YEAR 5 CURRICULUM
SPRING TERM

‘SHAKE THINGS UP’

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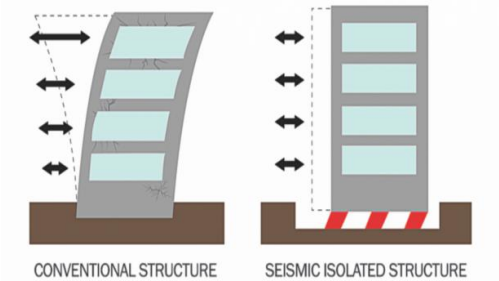

Longhill Primary School Year 5 Spring Curriculum

Theme – Shake Things Up

Driving the Theme:

Design and Technology
As designers we will learn about structures. Explore how to strengthen and stabilise our structures.
Programmes of Study
Design • Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. • Generate, develop, model and communicate their ideas through discussion, and diagrams, pattern pieces and computer aided design. **Make** • Select from and use a wider range of tools and equipment to perform practical tasks accurately. • Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

Evaluate

- Investigate and analyse a range of existing products.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world.

Technical Knowledge

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structure.
- Understand and use mechanical systems in their products.

We will find out about how one of the biggest challenges in earthquake zones is to create buildings that can withstand the shake of an earthquake. We will research shear forces and ways engineers design earthquake proof buildings. Our shake it up challenge will be to build a shake platform to test our prototypes and modify them until they keep the occupants of our buildings safe.

We will also explore different ways to create from blocks and shapes. We will create our own angry birds structures out of real materials.

We will discover how arches are very strong shapes and we will see how architecture throughout the ages has used the arch to create stable structures and openings. We will take the sugar cube arch challenge where we will have to build our own arches out of sugar cubes.

We will explore how to stiffen and strengthen materials by rolling, folding and combining them. We will take part in the paper chair challenge where we will need to make a chair that will hold our own weight out of paper.

Our next challenge will be to make a Tin Foil Tower that is strong and stable and uses only paper and tin foil, a spaghetti structure that turns a brittle materials into a strong structure and a house of cards which will turn flexible and light playing cards into a strong stable house.

Finally we will take part in the Great Bridge Challenge where we will need to use all of our knowledge of structures to build a suspension bridge that is at least half a meter in length. The winner of the challenge will be the best designed and strongest bridge.

Writing	Reading	SPaG
Non Chronological Reports Short 3 week unit on Explanations and then 3 weeks on Persuasion	One whole class SPIES session per week which covers: S: Sets out the objective for the lesson. P: Probe the text. This focuses on content domain 2a and picks out useful vocabulary and language that will help the children to better understand the text and develop their own vocabulary knowledge. I: Investigate further. This focuses on content domain 2b where children answer retrieval questions. E: Extend the learning. This focuses on content domain 2d where children develop their inference skills. S: Search for meaning. This section changes to cover the remaining content domains. <u>Mini Missions:</u> There are two further reading lessons in the week. The first is a taught 'Mini Mission' that focuses on further developing the inference skills of the children as this has been identified as an area to improve. The second 'Mini Mission' is an independent activity that focuses on 2b. Children answer a range of retrieval questions presented in a variety of ways. (Find and copy, tick, number, etc.)	Converting nouns or adjectives into verbs using suffixes –ate, ify, ise Verb prefixes – dis, de, mis, over, re Relative clauses beginning with who, which, where, when, whose, that, or an omitted relative pronoun Indicating degrees of possibility using adverbs or modal verbs. Devices to build cohesion e.g. then, after that, this, firstly Linking ideas across paragraphs using adverbials of time, place and number Brackets, dashes or commas to indicate parenthesis. Use of commas to clarify meaning or avoid ambiguity.

	<u>Big Read Texts</u> The Polar Bears Explorers Club	

Science
<u>Working Scientifically</u> During years 5 and 6 pupils should be

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Taking measurements using a range of scientific equipment with increasing accuracy and precision, taking repeat readings when appropriate.
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scattergraphs, bar and line graphs
- Using test results to make predictions to set up further comparative and fair tests.
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Identifying evidence that has been used to support or refute ideas or arguments.

Properties and change of materials

- To know the similarities and differences between everyday objects and be able to group them based on their propertiues and results of testing.
- To know that some materials are more suitable for particular uses than others based on testing and conclusions.
- To know that some materials will dissolve in liquid to form a solution, and know how to recover a substance from a solution.
- To know how mixtures might be separated, including through filtering, sieving and evaporating.
- To know and explain the difference between reversible and irreversible changes.
- To know that dissolving, mixing and changes of state are reversible changes.
- To know that some changes result in the formation of new materials and that this kind of change is not usually reversible. EG. Burning or mixing acid with bicarb.

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Try New Things – 40 Ways to Build Pupil Resilience.
Separate a mixture – Page 35
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Music

Pupils should be taught to:

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the inter-related dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- develop an understanding of the history of music.

Charanga
Make you feel my love
The Fresh Prince of Bel Air

Continuous Provision
Transitions – use music for transitions between activities.
Storytelling – Keep a range of musical instruments to hand that pupils use to create a soundtrack to their favourite stories or poems.
Warm ups – E.g PE
Calm Sessions – e..g after break times.

