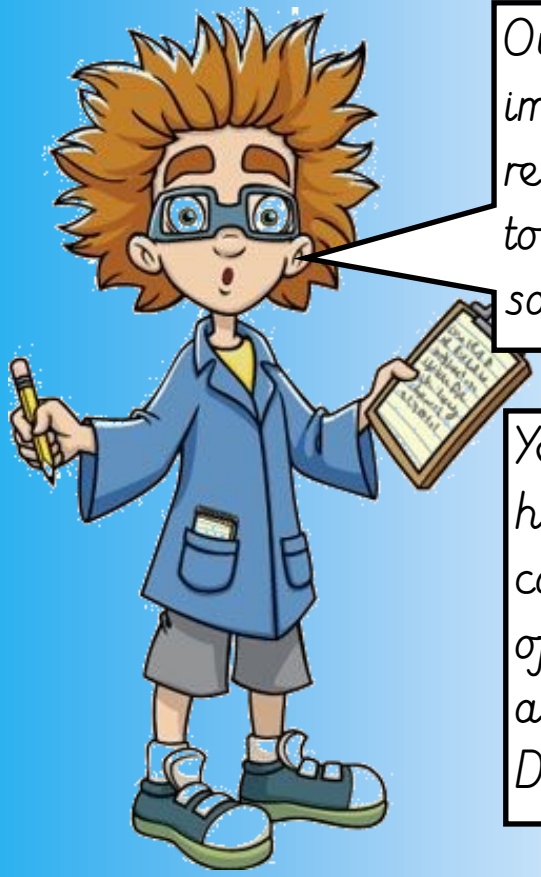
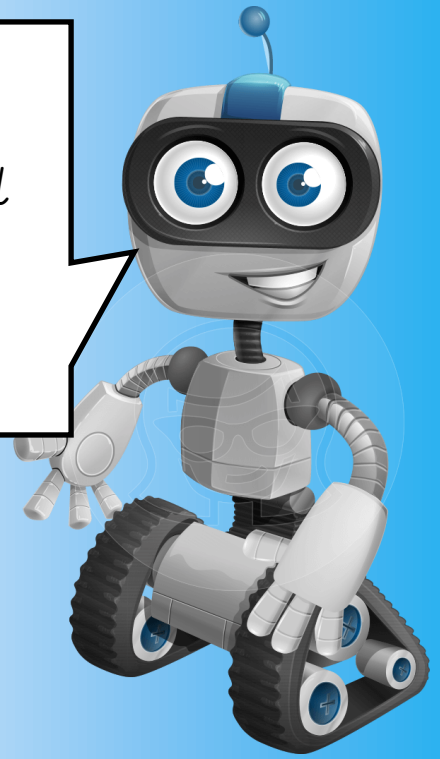
Burley and Woodhead - Year 6

We are scientists



Our understanding of the world around us has been improved, and continues to improve, through scientific research. Throughout history, many scientists have sought to make their mark through making new discoveries and solving interesting mysteries.

Year 6 will review the history of technology and how it has evolved over time. We will be predicting what will come next and making our own contributions to the field of robotics. In the second half term, we will turn our attention to animal evolution and the work of Charles Darwin.



GLOBAL ME

LEARNING ME

SAFE ME

COLLABORATIVE ME

CREATIVE ME

HEALTHY ME

We are scientists

History
The history of technology - an exploration of how different pieces of technology have changed over time and how our lives have been affected by this. What technology do we take for granted now that our parents didn't have? Where will technology go next?

Charles Darwin - who was this man and why is he famous? What did he contribute to our understanding of the world? What events occurred in his life?

Design Technology
Electrical systems - using the knowledge gained in our scientific study on electricity, we shall be creating a range of complex electrical systems to solve different everyday problems.

Computing
We shall be controlling physical systems, through coding, by learning about robotics and building our own robots.

Drama
Charles Darwin improved his knowledge of the world through sailing to different lands. Our drama will focus on life aboard a ship, it's risk and dangers.

Global Learning
Are scientific advancements always positive for the world?
How can we solve the energy crisis currently facing us?

