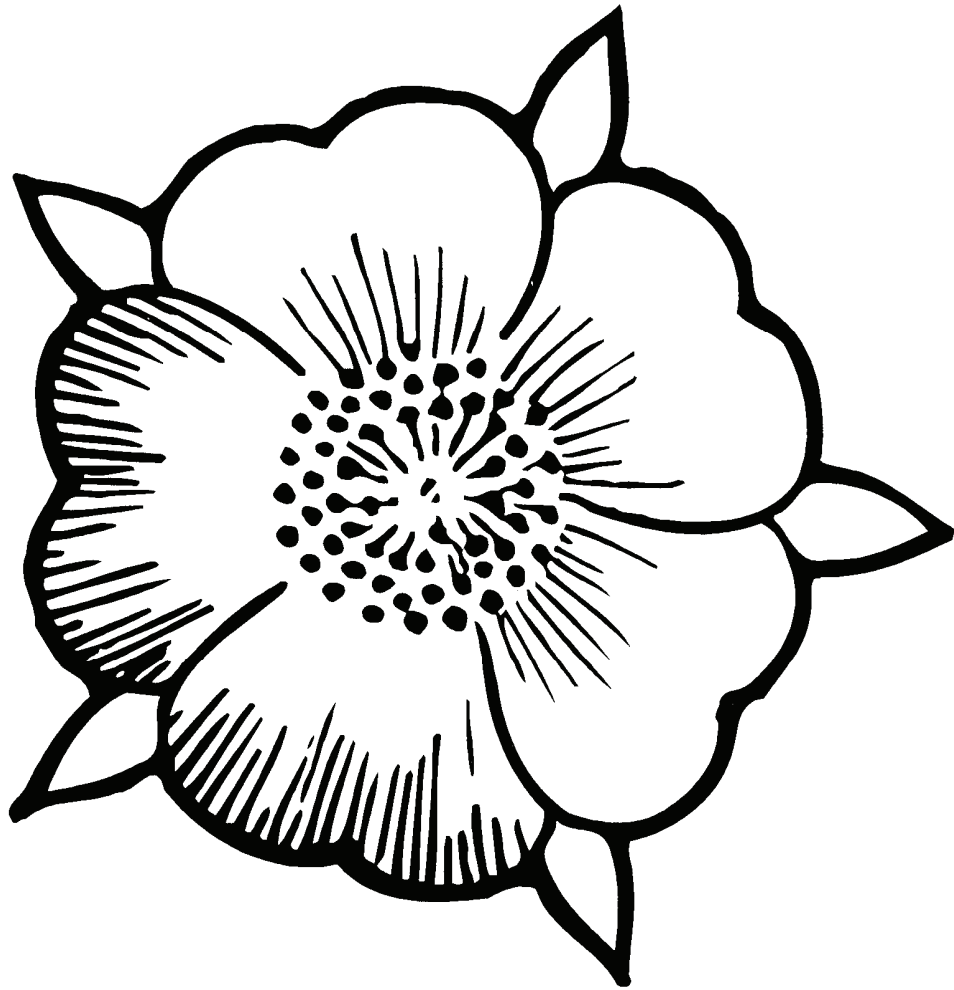




**Birmingham Botanical Gardens
Study Centre**



**Key Stage 2
Maths Trail
Answers for Teachers**

Introduction

Useful information about the trail has been set out in the format:

- answer (when possible)
- comments (when appropriate)
- National Curriculum reference (Programme of Study)

Answers

These are not always hard and fast. Prices change, temperatures change and some questions depend on debate. But best of all, you and your pupils may have your own ideas about how to tackle a particular question. Jolly good too: you know them better than we do.

National Curriculum References

The following abbreviations have been used:

Ma2 - Number

Ma3 - Shape, Space and Measures

followed by the standard notation found in the Mathematics document.

There is of course, using and applying mathematics (Ma1) throughout the trail.

If you don't already have a maths trail around your own school grounds or locality, then we hope that this trail gives you some ideas.

Meanwhile, enjoy the Botanical gardens trail and may the sun shine on you!

Written in connection with Birmingham City Council's Education Department



Q	Answer	Comments	NC Ref/s
1	30	$90 \div 3$	Ma2 3a,h Ma3 2a, 4c
2	Saturday	Something like: $1+7+7+7+7 = \text{Friday 29th}$ hence.....	Ma2 2a 4a, b
3	Depends	The significance of Sophie's birthday is that she's over 5 and pays to get in	Ma2 4a, b
4	Depends	Temperature varies from 10 to 27°	Ma3 4b
5	South East (180°)	The directions are approximate NB did you say 'hello' to Jenny?	Ma3 2a
6	160 years Depends	$160 + (\text{this year} - 1989)$	Ma2 2a 4a, b
7	Various	At the top.....below	Ma3 2b
8	6 layers 46 bricks 276 altogether	The method assumes the same number of bricks per layer, to count misses the point!	Ma2 2a 4a, b
9	6 Hexagon	Regular hexagon if you like	Ma2 2a Ma3 2b
10	10	Each of the two patterns show 5 rhombuses, 4 small inside 1 large	Ma2 2a 4a Ma3 2b
11	Including squares, rectangles and triangles	Note symmetry in the patterns	Ma3 2b c
12	8 rails maybethe children can have fun investigating possible answers.	Ma2 2a 4a, b

		What if each child holds 2 rails or Every other child holds 2 rails?	Ma2 2a 4a, b
13	131	Well....we counted 131 but the apparatus was buried under mixed infants at the time.....	Ma2 2a Ma3 2b
14	Depends	This year - 1895	Ma2 4a, b
15	90 years	1940 - 1850	Ma2 4a, b
16	Lots!	Will you ask for plane and solid shapes?	Ma3 2b