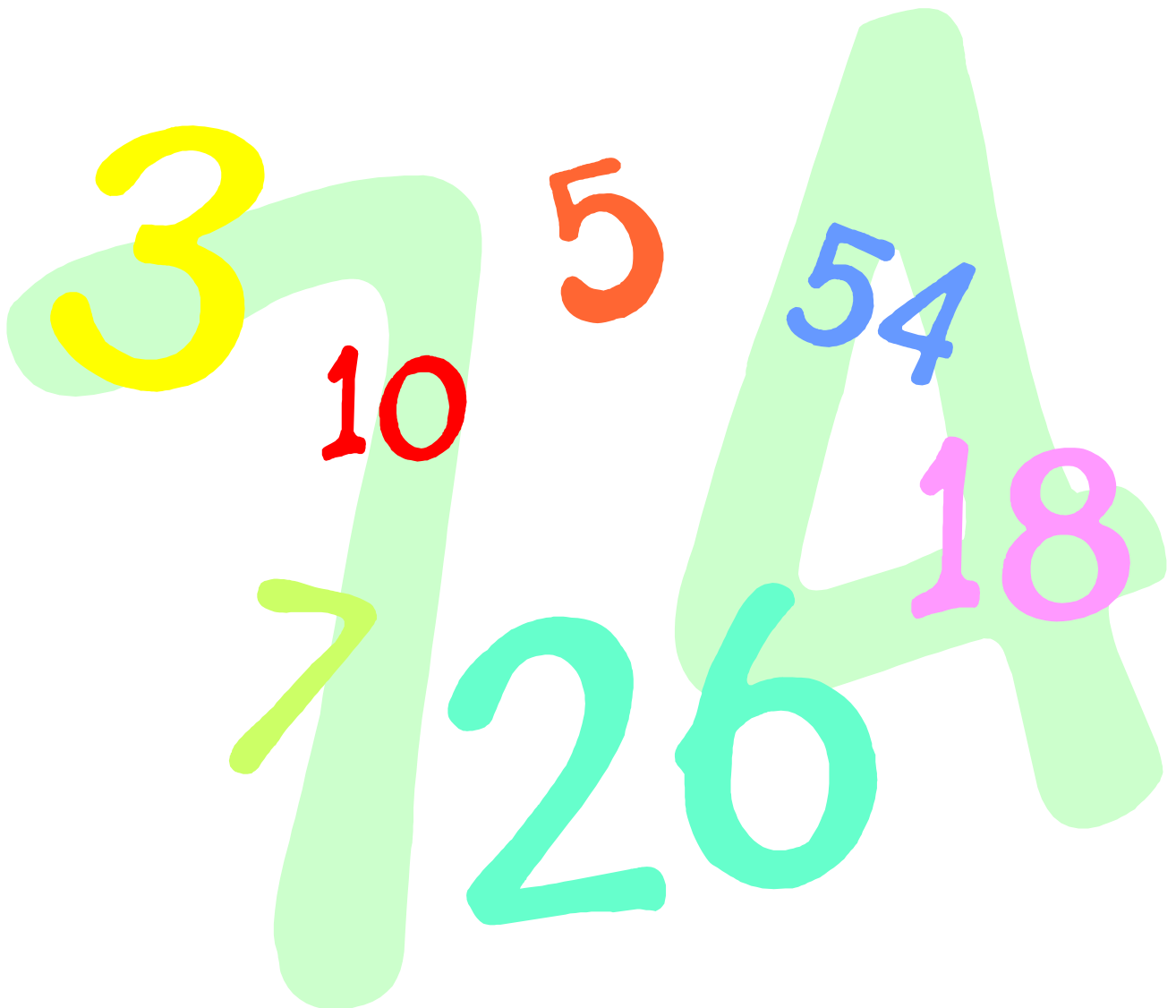


Fulham
Palace
est 1704

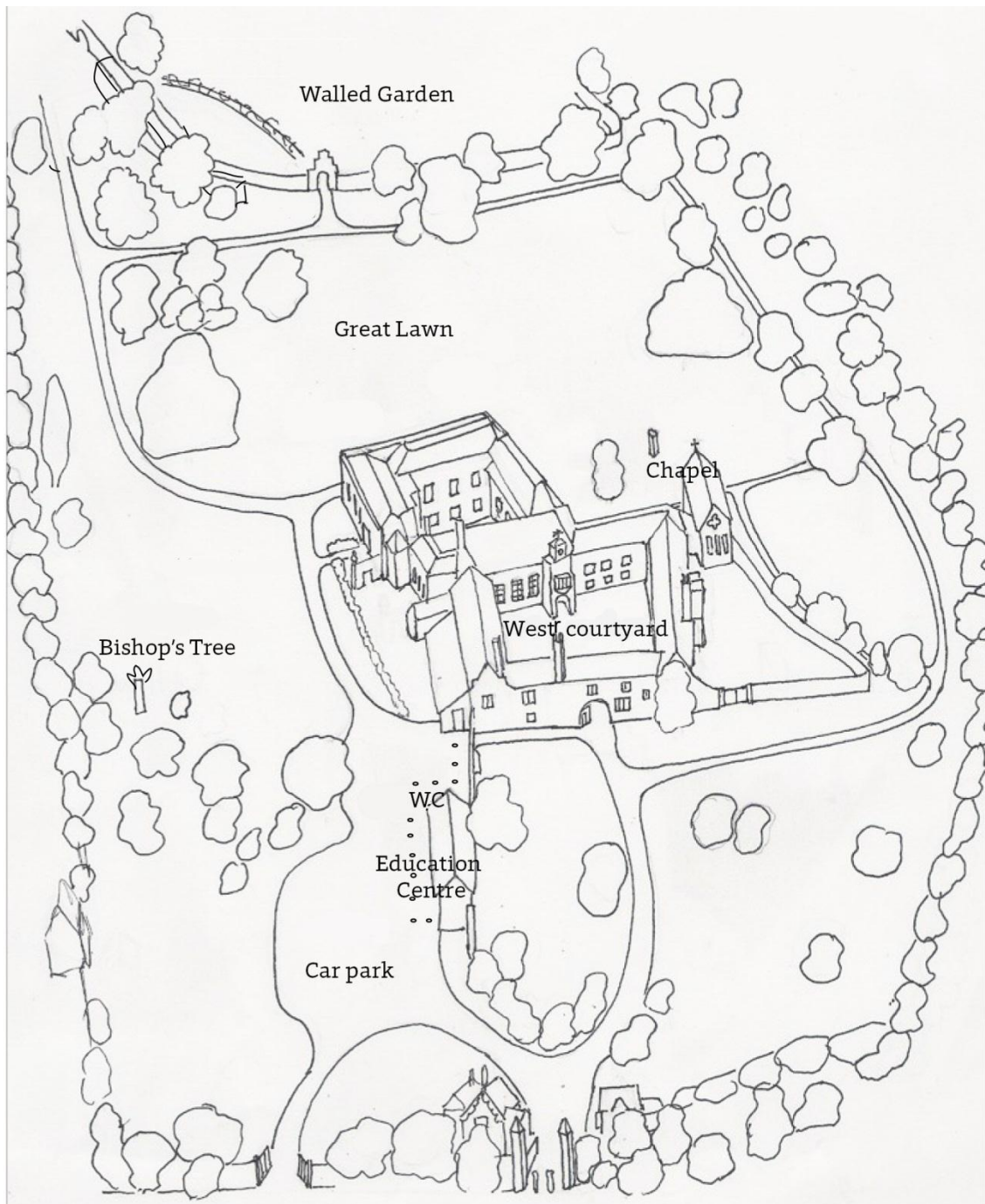
KS2 MATHS TRAIL



Written in partnership with
All Saints CE Primary School.

Before you start:

- Make sure you have everything you need – pencils, measuring equipment, answer sheet
- Fulham Palace and its grounds is open to the public so please be respectful of other people using the area. Don't shout, 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.
 - Have fun!



Start in the **West Courtyard** which has a clock tower and a fountain in it. This Courtyard was built in the Tudor period when the diamond (or diaper as they called it) was an important shape in building design.

1. List some properties of the diamond shape.



Look for the doors in the Courtyard.

2. How many doors can you see in the Courtyard?
3. What is the width of one of these doors?
4. What is the width of the door multiplied by the amount

of doors?

Find the clock.

5. What time is shown on the clock?
6. What would be the time if it was a 24 hour clock?
7. What would be the time on a 24 hour after an hour and a half?
8. Using the clock, can you work out what number each of the Roman numerals represents?



V=	X=	VIII=	I=
VI=	XI=	IX=	III=
II=	VII=	XII=	IV=



Go to the fountain.

9. If a bath holds 100 litres of water, how many litres do you estimate the fountain contains?



Find the coat of arms in the courtyard and look at the numbers.

10. What is the largest number you can make out of these numbers?
11. What is the smallest number you can make out of these numbers?
12. What is the difference between these two numbers you have made?

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.



Find the little chair.

13. What is the height of the little chair?

Find the big chair.

14. What is the height of the big chair?

15. What is the difference in height between the big chair and the little chair?

16. Using your knowledge of the height of the big chair, can you estimate the height of the tree?

Look for the Bishops.

17. How many wooden Bishops are there?

