As scientists, we revisit and build on our knowledge of light and electricity. We revise what a simple circuit looks like and how to draw one using appropriate symbols. We also investigate the impact power voltage has on the variable components in a circuit, such as a bulb or a buzzer. We rediscover how light travels and the impact the position and distance the light source has on a shadow, as well as identifying the various parts of an eye and how we can see objects directly in front of us.

As part of our DT curriculum, we design and make a tank which incorporates

pneumatics. The increase in air pressure will help launch a projectile.

We draw upon our design skills to consider how the tank will look and how it will work. We then build upon our skills of incorporating a moving mechanism into the design and then use our new knowledge of pneumatics to build a tank that has the ability to launch a projectile.



Year 6 Autumn term From Darkness to Light

This theme has been developed to inspire year 6 children across a range of different subjects including science, design technology, history and RE. It links the darkness of World War Two through our chosen text "Letters from the Lighthouse" to how light is produced and the Jewish festival of Hanukkah. During our learning journey, we will uncover the secrets of one of the most significant events of the 20th Century and its local significance. To enhance the children's learning, we will retrace the steps of the codebreakers by taking the train to Bletchley Park. We will complete the term by exploring the similarities and differences of three religions: Islam, Christianity and Judaism.

As historians, we travel back in time to experience life during WWII. We will discover which countries were involved in the war and their impact and who the main leaders of those countries were at this time. We will take a train trip to Bletchley Park to explore this local historical site and the role it played in WW2. Life during the Blitz was very different to today and we will find out how children lived and what life was like for those who were evacuated.

We start the year with our cross country topic where we will learn and practice to run at our own pace across a variety of longer distances. This helps us gain a better understanding of our stamina and fitness levels and how to control our pace.

We learn how to create more complex routines in our dance and gymnastics topics whilst also practising our gymnastics shapes, balances, rolls, jumps and we introduce vaulting.

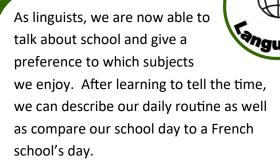
As digital citizens we consider how we conduct ourselves online. We learn about online security focusing on usernames, passwords and how much information about ourselves appear in our online profiles e.g. social media such as WhatsApp or TikTok. Sharing images and the importance of consent online is explored. We continually revisit throughout the year, the effect of our online presence now and the impact this may have on us in the future.

As artists, we continue refining our ideas in our sketchbooks. We learn about adding tone to not only show light and the absence of light but to distinguish between textures and colours when using monochrome media. We increase our modelling techniques by using an armature under a solid outer layer to create modroc spitfires. We ook at facial proportions as we work on a pencil self-portraits. We finally create a digital piece of work based on camouflage patterns.



In Autumn 1, we learn to sing and play along to Happy by Pharrell Williams. We learn about major and minor keys and will follow along with the song using our glockenspiels.

In Autumn 2, our focus is on Jazz music. We listen and appraise lots of different jazz pieces and play some of our own on the glockenspiel.



Later, we will learn how to order in a café and create a small drama piece showing this.

In PSHE, we consider the impact bulling has on people. We explore the role that social media has in our lives and how it can be used positively, and the potential consequences when used negatively. During Black history month, we take time to learn about inspirational people from the past who worked tirelessly to ensure equality for all. We then create a

project based on one person who has inspired us to think about change.

In RE lessons, we learn about the religion of Islam and compare and contrast with other world religions. We look at places of worship, pilgrimage, the 5 pillars and daily routines of a practising Muslim. We explore the story of Hanukkah and why it's celebrated by Jews (linking in with our WWII topic). We then compare this religious celebration to celebrations in other religions we have studied during our time at Loughton School.