## Fulham Palace House& Garden

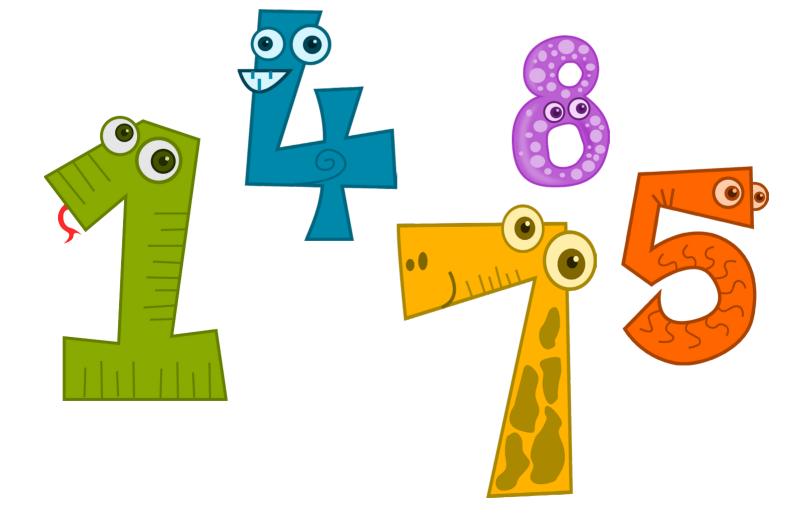






# KS1 Maths trail

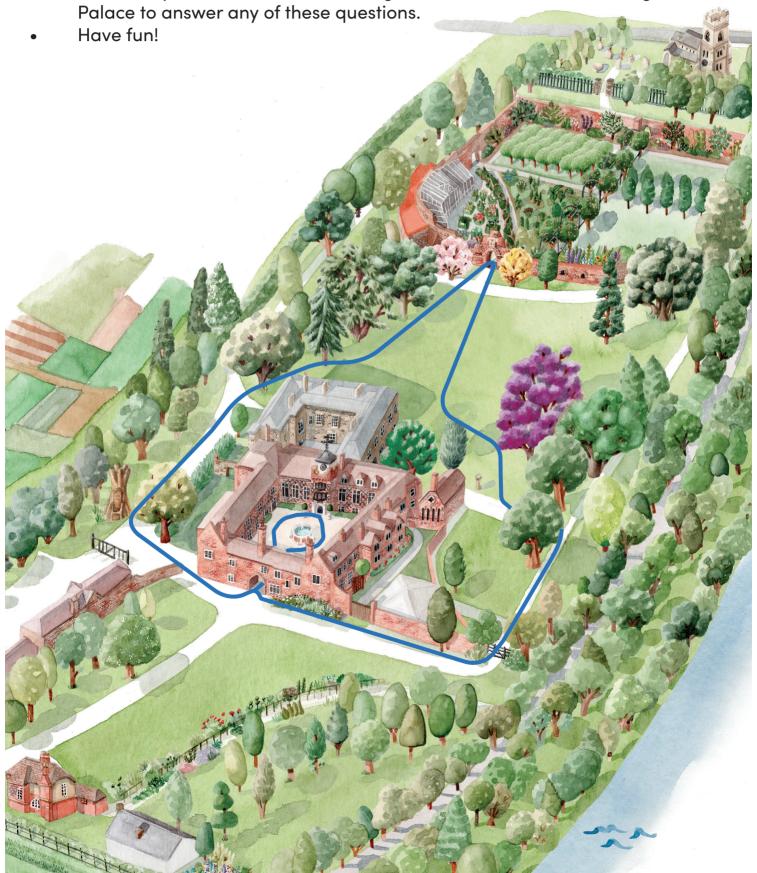




#### Before you start

- Make sure you have everything you need pencils, measuring equipment.
- Fulham Palace and its grounds is open to the public so please be respectful of other people using the area. Don't shout, don't climb the trees, move sensibly around the site, look where you are going and don't leave things on the ground that could trip people up or could hurt small children.
- Work as a team to find out the answers.

All of the questions are linked to things outside. You do not need to go in the Palace to answer any of these questions.



**Tudor courtyard**Start in the Tudor courtyard which has a clock tower and a fountain in it. This courtyard was built in the Tudor period.

