



## Design and Technology – Long-Term Plan

### Subject Curriculum Intent Statement:

We are Design Technologists!

At Stoke Heath, we learn about the practical ‘Made World’, consisting of garments, devices, food, mechanisms, machines, furniture and environments. In our school, we interact with the Made World as active participants by using our creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts, considering our own and others’ needs, wants and values. This is achieved through a bespoke and personalised curriculum which gives our children the knowledge and skills needed. Our learners are appropriately challenged through a breath of opportunities helping them to become procedurally fluent in this subject. We acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, I.T. and art. Our children are encouraged to take risks, become resourceful, innovative and enterprising. Through the evaluation of past and present Design and Technology, they develop a critical understanding of its impact and essential contribution to everyday life within the Stoke Heath community and beyond.

Year	Autumn	Spring	Summer
1	<b>MECHANISMS:</b> Levers and sliders linked to Christmas / Wintertime e.g. make a Christmas /Winter card with a moving part.	<b>FOOD TECHNOLOGY:</b> Preparing fruit linked to Science - Animals including humans e.g. make a fruit cocktail.	<b>STRUCTURES:</b> Freestanding structures linked to Science - Materials (properties) e.g. make a freestanding structure based on an English text such as a bridge for the Three Billy Goats Gruff to cross the river safely, etc.
2	<b>TEXTILES (sewing):</b> Templates and joining techniques linked to Science - Materials (uses) e.g. make a Christmas glove / finger puppet, etc.	<b>MECHANISMS:</b> Wheels & axles linked to English e.g. design and make a vehicle for a story character.	<b>FOOD TECHNOLOGY:</b> Preparing vegetables linked to Science - Animals including humans (food and exercise) e.g. make a healthy summer egg/potato salad.
3	<b>MECHANICAL SYSTEMS:</b> Levers and linkages linked to Christmas / Wintertime e.g. make a story book with moving parts with a seasonal theme.	<b>STRUCTURES:</b> Shell structures linked to Maths - Shape and space e.g. make a desk tidy, keep safe box, gift box for Easter, etc.	<b>FOOD TECHNOLOGY:</b> Health and varied diet linked to Science - Animals including humans (food and exercise) e.g. make a healthy sandwich / wrap / roll / pitta pocket with several ingredients.



4	<p><b>FOOD TECHNOLOGY:</b> Healthy and varied diet linked to Science - Animals including humans (digestion and teeth) e.g. make a healthy savoury dish such as a mixed winter salad with added cooked ingredients.</p>	<p><b>ELECTRICAL SYSTEMS:</b> Simple circuits and switches linked to Science from Aut 2 - Electricity (reinforce and apply learning) e.g. make a reading light / nightlight / torch / table lamp, etc.</p>	<p><b>TEXTILES (sewing):</b> 2D shape to 3D product e.g. make a beach bag for the summer holidays.</p>
5	<p><b>FOOD TECHNOLOGY:</b> Celebrating culture linked to PSHE - Celebrating cultures &amp; diversity e.g. make different types of bread / pizzas, etc.</p>	<p><b>MECHANICAL SYSTEMS:</b> Cams linked to Science - Forces e.g. make an Easter toy with oscillating, rotating or reciprocating movement.</p>	<p><b>STRUCTURES:</b> Frame structures linked to Science - Materials (properties) e.g. make a playground shelter, tent, play-house, gazebo, bird hide, kite, adventure playground equipment, etc.</p>
6	<p><b>TEXTILES (sewing):</b> Combining different fabrics and CAD linked to seasonal celebration e.g. make a fabric advent calendar, etc.</p>	<p><b>FOOD TECHNOLOGY:</b> Celebrating seasonality linked to Science - Living Things e.g. make a savoury dish such as a curry &amp; rice dish or a pasta &amp; sauce dish using seasonal produce.</p>	<p><b>ELECTRICAL SYSTEMS:</b> More complex circuits &amp; Monitoring and control linked to Science - Electricity e.g. make a vehicle alarm, alarm for school shed, alarm for valuable artefact, automatic night-light, security lighting system, garden light, etc.</p>