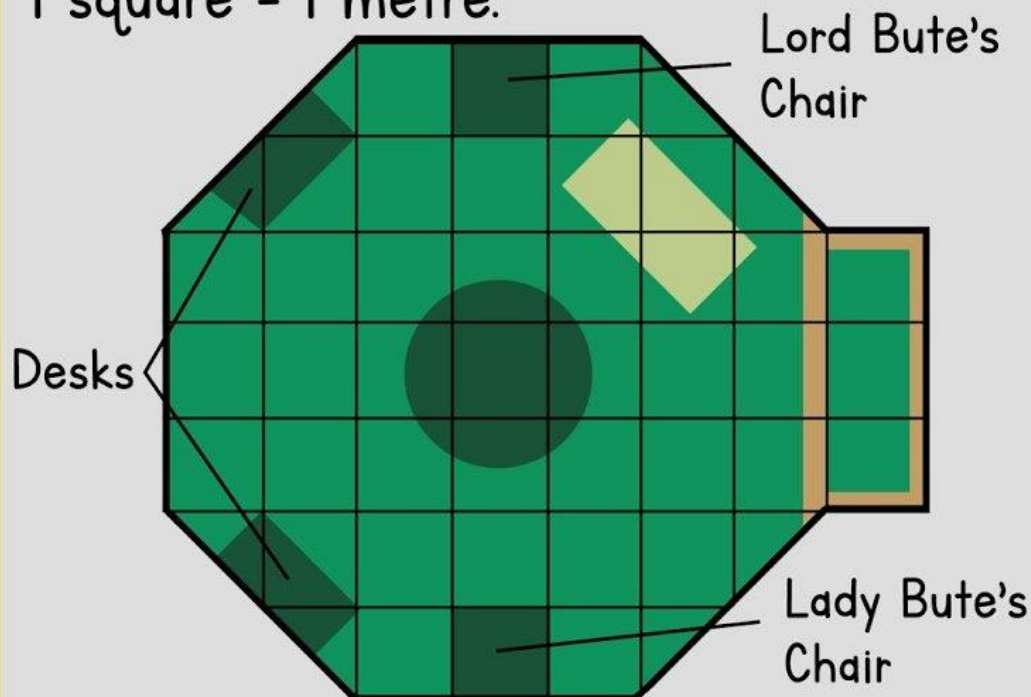


1. What is the area of the cabinet?
2. What is the area of the table?
3. What is the area of the table and the benches?
4. What is the total area of the room?

Bonus - If each square was 50 cm, what would the area of the room be now?

CALCULATING AREA

Use the image of the Drawing Room to answer the questions on area.
1 square = 1 metre.



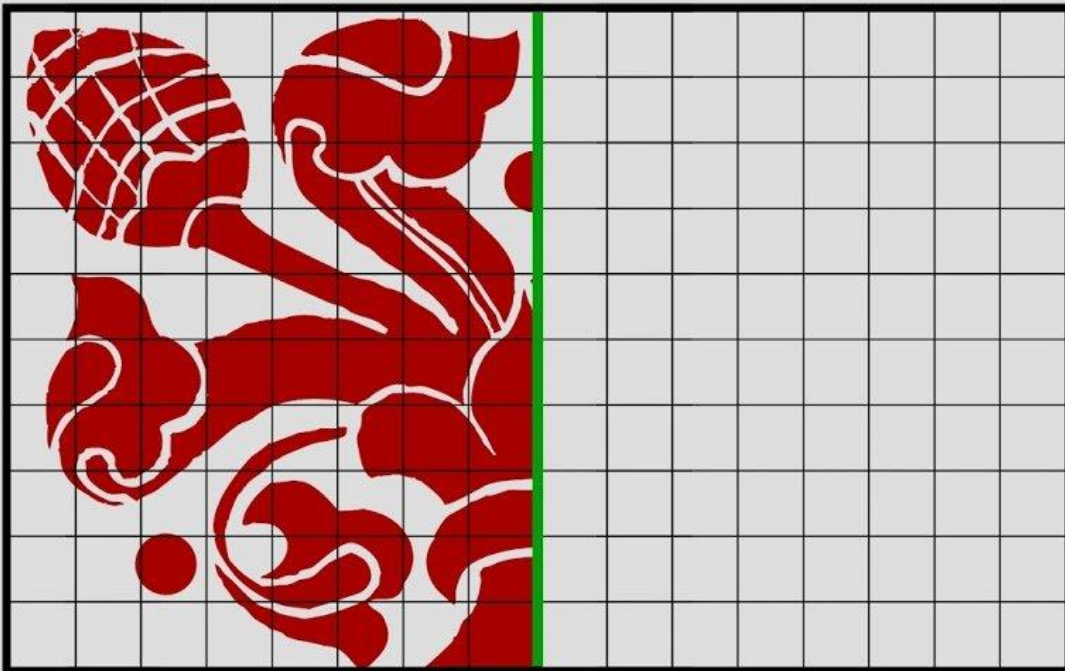
1. What is the area of one desk?
2. What is the area of Lord Bute's Chair?
3. What is the area of Lord and Lady Bute's chairs and the desks?
4. What is the total area of the room?

