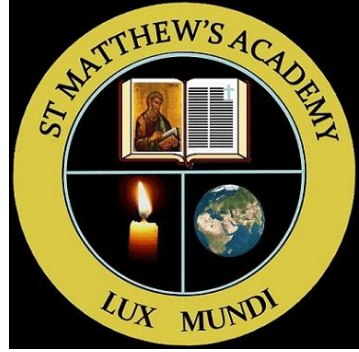# Science

St Matthew's Academy — LUX MUNDI

What can my child expect in Science in S1?

In S1 and S2 we work on integrated Science courses which cover outcomes focused on:

- Planet Earth

- Forces, electricity and waves

- Materials

- Biological systems

- Topical Science

Skills

We also focus on Problem Solving and experimental work to develop:

- Inquiry and investigative skills
- Scientific analytical thinking skills
- Skills and attributes of scientifically literate citizens

Introduction

The first topic is an introduction to Science and pupils learn:

- How to carry out experimental work safely
- Recognising apparatus in the Science lab
- Measurements
- Recording results

Building Blocks

In Building Blocks students learn about:
- Cells
- Electricity
- Particles
- Waves

And focus on Problem Solving skills such as averages, bar graphs and pie charts.

How It's Made

In How It's Made students learn about:

- Energy

- Reproduction

- Substances

And focus on Problem Solving skills such as percentages, line graphs and fair testing

Assessment

We assess each of our topics in S1 along with more informal assessments throughout to check learning.

Pupils also sit Problem Solving assessments near the beginning and the end of the year to assess progression.

Parents in Partnership

Ways you can help support your child with Science work:

- Understanding quantities and measurements
- Literacy skills
- Numeracy skills

Quantities and measurements

Learning measurements in everyday situations help students to apply them effectively in the classroom

- Measurements in the kitchen

- Measurements of height

- Distances

- Time

- Temperature

Literacy skills

- Listening
- Talking
- New vocabulary
- Sharing opinions

Numeracy skills

- Calculating percentages
- Calculating averages
- Pie charts
- Bar graphs
- Line graphs

St Matthew's Academy

Science Department

S1 and S2 Science

Information for Parents

Averages

Having taken a number of readings, add them up and divide by the number of numbers to find the average.

eg   *Find the average temperature from the following readings:*
22ºC, 24ºC, 21ºC, 23ºC.

Average Temperature = $\frac{\text{all temperature readings \textbf{totalled}}}{\text{number of readings}}$

Average Temperature = $\frac{22+24+21+23}{4}$ = $\frac{90}{4}$ = **22.5ºC**

Percentages

The word percentage means 'per hundred.'

A percentage can be worked out from: $\frac{\text{Number}}{\text{Total}} \times 100$

eg 1   *A pupil scored 50 out of 80 in a science test. What was his percentage score?*

Percentage is found from: $\frac{\text{Number}}{\text{Total}} \times 100$

that is: $\frac{50}{80} \times 100$ = **62.5%**

eg 2   *15% of the pupils in 1A are left handed.*
There are 20 people in 1A. **How many** *are left handed?*

15% means 15 out of 100 or $\frac{15}{100}$; the number is found from: $\frac{15}{100} \times 20$ = **3**

So 3 pupils in 1A are left handed.