Science - half term one
Electricity and circuits - how has our knowledge of electricity changed over time and what impact has this had on our lives? How do we generate electricity at the moment and what are the implications of this? How does electricity travel and how can we use it to power a variety of circuits?

Science - half term two
Living things and their habitats - a study of how living things are classified into groups based on their similarities and differences. This will include learning about micro-organisms.
Evolution - we shall learn about how living things have changed over time and how fossils can be used to see this. What changes have occurred and why have those changes happened?

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English
During the first half term, we shall read Tin by Padraig Kenny, a story all about a world of robots and mechanical beings, and completing a range of writing related to this text.
The second half term will see us using the knowledge we gain about Charles Darwin's life to write a biography of this world renowned scientist.

Maths
At this point in the year, we shall learn about measurement, geometry and statistics. We shall then move on to the concepts of algebra, ratio and proportion and area and look at how to solve a variety of problems in these in the second half term. As always, our coverage shall be adapted the reflect the needs of the class and we shall teach maths by developing our skills in fluency, reasoning and problem solving.

Religious Education
This half term, our studies will focus on Buddism and the main aspects of this religion.

Art
We will look at how art has changed over time and produce pieces which show this.

PSHE - Safe Me and Healthy Me
We shall use the first half term to remind ourselves how to stay safe in the physically world and the digital world. In half term two, we will think about how to keep ourselves healthy and explore the impact of different drugs on our bodies.

Music
We shall be continuing to develop our ability to critically listen to music and perform pieces. We will also be composing pieces of our own to perform.

French
This half term, the children will continue to develop their understanding of the French language through reading, writing and oral work.

PE
Half term one - both PE sessions during this half term will focus on gymnastics and developing our balance and technique.
During the second half term, this will change to dodgeball and street dance.

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Outcomes

Across the term, there shall be many different learning outcomes - far too many to list them all here - but here are a few to look out for:

Different pieces of artwork that show how art has developed over time.

A range of different electronic devices which have been designed to solve everyday problems and use different types of circuits to operate successfully.

Biographies of Charles Darwin which detail his life from birth to death and includes all of his major contributions to the world of science.

Robots which have been built by the year 6 class and can be programmed to carry out different tasks.

An understanding of alternative energy, the benefits and drawbacks of each type and how each of them can be used to support a sustainable energy plan.

Digital biomes that we have created and populated with animals to explore how different ecosystems work and how they can be affected by changes.

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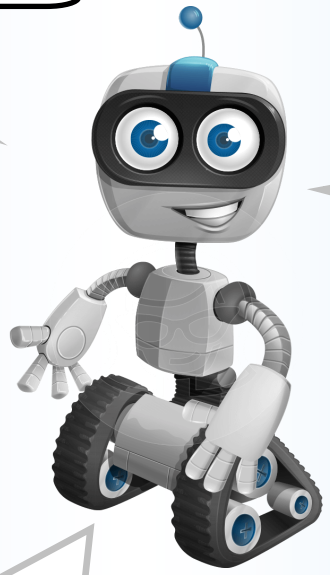

At home, you could talk about:

- what technology was like when you were a child - how has it developed across your lifetime?
- how you think technology will advance over the next 20 years,
- which piece of technology you think is the most useful to us.

At home, you could read:

- non-fiction texts about technology, how it has changed and how it works,
- non-fiction texts about electricity and the history of its discovery,
- non fiction texts about evolution,
- biographies and autobiographies about a range of people but especially those who are connected with science or technology,
- fiction texts about robots or robotics.

At home, you could write:

- your own bite-size explanation of a scientific principle that we have learnt. You could try turning your explanation into a video,
- a guidebook for a piece of technology that you have created or imagined.

At home, you could create:

- coded games, apps or programs using the skills you developed last half term,
- your own design for a robot or an animal who has adapted to life in a specific biome,
- artwork from different periods in our history.

At home, you could watch/listen to:

- BBC clips about robotics and technology such as the clips related to the Mars Rover,
- "Crash Course Kids" on YouTube for information about evolution, inheritance and habitats.

BURLEY AND WOODHEAD CHURCH OF ENGLAND - PRIMARY SCHOOL - EST. 1832

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