Longitudinal Learning
Compose and transcribe
In this ongoing challenge pupils compose musical pieces in 4/4 or ¾ time in a form that others should be able to perform true to the transcript.

Art
Spring 1
Collage
Can select with thought, different materials from the teachers resources, considering content, shape, surface and texture
Can select, sort and modify by, cutting, tearing with care before adding other marks and colour to represent an idea
Can sort and use according to specific qualities, e.g. warm, cold, shiny, smooth

Can engage in more complex activities, e.g. control surface decoration of materials with clear intentions
Can use paste and adhesives to select and place cut and torn shapes onto a surface to convey an idea

Spring 2
Textiles
Can select organise and use materials such as threads, cottons, wool, raffia, paper strips and natural fibres to make a simple craft product
Can sort, select and control colour, line, shape, texture to make and control fabric and textile surfaces from the study of a craft artist
Can collect, deconstruct, discuss and use fabrics and cloth to reassemble new work
Can cut threads and fibres, stitch, sew together and surface decorate using adhesive and bead or buttons
Can weave in a simple loom and build constructed textile surfaces

Modern Foreign Languages

1. Luc et le professeur – Commands (formal / plural)
2. Le vrai professeur – Commands (informal / singular)
3. J'ai les cheveux noirs et longs - Descriptions

Geography	**History**
Locational Knowledge	**Use of sources**

Locate on a map human characteristics of countries around the world. **<u>Longitudinal Learning</u>** Have an ongoing challenge where pupils investigate the main transport bridges in the UK. As an extension pupils may also investigate some of the country's most historic bridges and their engineers and then contrast them with modern engineering design.	Use a variety of reliable sources to gain a deeper understanding of an event. Compare historical sources and suggest the validity of these.

PE	RE	PSHCE- Jigsaw
<u>The PE HUB</u>	Discover RE	<u>Dreams and Goals</u>

Spring 1 Gymnastics • Take responsibility for own warm-up including remembering and repeating a variety of stretches • perform more complex actions, shapes and balances with consistency • Use information given by others to improve performance • Remember and repeat longer sequences with more difficult actions. Netball • To be able to use specific netball skills in games for example confidently: pivoting, dodging, bounce pass and previously learnt skills • To begin to play efficiently in different positions on the pitch in both attack and defence • o increase power and strength of passes, moving the ball over longer distances Spring 2	Spring 1 Theme Beliefs and Moral Values **Key Question:** Are Sikh stories important today? **Religion:** Sikhism Spring 2 Theme Easter **Concept:** Salvation **Key Question:** How significant is it for Christians to believe God intended Jesus to die? **Religion:** Christianity	I understand that I will need money to help me achieve some of my dreams. I know about a range of jobs carried out by people I know and have explored how much people earn in different jobs. I can identify a job I would like to do when I grow up and understand what motivates me and what I need to do to achieve it. I can describe the dreams and goals of young people in a culture different to mine. I understand that communicating with someone in a different culture means we can learn from each other and I can identify a range of ways that we could support each other. I can encourage my peers to support young people here and abroad to meet their aspirations, and suggest ways we might do this, e.g. through sponsorship Healthy Me I know the health risks of smoking and can tell you how tobacco affects the lungs, liver and heart. I know some of the risks with misusing alcohol, including anti-social behaviour, and how it affects the liver and heart. I know and can put into practice basic emergency aid procedures (including

<u>Netball</u> • To be able to use specific netball skills in games for example confidently: pivoting, dodging, bounce pass and previously learnt skills • To begin to play efficiently in different positions on the pitch in both attack and defence • To increase power and strength of passes, moving the ball over longer distances <u>Cricket</u> • Link together a range of skills and use in combination • Collaborate with a team to choose, use and adapt rules in games • Recognise how some aspects of fitness apply to cricket, e.g. power, flexibility and cardiovascular endurance		recovery position) and know how to get help in emergency situations. I understand how the media, social media and celebrity cultures promotes certain body types. I can describe the different roles food can play in people's lives and can explain how people can develop eating problems (disorders) relating to body image pressures. I know what makes a healthy lifestyle including healthy eating and the choices I need to make to be healthy and happy.

Computer Science

Mr Andrews Online Curriculum: Who Wants to Play? (https://mrandrewsonline.co.uk/who-wants-to-play-2/)

Information Technology

- Identify the pros and cons of different games.
- Use creative tools to create a marketing campaign for a game.
- Design and create 8-bit characters.
- Combine text and images to create posters.
- Plan and create a video by combining images, text, music and different layouts.
- Use word processing tools to format a document.

Computer Science

- Work independently to design and program a game for a specific audience.
- Program a game which tells a story over more than one level.
- Experiment with different codes to test each element of a game until the desired outcome is reached.
- Make predictions about what will happen in a program when inputs are changed.
- Test, debug and improve programs.

Digital Literacy

- Describe ways technology can affect healthy sleep and strategies, tips or advice to promote healthy sleep with regards to technology.
- Explain the importance of self-regulating my use of technology and demonstrate the strategies I use to do this (e.g. monitoring my time online, avoiding accidents).
- Describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.