Bonus - If each square was 50 cm, what would the area of the room be now?

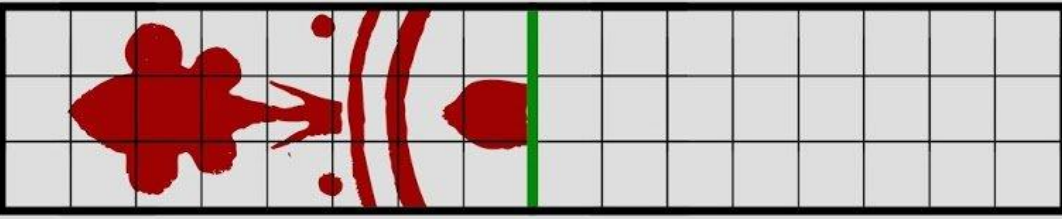
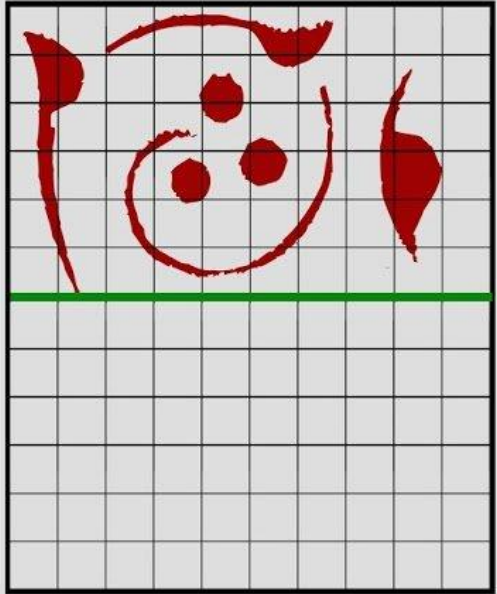
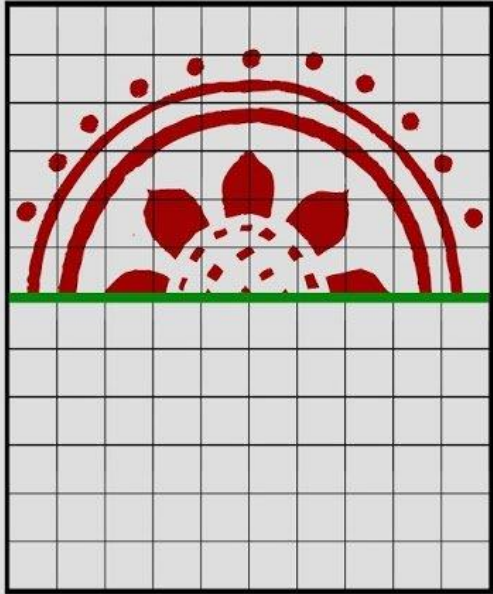
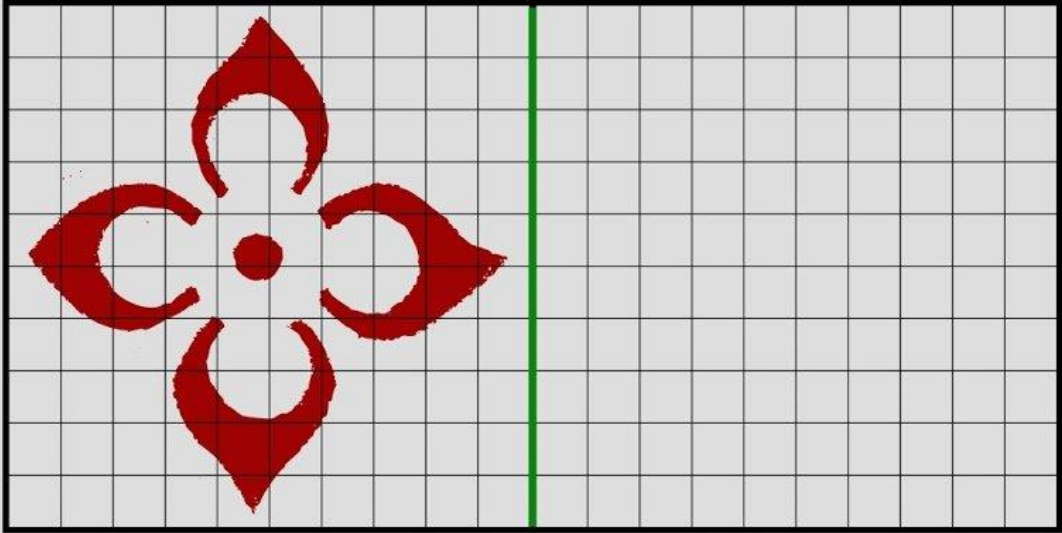
SYMMETRY

Burges is trying to decorate the Banquetting Hall but needs your help. Can you help him?

