Teacher Guide
Mathe-Magic

ABERDEEN SCIENCE CENTRE

Levels : Early and Lower First
Maximum Number of Pupils: 33

Duration: 60 mins

What to Expect

Pupils will be introduced to number systems and its origin. Pupils will discuss about use of units of measurements and also importance of using appropriate units. Through hands-on activities, pupils will identify 3D and 2D shapes and patterns in this interactive workshop.

Maths Week Scotland

What is Covered

- Pupils will use mathematical operations such as multiplication, addition, division and subtraction throughout the workshop to solve real-life problems.
- Pupils will explore about various Mathematical problems and also its importance/relevance in the world around us
- Pupils will work in small groups to unravel the use of numbers in the world and used by civilisations throughout history
- Pupils will do measurements using tapes, weighing, scales and use appropriate units
- Pupils will be given exciting challenge to understand 3D shapes and patterns to solve real life problems of packaging and stacking.
- (Second level): Pupils will explore about RFID codes, especially barcodes, their relevance in daily life and calculate like a barcode scanner.

Curriculum for Excellence links

We have identified the Curriculum for Excellence experiences and outcomes to which this workshop can most significantly contribute:

First Level
MNU 1-03a

I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed.

First Level
MNU 1-11a

I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units.

First Level
MTH 1-12a

I have discussed the important part that numbers play in the world and explored a variety of systems that have been used by civilisations throughout history to record numbers.

First Level
MTH 1-16a

I have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary.

Second Level
MTH 2-03c

Having explored the need for rules for the order of operations in number calculations, I can apply them correctly when solving simple problems.

Second Level
MTH 2-12a

I have worked with others to explore, and present our findings on, how mathematics impacts on the world and the important part it has played in advances and inventions.

Second Level
MTH 2-16a

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.

Second Level
MNU 2-03a

Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others.

Second Level
MNU 2-11a

I can use my knowledge of the sizes of familiar objects or places to assist me when making an estimate of measure

Second Level
MNU 2-11b

I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems.