





YEAR 2

**DESIGN & TECHNOLOGY
CURRICULUM**

Year 2 D&T - Broader Curriculum Aims and Objectives

Key Themes	Topics of Study
<ul style="list-style-type: none"> Food Technology Mechanisms Textiles 	<ul style="list-style-type: none"> Taste Combinations - Healthy wrap Wheels and Axels - Fairground Wheel Stitching Textiles - Pouches
Key D&T Knowledge and Understanding	Vocabulary
<ul style="list-style-type: none"> Know that food can be divided into five groups and how much of each food group is recommended per day. Know that wraps can form part of a healthy diet if they have the right combination of fillings. Know how to design and plan a sandwich for a particular purpose. Know how to prepare food hygienically and safely. Know that textiles are flexible materials which are woven from fibres. Know some uses for textiles. Know how to join fabrics together and how to attach different materials and/or decorations. Know that some joining techniques such as pinning or stapling are quick but not as secure as sewing or gluing. Know how to use a template to create a fabric treasure pouch. Know how to sew textiles together using a simple stitching technique. Know that a mechanism is a system of parts working together to form a purpose, movement or series of steps in a product. Know that a wheel mechanism is made up of a wheel, an axle, an axle holder and a frame or base. Know that a wheel is a circular object that revolves on an axle Know that an axle is a rod that enables a wheel to rotate. The wheel can rotate freely on the axle or be fixed to, and turn with, the axle. Know how to create joints and structures from paper/card and tape. Know how to use tabs and joins as techniques for making a structure more stable. 	<p>Alternative, diet, balanced diet, evaluate, ingredients, expense, nutrients, packaging, refrigerator. Axle, decorate, Ferris wheel, Ferris wheel pod, mechanism, stable, strong, weak, waterproof, test. Design criteria, input, linkage, mechanical, mechanism, output, pivot.</p> <p>Function, man-made, mould, natural, stiff, structure.</p> <p>Accurate, fabric, knot, pouch, running-stitch, sew, shape, stencil, template.</p>
	Quality Literature Links
	 

Year 2 D&T - Broader Curriculum Aims and Objectives

Progression of Skills / Disciplinary Knowledge

Designing	Making	Technical Knowledge	Evaluating and Analysing	Cooking and Nutrition
Understanding Contexts, Users and Purposes. Generating, developing, modelling and communicating ideas	Planning, Practical Skills and Techniques	Construction and Textiles	Own Ideas and Products Existing Products	Understand and apply the principles of nutrition and learn how to cook.
<ul style="list-style-type: none"> • Have own ideas and plan what to do next. • Explain ideas and describe how they might be achieved. • Explain the purpose of a product, how it will work and how it will be suitable for a user. • Describe and design using pictures, words, models, diagrams and begin to use IT. • Design products for self and others following design criteria. • Choose the best tools and materials and explain choices. • Use knowledge of existing products to generate ideas. 	<ul style="list-style-type: none"> • Explain what is going to be made and how it fits the purpose. • Make suggestions about what to do next. • Join materials/ components together in different ways. • Measure, mark out, cut and shape materials and components with support. • Describe the tools being used and why. • Choose suitable materials and explain choices linked to characteristics. • Use finishing techniques to make products look good. • Work in a safe manner. 	<ul style="list-style-type: none"> • Measure and cut materials • Describe some different characteristics of materials. • Join materials (inc textiles) in different ways and explain the process. • Use joining, rolling or folding to make things stronger. • Use own ideas to strengthen a product. • Explain choice of textiles. • Understand that a 3D textile structure can be made from two identical fabric shapes. 	<ul style="list-style-type: none"> • Describe what went well thinking about design criteria. • Talk about existing products considering: use, materials, how they work, audience, where they might be used, express personal opinion. • Evaluate how good existing products are. • Talk about what could make a product better and what could have been done differently. 	<ul style="list-style-type: none"> • Explain basic hygiene. • Describe the importance of a balanced diet. • Show understanding of where food comes from- animal/underground etc. • Explain there are different groups of food. • Describe what is meant by "five a day". • Cut, peel and grate with increasing confidence.

PRIOR LEARNING LINKS - D&T

Y1: Fruit Smoothies-Understand the difference between fruits and vegetables. Use senses to explore smell, taste and texture. Develop peeling, cutting and grating skills.



FUTURE LEARNING LINKS - D&T

Y3 Seasonal Tarts: Learn more about where foods come from in the UK and the wider world. Understand which foods are available within which season. Adapt and follow a recipe to make a seasonal tart.

Year 2 Design & Technology

Unit of Learning: **Let's Make a Healthy Wrap**

D&T School Theme: Food and Nutrition

Teaching Sequence for this Unit.

What is meant by a healthy balanced diet?

What are the five food groups?
How much of each should we aim to eat each day?

FN

TK

What senses apart from taste do we use to experience food?

How do different foods feel, smell and taste?

FN

A

TK

What would need to go in a set of design criteria for a healthy wrap?