Use the line of symmetry to help you.



SYMMETRY



MATHS WORD PROBLEMS

Lord Bute is holding a banquet for 20 of his best friends!

1. Lord Bute has 10 apples. He drops 3.
How many apples does he have left?



2. The chef has made courses for 25 people. Only 22 people will be eating.
How many courses will be left?

3. 16 guests wore a hat to Castell Coch.
How many guests did not?



4. A fish can serve 11 people. All 22 people want to eat fish.
How many fish will the chef need to cook?

5. 17 of the guests went into the drawing room.
9 guests went on a tour of the castle.
How many guests stayed in the drawing room?

6. After the meal, 5 guests went to the chapel.
They were joined by 11 more guests.
How many were in the chapel?

MATHS WORD PROBLEMS

Lord Bute is holding a banquet for 20 of his best friends!

1. He wants to serve bread. 1 loaf of bread will feed 4 guests.

How many loaves should he order?



2. Lord Bute has made too much wine! 1 bottle will serve 5 guests. He has made 6 bottles. How many bottles will be left?

3. The banqueting table only has 12 seats. There are 4 other seats.

How many guests will have to stand?

4. Lady Bute picked 60 flowers as gifts for the guests.

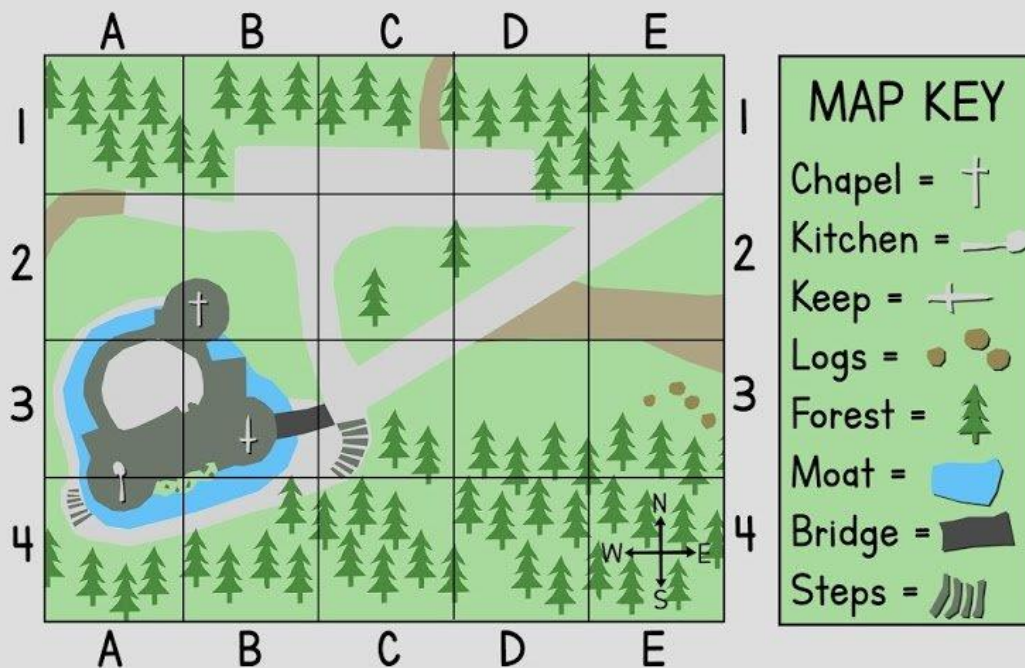
If given equally, how many flowers can each guest have?



5. All 20 guests arrived but half left after the main course. 3 more guests left after pudding. How many guests remained?

READING COORDINATES

Below is a map of Castell Coch.
Use the map to answer the questions.



1. In which grid is the keep located?
2. In which direction are the logs to the bridge?
3. What is in grid A3?
4. In which 6 grids is the moat located?
5. Start at the chapel grid. Move two boxes east, one box south and one box east.
What feature is in the box?
6. Start at A4. Move three boxes north, one box east and one box south.
What feature is in the box?