



## Programme Description

**Length:** Half Day  
**Age Group:** P4-7  
**Availability:** All year round  
**Price:** £3.50/child

On this programme pupils use GPS units to follow a Maths trail around the garden, solving problems on their way, to end up back at home base.

## Learning Intentions

### Children will:

- Use GPS units to locate Maths challenges hidden round the Garden
- Use compasses to complement GPS readings.
- Solve a range of maths challenges
- Explore the Garden independently

## Curriculum Links

### Measurement

I can use my knowledge of the sizes of familiar objects or places to assist me when making an estimate of measure. [MNU 2-11a](#)

I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems. [MNU 2-11b](#)

I can explain how different methods can be used to find the perimeter and area of a simple 2D shape or volume of a simple 3D object. [MNU 2-11c](#)

### Patterns and relationships

Through exploring number patterns, I can recognise and continue simple number sequences and can explain the rule I have applied. [MTH 1-13b](#)

Having explored more complex number sequences, including well-known named number patterns, I can explain the rule used to generate the sequence, and apply it to extend the pattern. [MTH 2-13a](#)

### Properties of 2D shapes and 3D objects

I have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary. [MTH 1-16a](#)

I can explore and discuss how and why different shapes fit together and create a tiling pattern with them. [MTH 1-16b](#)

Having explored a range of 3D objects and 2D shapes, I can use mathematical language to describe their properties, and through investigation can discuss where and why particular shapes are used in the environment. [MTH 2-16a](#)

## Angle, symmetry and transformation

I can describe, follow and record routes and journeys using signs, words and angles associated with direction and turning. **MTH 1-17a**

I have investigated angles in the environment, and can discuss, describe and classify angles using appropriate mathematical vocabulary. **MTH 2-17a**

I can accurately measure and draw angles using appropriate equipment, applying my skills to problems in context. **MTH 2-17b**

Through practical activities which include the use of technology, I have developed my understanding of the link between compass points and angles and can describe, follow and record directions, routes and journeys using appropriate vocabulary. **MTH 2-17c**

Having investigated where, why and how scale is used and expressed, I can apply my understanding to interpret simple models, maps and plans. **MTH 2-17d**

## What to expect

- Pupils will be working outside, so should wear appropriate clothes and shoes.
- They will work in small groups to follow a geocaching trail independently and complete a variety of maths challenges.
- What is covered from the Maths curriculum will vary depending on challenges to be met. If a school wishes to cover specific Maths Es&Os please let us know well in advance

## How to book

Bookings for all schools programmes are by telephone only.

Please call the Education Office on 0131 248 2937 (option 2 for Schools).

The office is open 9.00am – 4.30pm, Monday to Thursday and 9.00am – 4.00pm on a Friday.

Enquiries about this programme can be made by emailing [education@rbge.org.uk](mailto:education@rbge.org.uk)



Royal  
Botanic Garden  
Edinburgh

### Education Department

Royal Botanic Garden Edinburgh, 20a Inverleith Row, Edinburgh, EH3 5LR

 0131 248 1040  [education@rbge.org.uk](mailto:education@rbge.org.uk)