Look for a book with the letters MAAXIINIM written on it.

18. Using this code can you calculate what the sum of the word is?

$$M=3 \quad A=6 \quad X=12 \quad I=2 \quad N=4$$

19. Multiply the number of wooden Bishops by the height of the little chair.

Now carry on along the path towards the **Great Lawn**.

Find one of the large wooden pinecones.

20. What is the length of the pinecone?

21. What would be the length of 8 pinecones in a line?



Find a wooden bench.

22. How many pieces of wood make up the bench?

23. How many pieces of wood would make up 6 benches?

24. How many parallel lines does the bench have?

25. Can you draw two examples of the benches' parallel lines?



Now go towards the gate into the **Walled Garden**.
Go through the gate and turn right. Then turn left along the path. Walk to iron gate at the far end.

The walled garden is split into four areas with a path running between each one. Each area is called a quadrant.

26. Using a trundle wheel, can you work out the perimeter of one of the two grass quadrants at this end of the Walled Garden?
27. Can you work out the area of the same quadrant?



Now leave the Walled Garden and go back to the **Great Lawn**. Look at the Palace. The side or façade that looks out onto the Great Lawn is from the 1820s. At this time architects designed buildings that were regular and ordered. They used ratios and patterns to help them do this.

28. Above the doors at either end of the facade are identical triangles. What kind of triangle are they?
a) right-angled b) scalene c) isosceles d) equilateral



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.

Near the chapel is a sundial. Find the sundial.

29. How many sides does the sundial have?
30. What shape is the sundial?

Follow the path that runs down the left side of the Chapel. Go through the metal gate and follow the path back to the West Courtyard.

Congratulations! You have completed the trail!

© Fulham Palace Trust 2013
Learning Department, Fulham Palace, Bishop's Avenue, Fulham, London, SW6 6EA
www.fulhampalace.org
education@fulhampalace.org @Fulham_Palace