Design Technology Long Term Plan

	Autumn	Spring	Summer
EYFS	**Identity and Diversity** ● Use their senses to explore and describe objects. Make models of their own choosing. ● Explore making, with different equipment including new ways of joining (e.g. split pins, staples, tags, string). ● Be proud of what they have made. ● Be aware that ingredients are available from a range of sources (shops, markets, grown at home). ● Complete basic hygiene tasks (e.g. wash hands). ● Talk about foods they like and dislike with reasons. Discuss the food that they eat during special occasions or cultural celebrations (e.g. birthday, Eid, etc.) ● Be willing to try new foods. ● Understand the importance of healthy food choices.	**Sustainable Development** ● Talk about what they want to make. ● Think of some ideas of their own. ● Explain what they are making. ● Use tools safely. Share their creations, explaining the process they have used.	**Peace and Conflict** ● Make observations about the features of objects. ● Plan how best to approach a task. Select appropriate resources and tools. Explain which tools they are using and why. ● Use tools to manipulate materials. Identify success and next steps. ● Change their strategy as needed. Select and use appropriate tools needed for a recipe. ● Use tools effectively and safely ● Identify and use the appropriate ingredients for a recipe
KS1 Cycle A	**Power and Governance** ● **Topic: Positions of Power Voice of People** ● Supporting text/book Vlad and the Great Fire of London/The King Who Banned the Dark ● Mechanisms: Levers and Linkages: Explore how materials can be connected to make a moving object (eg split pins) https://www.kapowprimary.com/subjects/designtechnology/key-stage-1/year-2/mechanismsmaking-a-moving-monster/	**Sustainable Development** ● **MITNE: Inventors** ● Key Project Mechanisms: Wheels and axles: What is a fair ground? Design a ferris wheel. How do the components fit together so the wheels rotate? How does the structure stand freely? https://www.kapowprimary.com/subjects/designtechnology/key-stage-1/year-2/mechanismsfairground-wheel/	**Peace and Conflict** ● **Topic Living During Conflict What Causes Conflict?** ● Supporting text/book Lion and the Unicorn The One Hundred Steps ● Key Project Textiles: How can I join materials? Pouches Design and create a simple pouch to store something precious. Use templates, consider different joining techniques including glue, staples and pin.

			Evaluate and remake to use a simple stitch. https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-2/textiles-pouches/
KS1 Cycle B	**Identity and Diversity** ● **Topic: Belonging and Identity** ● Supporting text/book: The Paper Bag Princess ● Key Project: Can I use a variety of tools with accuracy? Developing fine motor skills to cut, tape and trace implemented through challenges	**Social Justice** ● **Topic: Helping others and contributing to the wider community** ● Supporting text/book UP! ● Key Project: Food: What is afternoon tea? Categorise foods and consider the importance of fruit and veg in our diets. Design a menu, taste and evaluate foods and make items to hold a tea party for the elderly. (Fruit Skewers,vegetable dippers,sandwiches,decorate cakes) https://www.kapowprimary.com/subjects/designtechnology/key-stage-1/year-1/fruit-andvegetables/	**Globalisation and Interdependence** ● **Topic: Links to the wider world and similarities and differences in the world** ● Supporting text/book The Lonely Beast ● Key Project: Mechanisms: How can you help the lonely beast travel around the world? Wheels and Axels: How do wheels move? Design a vehicle to include wheels and axles . Understand how wheels move, where we find wheels (ie vehicles, trolleys etc) problem solve to identify why wheels won't rotate. https://www.kapowprimary.com/subjects/archive/design-technology/key-stage-1/units/mechanisms-wheels-and-axles/#
LKS2 Cycle A	**Identity and Diversity** ● **Topic: Ancient Egyptians and Roman Britain** ● Supporting text/book The Egyptian Cinderella Escape from Pompeii ● Key Project Food: How can I alter a recipe? Think about the diet of those in Ancient Egypt. Design and make a Rice Salad. Evaluate and consider the changes to be made to the item for taste, appearance and health. https://www.kapowprimary.com/subjects/designtechnology/lower-key-stage-2/year-4/foodadapting-a-recipe ● **Topic: Mechanical Systems: How can air be used to make a moving object?** ● Pneumatic toys - using air to understand how	**Social Justice** ● **Topic MITNE: Castles** ● Key Project: Structures: What is a castle? Learn about the features of a castle design and make one based on these features using nets, recycled materials and a strong base. https://www.kapowprimary.com/subjects/designtechnology/lower-key-stage-2/year-3/structuresconstructing-a-castle/	**Globalisation and Interdependence** ● **Topic Human Rights - How did people settle (Stone Age to Iron Age) and Refugees Why do people move?** ● Supporting text/book The Stone Age Boy The Boy at the Back of the Class ● Key Project Textiles: How can we support refugee children? Use different sewing techniques to make a cushion toy for a refugee. https://www.kapowprimary.com/subjects/ designtechnology/lower-key-stage-2/year-3/textilescushions/

