

## Stunning Start

Visit from Bedford Fire Station

### Key Vocabulary

**Battery** – a container consisting of one or more cells, in which chemical energy is converted into electricity and used as a source of power.

**Bulb** – is a small and simple light source that uses a wire filament to glow on the application of electricity.

**Chronologically** – things arranged in the order that they happened.

**Circuit** – a roughly circular line, route, or movement that starts and finishes at the same place.

**Machines** – an apparatus using mechanical power and having several parts, each with a definite function and together performing a particular task.

### Key Facts

**Wilbur and Orville Wright** were American inventors and pioneers of aviation. In 1903 the Wright brothers achieved one of the first flights with a powered, sustained and controlled airplane.

Cardington Airfield is a former Royal Air Force station in Bedfordshire, England, with a long and varied history, particularly in relation to airships and balloons.

Benjamin Franklin was an American inventor and politician. His most exciting invention was the lightning rod. Franklin made key discoveries about the relationship between lightning and electricity.

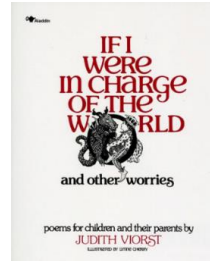
## Excellent End

Presentation of the vehicles children have made

## English

**If I Were in Charge of the World** by Judith Viorst: poetry. Includes the contraction I'd and wouldn't and expanded noun phrases.

Pupils will write their own 'If I were in charge of the School' poem and learn it off by heart to perform to the class.



## Design and Technology

To explore a range of toy vehicles and say what is good about them and what could be improved.

Pupils will explore toy cars and discuss why they are successful.

To design a vehicle that we would like to make.

To choose and appropriate material for making the vehicle.

To tell how the design could be improved.

To tell how the design can be made stronger / stiffer and more stable.

To use wheels, axels or sliders in the vehicle to make a moving part.

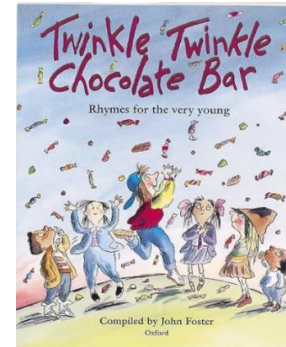
Pupils will design and make their own car.



## Educational Visit

Visit to Shuttleworth Collection

### Class Reader



## Machines Summer Term 1

### Science Scientists & Inventors

Throughout the unit, children will work in a fun and hands-on way to learn about scientists and inventors:

- The invention of the waterproof coat, and will explore other waterproof materials by carrying out simple tests.
- The work of doctors, and will learn about **Elizabeth Garrett Anderson**, the first woman doctor in Britain.
- To create their own greenhouse based on the invention of the biomes at the Eden Project, and use their greenhouse to compare the growth of plants
- How germs are spread, looking at the work of **Louis Pasteur** and carrying out a fun experiment to prove how far germs can spread in a few minutes.
- Set up a small world to show the effects of water pollution, as discovered by **Rachel Carson** during her research on ocean habitats
- The development of wind turbines and how this invention is used to generate power.

## History

**Know when the first aeroplane flight happened (and place it on a timeline)**

Pupils will learn about the Wright brothers and the different inventions they made. Pupils will see some of the Wright brothers' creations at the Shuttleworth Collection.

**Know when man first flew to the moon (and place this on a timeline).**

**Name the people who first landed on the moon.** Pupils will learn about Neil Armstrong, Yuri Gagarin, Helen Sharman and Tim Peake.

**Why Cardington Hangers are important.** Pupils will learn about the significance of the Cardington Hangers and will get to see them.

**Order vehicles chronologically on a timeline. To tell how cars have changed over time.**

Pupils will look at how cars have changed over time. Vehicles will include Benz Patent Motorwagon, Cugnot's Steam Carriage, Baker Electric Car and Ford Model T.