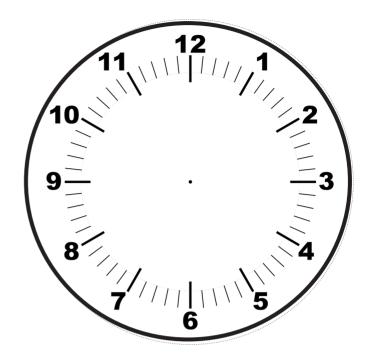
	<b>1.</b> S	ha	pe	Hu	nt
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What shapes can you find in the courtyard? Can you draw and name them in the box below?
2. Look for the chimneys
How many chimneys can you spot?
3, 4. Look for the doors and windows in the courtyard
How many doors can you see in the courtyard?
How many windows can you count?
5. Choose one window to look at
How many squares or rectangles can you count?

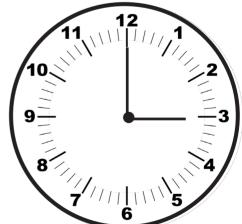
#### 6. Can you find the clock?

Look at the hands, can you draw them on this clock?





- 7. What number is the little hand pointing to?
- 8. What number is the big hand pointing to?
- 9. What time of day do you think it is? Is it the morning or afternoon?
- 10. If the clock looked like this. What time would it be?



- 11. The clock in the courtyard uses Roman numerals. Using the clock, can you work out what number each of the Roman numerals represents?



Go to the fountain

12. How many spouts of water are there?

Look at the pattern of the spouts.



Can you match the pattern to one of the dice faces below?

13. Circle the pattern that matches the spouts.







14. What number does this face represent?\_\_\_\_\_\_

Now leave the courtyard through the arch and turn right. Follow the path around the Palace to the Bishop's tree. It will be on your left across the grass.

<b>Bisho</b>	ps '	tree
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15. How many crossed swords can you spot on the tree? 16. Can you find any numbers written on the tree? Write them down. Can you find the sleeping cat? 17. Count and write down how many books the cat is lying on. 18. Count and write down how many chairs there are around the tree. 19. Can you add these numbers together? number of books number of chairs Look at the chairs Spread your fingers as wide as you can. This is a hand span. 20. Estimate how high the little chair is using your hand span. How many hand spans high is it? 21. Estimate how high the big chair is using your hand span. How many hand spans high is it?

22. Can you measure the height of the chairs in centimetres (cm) using a ruler?

### Look for the wooden Bishops on and around the Bishop's Tree

23. How many wooden Bishops are there? _	
Now carry on along the path toward	ds the main lawn
Measure the height of a tree the Native American way: 24. Pick a tree on the lawn. a) With your back to the trunk of the tree walk away until you can see the top of the tree when you look between your legs.	Thomas top o
b) Turn around and count how many paces it takes to walk back to the tree.  paces	tree
The number of paces is a non-standard measurement for the height of the tree.	
Now go towards the gate into the w	alled garden
Find a wooden bench.	
25. How many pieces of wood make up the k	pench?
26. Estimate how many children could sit on	the bench
27. Test it out! How many of you can sit on th	ne bench?

28. Estimate how many adults could sit on the bench.
29. Do you think you could you fit more adults or children on the bench? Tick the statement you agree with.
I think more adults would fit on the bench.
I think you more children would fit on the bench.
I think you can fit the same number of adults as children on the bench.
30. Why do you think that is?
Main lawn  Now leave the walled garden and go back to the main lawn. Look at the Palace.  The side or façade that looks out onto the main lawn is from the 1820s. At this time architects designed buildings that were regular and ordered. They used patterns to help them do this.  31. Looking at the Palace what shapes can you find? Draw them below.
32. How many windows can you count? Can you count them in two's?

33. Can you find one of these plants? W	/hat 3D and 2D shapes can you see?
List them.	
34. How many squares are on the base	?

#### Chapel

Walk towards the chapel to the left of the main building. The chapel is from the Victorian period but they copied some of the details from the Tudor courtyard.

Look at the pattern of the bricks

35. Continue the pattern, drawing it below.



36. Can you describe the pattern?

#### **Discuss:**

- a) What shape is used to make the pattern?
- b) How is the shape changed/moved to create the pattern?

Follow the path that runs down the left side of the chapel. Go through the metal gate and follow the path back to the Tudor courtyard.

**Congratulations! You have completed the trail!**