	this makes moving parts. https://www.kapowprimary.com/subjects/designtechnology/lower-key-stage-2/year-3/mechanicalsystems-pneumatic-toys/		
LKS2 Cycle B	**Social Justice and Equity** ● **Topic: Settlements - Vikings and Anglo Saxons** ● Supporting text/book:The Anglo Saxon Boy The Youngest Marcher ● Key Project: Structures: What were viking long ships? Create simple frame structures of Viking longships. https://www.kapowprimary.com/subjects/designtechnology/lower-key-stage-2/year-4/structurepavilions/ ● Key Project Electrical systems: How has electricity developed over time? Compare different sources of light candle, gas, torch electric. Evaluate effectiveness Apply scientific understanding to create a compact torch for someone on an expedition. https://www.kapowprimary.com/subjects/designtechnology/lower-key-stage-2/year-4/electricalsystems-torches/	**Sustainable Development** ● **Topic: Fair Trade** ● Supporting text/book:Flood Earth Friends ● Key Project Food: Where do our healthy foods come from? Compare fair trade and normal food costs - why is there difference? Consider the seasonality of our produce. Create a food item made from fair trade only to sell at a fair - consider how this would be priced. How could this be packaged? https://www.kapowprimary.com/subjects/designtechnology/lower-key-stage-2/year-3/food-eatingseasonally/ ● **Topic MITNE: Transport** ● Key Project Mechanical Systems: Making a slingshot car. Create a slingshot car using sticks, dowels, straws, wheels. Construct using a glue gun and make the launch mechanism. https://www.kapowprimary.com/subjects/designtechnology/lower-key-stage-2/year-4/mechanicalsystems-making-a-slings hot-car/	**Globalisation and interdependence** ● Key Project: Textiles: Mindfulness Matters Look at different techniques of fastening. Create a book sleeve for your favourite book - perfect for your mindful moments. https://www.kapowprimary.com/subject/designtechnology/lower-key-stage-2/year-4/textilesfastenings/
UKS2 Cycle A	**Social Justice and Equity** ● **Topic: Poverty, Homelessness, Victorians** ● Supporting text/book: Street Child/A Christmas Carol ● Key Project Textiles: How do people in Victorian society dress? Look at the design features of past and modern waistcoats. Design and make a waistcoat using templates, pins, stitching to fit a given person/item. Consider the fastenings used for buttons	**Identity and Diversity** ● **Topic: Discrimination** ● Supporting text/book: Wonder ● Key Project Food: How does Mayan food differ from British food? Evaluate and compare foods from other cultures against your own. How does the seasons impact food? Consider the impact of climate on produce (cocoa beans). (Use KAPOW: What could be healthier to support ● **Topic MITNE: Mining Key Project Food: What is the**	**Globalisation and Interdependence** ● **Topic: Globalisation and interdependence Power and Governance** ● Supporting text/book Cosmic The Accidental Prime Minister ● Key Project Structures: How do areas in the community suit children? Consider changes to the environment. Look at the purpose of playgrounds and carry out a census of their use. Design and create a playground model with apparatus. (Use structures: bridges to

	https://www.kapowprimary.com/subjects/design-technology/key-stage-2/year-6/textiles-waistcoats/	**diet of a miner?** ● Look at typical foods consumed by miners - pasty, bread etc. make some irish soda bread - learning to knead. Understand the affordability of this bread (Soda bread recipe in 'Really Useful Primary DT Book') (Use what could be healthier to support)	support making of models and apparatus) Power and Governance **Bridges:** https://www.kapowprimary.com/subjects/design-technology/upper-key-stage-2/year-5/structure-bridges/ Playgrounds: https://www.kapowprimary.com/subjects/designtechnology/upper-key-stage-2/year-6/structureplaygrounds/
UKS2 Cycle B	**Peace and Conflict** ● **Topic: World War 1 and 2** ● Supporting text/book: Letters from the Lighthouse - Last Post/Oranges in No Man's Land ● Key Project: Electrical systems: What is the purpose of a lighthouse? - Recognise the purpose of a lighthouse. Design and build a lighthouse using crumble programming (Computing)	**Sustainable Development** ● **Topic: Water Impacts on the Ocean MITNE: Ship Building** ● Supporting text/book: A Long Walk to Water Floats ● Key Project: Mechanics How do boats float? Design a boat that uses understanding of upthrust and buoyancy. How do boats move/change direction? Understand the mechanics of pulley and levers behind sails/motors/propellers https://www.stem.org.uk/polar-explorer-educational-resources	**Human Rights** ● **Topic: Changes and Breakthroughs How to Change the World** ● Supporting text/book: Pig Heart Boy/Can You See Me ● Key Project Food: Celebrating the culture of our partner school. (Come Dine With Me, Inspired by French Trip) France Trip Crepe workshop making crepes Evaluate this and consider how these could be made differently and more healthily based on seasonal fruits. Understand the process from farm to fork for some of the ingredients used and develop a Come Dine with Me experience https://www.kapowprimary.com/subjects/ designtechnology/upper-key-stage-2/year-6/food-comedine-with-me/ ● **Topic: BEE WEEK** ● Key Project: How can we support the bee population? Design and create an eco friendly way to distribute bee friendly plants to support the bee's need for pollen. Create a wooden frame to display these on.