

WHOLE SCHOOL TOPIC - We are technologists!

Autumn term 1 – 2020

Tundra Class

ENGLISH

In English we will be working in Big Write cycles – these are 2-week programmes which focus on a specific genre of writing per cycle. Grammar and reading are included in these cycles within explorations of model texts.

During the first cycle we will look at persuasive speeches, writing our own as 'leaders of tomorrow'. We will watch some inspirational speeches and discuss what makes them persuasive before choosing a topic and writing our own.

The second cycle will focus on descriptive writing as we take inspiration from our shared text, "Goodnight Mister Tom" by Michelle Magorian.

The third cycle will explore biographies of famous people who have worked in the STEM industries.

We will focus on the drafting and editing process for our writing before having a fortnightly Big Write session where we will write up the final version of our work with a focus on presentation and formatting.

TOPIC OVERVIEW

The world is in a constant state of change and we need to be ready and able to adapt to the challenges and opportunities that come our way. This term, we will be developing skills and understanding that will allow us to approach the future with excitement and optimism.

Thinking about Tomorrow's World, we will outline our vision for what the future might bring and encourage others to share that vision and work with us towards it. We will learn how to code in computing and, in science, understand how electricity and light can be harnessed for our advancement. In history, we will look at a period of rapid technological advancement, World War II, and understand how need necessitated innovation. In PSHE we will also explore our own health and wellbeing and how to safeguard both throughout our lives.

Perhaps you might be a visionary for the next generation.

FRENCH

At the end of the Autumn term 1, we will be able to:

- name shops in a town and say their opening hour
- ask for and give directions

MATHS

Place value
Rounding
Adding and subtraction
Factors, multiples and prime numbers
Multiplication

VALUES AND PSHE

This term's Values are:

Self-belief

Humility

We will also be learning about:

- Relationships
- Online presence/ safety
- Sustainability

At the end of the Autumn term 1, we will be able to:

- understand that everyone has their own identity and different qualities
- understand that everyone has similarities and differences with other people
- understand what we mean by 'mental health' and how we can look after it
- understand that life will have ups and downs and how to care for ourselves
- understand how to keep safe in different situations
- help other people in emergency situations



SCIENCE

Electricity

At the end of the Autumn term 1, we will be able to:

- name common appliances that run on electricity
- understand how a switch effects the flow of electricity in a circuit
- know whether a lamp will light in a circuit depending on the switch
- name some common conductors and insulators
- understand how and why circuit symbols are used to create circuit diagrams.
- assemble a simple series circuit that lights an LED.
- draw a circuit diagram for a simple LED circuit
- understand what is meant by the terms current and voltage.
- understand why the brightness of a lamp changes with the number and voltage of the batteries that it is connected to.
- construct simple series circuits using batteries, lamps and crocodile clips

Light

At the end of the Autumn term 1, we will be able to:

- know that light is needed in order to see things and that the dark is the absence of light
- understand that light travels in a straight line
- know that light is reflected from surfaces
- recognise that light travels in straight lines.
- know that shadows form when light travelling in straight lines hits an opaque object and can't get through and that this explains why the shadow is the same shape as the object.
- understand that when light hits a transparent object most of the light gets through so they form only the slightest shadow.
- carry out a scientific experiment
- understand that the distribution of light from a torch changes with distance
- design and build a torch construct a simple series circuit with a bulb, cell and switch

COMPUTING

At the end of the Autumn term 1, we will be able to:

- be able to change the look of a sprite
- be able to make the sprite move
- be able to add further sprites and alter the speeds they move
- make the sprite follow the mouse pointer
- use the pen tool to draw a variety of shapes using the repeat function
- direct a monster through a maze
- change the background and add a sprite with multiple costumes
- add script which will alter the costume which is displayed and use the wait command
- move the sprite using the keyboard
- write script that will run when the sprite touches a particular colour
- write script that will run when one script touches another
- create a complex game which includes further sprites and scripts
- make a sprite turn and move using the keyboard
- understand the X and Y positions and use them to control a sprite to write your name
- make a game using two methods to move the sprites
- create a variable that changes its value when a sprite is clicked
- set a variable's starting value and count up and down with variables
- create a working game that keeps score and has a time limit
- apply the skills learned in Scratch over the unit to follow instructions and complete independent projects

MUSIC

Happy (links with PSHE curriculum)

At the end of the Autumn term 1, we will be able to:

- listen and Appraise (begin to recognise the style indicators of Pop music with a Soul influence)
- undertake musical activities to listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- develop an understanding of the history of pop music with a soul influence

RELIGIOUS EDUCATION

In the Autumn term 1 our focus will be Buddhism.

We will be focussing on the key question:

What did Buddha teach about leading a better life?

HISTORY

At the end of the Autumn term 1, we will be able to:

- understand the events surrounding the outbreak of war
- learn the locations of countries in Europe and the part they played at the start of WWII
- put key events, people and places on a timeline
- learn the countries in Europe and the part they played at the start of WWII
- know about the Battle of Britain and Blitz
- understand the significance of the Battle of Britain in WWII
- use information from different sources
- build an understanding of how life changed for people in Britain during WWII
- understand that people in Britain had different experiences of the war depending on where they lived/ their age/ their gender/ their occupation etc.
- analyse a range of source material to promote evidence about the past
- understand the role of code-breaking in WWII
- understand how WWII advanced key technology, e.g. radar
- understand how radar helped Britain to victory in WWII
- begin to understand how technology developed in WWII continues to be used today (e.g. computers)
- devise codes using various methods
- decode messages using understanding of ciphers