



Kibworth C of E Primary School  
Year 5  
Autumn 2 2023  
Scream Machine



Dear Parents and Carers,

We've had a fun start to Year 5! Our 'Traders and Raiders' topic was very well received by all of the children and our group PowerPoints at the end of the topic really expressed our learning. We hope you have rested well over half term and that you are ready to come back to learn.

Reminder: we have two sessions of PE a week on a Monday and Thursday. Please ensure correct PE kits are brought to school on these days. As the weather is getting colder, make sure children are appropriately dressed.

This term we are taking a trip to the 'theme park' in our second topic 'Scream Machine.'

Throughout this unit, we will be exploring the questions:

- What considerations need to be made when opening a theme park?
- How do forces and mechanisms interact with rides?
- What is the design process for making a theme-park ride?

### Literacy

Throughout our literacy learning this year, we are going to be learning about how to write for a range of purposes. Our focus for this half term is writing to persuade, discuss and to inform.

#### Persuasive leaflet, discussion and blurb.

**Book: The Unforgotten Coat by Frank Cottrell Boyce**

**The Boy who Swam with Piranhas by David Almond.**

First, we will be writing a persuasive leaflet for a theme park! Within this unit the children will be learning how to use relative clauses, modal verbs and emotive language to persuade and engage the reader.

After that, we will be writing a discussion. The children will learn how to write using cohesive devices, discursive phrases and topic sentences.

Finally, we will spend a couple of weeks studying the book 'The Unforgotten Coat' by FCB. We explore the themes in detail and use our inference skills to learn more about the characters. We will then write a blurb to summarise the story.

### Mathematics

#### Multiplication and division

Children will practice their formal written methods for multiplication and division which were introduced in Year 4. Having a sound understanding of times tables will really help the children to develop their fluency in these areas. Children will learn how to apply their fluency in these skills to multi-step problems.

#### Angles

This unit will build on the learning that took place in Year 4. Children will learn how to measure angles using a protractor and use their knowledge of acute, obtuse and straight angles to reason. This unit will even have a investigative maths, where we get to explore angles through writing on the tables!

## Key areas of learning:

Computing	RE
<p>Children will:</p> <ul style="list-style-type: none"> <li>• Know how to use physical computing to explore concepts of selections in programming.</li> <li>• Know how to connect and programme components of a micro controller.</li> <li>• Know how algorithms and programmes can be used through the use of an input device.</li> <li>• Know how to use repetition and conditions to write algorithms and programmes that utilise these concepts.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>- know how to identify the difference between a 'Gospel' and a letter.</li> <li>- Know how to offer suggestions about what texts about baptism and Trinity might mean.</li> <li>- Know how to describe how Christians show their beliefs about God and the Trinity in worship and in the way they live.</li> <li>- Know how to make links between some Bible texts studied and the idea of God in Christianity.</li> </ul>
Design & Technology	Science
<p>Children will:</p> <ul style="list-style-type: none"> <li>- Know how to produce a range of ideas after collecting information from different sources.</li> <li>- Know how to produce a detailed step-by-step plan.</li> <li>- Know how to design a product that requires a pulley or gears.</li> <li>- Know how to use a range of tools and equipment competently.</li> <li>- Know how to evaluate against original criteria.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>- Know what gravity is and its effect on objects and its impact on our lives.</li> <li>- Know about the significance of Isaac Newton and his Scientific findings.</li> <li>- Know and identify the effects of air resistance, water resistance and friction.</li> <li>- Know how levers, pulleys and gears allow a smaller force to have a greater effect.</li> </ul>

## Outline of Learning Journey

<b>Engage - Theme parks</b>	We will start the unit by visiting a mini-fairground in school! We will then explore where and why theme parks are located in the UK. We will focus on the human and economic geography of theme parks and how they will take into account geographical elements such as population density, terrain and climate.
<b>Forces</b>	For a few weeks, the children will develop their understanding of the forces: gravity, air resistance, water resistance and friction. We will then move on to exploring how these forces act on a rollercoaster. The children will learn about momentum, kinetic and potential energy. In order to apply this knowledge, the children will get the opportunity to build their own foam rollercoasters and make loop-the-loops!
<b>Apply - Mechanics</b>	To prepare for the building of our rides, we will explore pulley mechanisms. This will involve us drawing on our knowledge of circuits from Year 4 so that we can create a working circuit to test our mechanisms out.
<b>DT - Designing, creating and evaluating a rollercoaster!</b>	In order to apply the knowledge we have learnt over this unit, we will design a fairground ride. After designing, we will work in small groups to make a rollercoaster using a range of materials and tools. Finally, we will evaluate our rollercoasters against a design criteria.

**Things that you could do at home:**

- Visit a theme park
- Look at the maps of different theme parks: where are the facilities and rides? Why is this?
- Look at leaflets of theme parks - How do they persuade you to visit their theme park?
- Design your own rollercoasters using ideas from rollercoasters which already exist.

**Here are a few ideas of how you can support your child's learning at home this half term:**

- Use Times Table Rockstars to practice rapid recall of times tables. <https://ttrockstars.com/login>
- Consolidate mathematics learning at school by using Century Tech learning. <https://app.century.tech/login/>
- Continue to support your child's reading and recording of reading at home. Encourage them to discuss what they have learnt from their reading: this may be through clarifying unknown vocabulary or answering the types of questions we shared with you at parents' evening. Encourage them to read the reading passport books!
- Continue to practice children's weekly spellings which are posted weekly on Teams and in their homework books.

Thank you so much for your continued support. We are looking forward to a fun-filled half term.

Miss Binczik, Mr Roantree, Mrs Wilkinson, Mrs Shuker.

**Year 5 team**