What would be the best combination of ingredients to use so that the wrap is healthy and tastes good?

FN

A

D

What will I put in my healthy wrap and why?

Does it fit the design brief? What food groups do my ingredients belong to?

FN

TK

D

Can we make and evaluate a healthy wrap using our chosen ingredients?

What techniques will we need to use?
How can we stay safe and be hygienic?

M

E

FN

Focus for Disciplinary Knowledge

Designing	Making	Technical Knowledge	Evaluating and Analysing	Food and Nutrition
Understanding Contexts, Users and Purposes. Generating, developing, modelling and communicating ideas	Planning, Practical Skills and Techniques	Construction, Textiles, Mechanical Systems and Electrical Systems	Own Ideas and Products Existing Products	Understand and apply the principles of nutrition and learn how to cook.



PRIOR LEARNING LINKS - D&T

Y1-Making a Windmill-Nets and Axles.

Learnt about using nets and templates to create simple structures. Developing understanding of how to strengthen structures by using a base. Developing awareness of simple mechanisms through understanding the different components in a windmill and how the wind turbine moves freely.

Y1-Moving Story Book: Explored how sliders are used to make things move-side-to-side and up-and-down. Designed moving picture , created slider and assembled own moving story book.

FUTURE LEARNING LINKS - D&T

- **Y3: Moving Monsters**– Develop further understanding of how moving parts work to create a mechanism. Looking at linkage system and the components within it. Learning more about product design criteria and selecting the most materials and equipment.

Year 2 Design & Technology

Unit of Learning: **Let's Make a Ferris Wheel?**

D&T School Theme: Mechanisms-Wheels and Axles

Teaching Sequence for this Unit.

Who invented the first Ferris Wheel?

How does a Ferris wheel mechanism work?

What examples of Ferris wheels can we find? What do we like/dislike?

A

TK

What will we need to consider as we design our own Ferris wheel?

Can we create an annotated design sheet, which includes key components and how they will be attached?
Which shapes make the strongest frame?

D

TK

What are the key parts to a Ferris Wheel and what materials are the most suitable to use to make them?

Can we add our selected materials and equipment to our design sheet?
Can we decide on the best order for the build?

D

A

TK

What techniques will we use to build and assemble our frame structure and Ferris wheel?

How can tabs and joins be used to create a stable structure?
How can axles be used to make a wheel rotate?

M

TK

What techniques/ equipment will we use to create and attach our pods and decorate the finished product?

M

TK

What tests do we need to carry out to evaluate if our mechanisms work?

Is it safe and does it look appealing?

E

TK

Focus for Disciplinary Knowledge

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PRIOR LEARNING LINKS - D&T

EYFS: Through continuous provision, children will have had a range of purposeful learning opportunities involving cutting and joining different materials and fabrics.



Year 2 Design & Technology

Unit of Learning: **Can we Make a Pouch?**

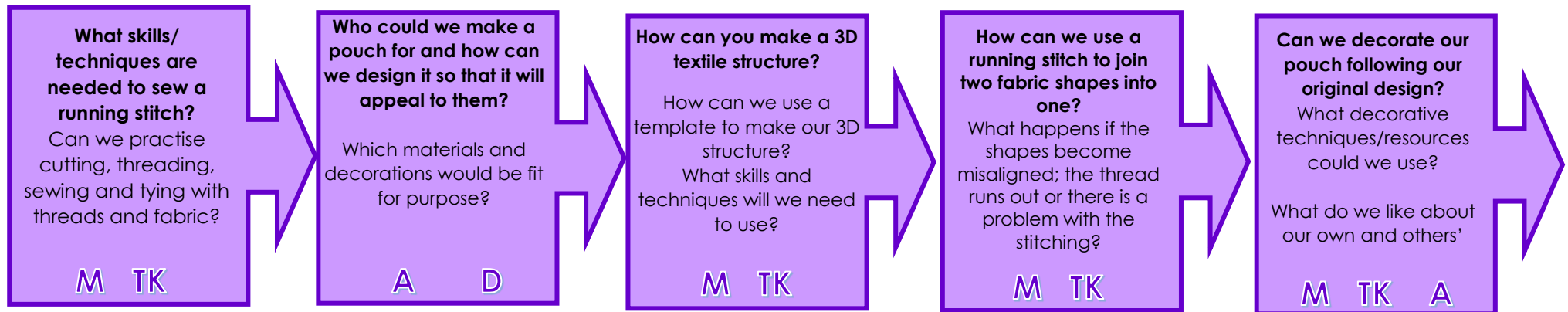
D&T School Theme: **Textiles**

FUTURE LEARNING LINKS - D&T

Y4 Book Sleeves. Explore different types of fasteners. Make and test a template. Pin, mark and cut out fabric. Use different techniques including sewing, to join and decorate.

Y6 Stuffed Toys. Use a range of stitches to add decorations and objects to a felt main body. Stuff the main body and use strong and secure blanket stitching to ensure it remain intact.

Teaching Sequence for this Unit.



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