

Design & Technology - Year 3 Spring 1: Scheme of Learning
Half Term Enquiry: Could you survive in both a rainforest and a city?

D&T Enquiry: How can we preserve certain foods?
D&T Strand: Cooking & Nutrition

Cooking & Nutrition	Lesson Plans	Links	Destinations (I will be able to ...)
	Investigate L.O: To know why we need to preserve fruits	Whole School Theme: We Are Geographer Reading: A Bear called Paddington Geography: Rainforest Biome Science: Animals inc Humans	Declarative: <ul style="list-style-type: none"> Know the different food groups and their impact on our health Know jams and marmalades preserve summer fruits Procedural: <ul style="list-style-type: none"> Know how food can be changed through the process of boiling
	Design & Technology Technical Knowledge & Skill L.O: To know the process of making jam		
	Design L.O: To know why jams are made		
	Make L.O: To know why boiling is used in the process of making jam/marmalades		
Evaluate L.O: To know why chefs evaluate their work so as to make improvements			

TECHNOLOGICAL FLOW SHEET FOR PROCESSING OF MARMALADE



preserve	To keep something as it is, especially in order to prevent it from decaying or being damaged or destroyed.
preservation	The act, process or result of preserving something.
boiling	The action of bringing a liquid to the temperature at which it bubbles and turns to vapour.
carbohydrates	Are one of the three main nutrients in food (along with fat and protein). Carbs are found in grains, such as bread, pasta, etc.
protein	A nutrient in food that help build, maintain and replace the tissues in your body. Protein can be found in eggs, nuts, beans, fish, etc.
Fruits and vegetables	A food group that are packed with vitamins and fiber. Parts of plants that we can eat.
marmalade	A clear jelly containing pieces of fruit and fruit rind.

Design & Technology - Year 3 Spring 2: Scheme of Learning
Half Term Enquiry: How does light work?

D&T Enquiry: What makes a lighthouse work well?
D&T Strand: Construction

Construction	Lesson Plans	Links	Destinations (I will be able to ...)
	Investigate L.O: To know what a lighthouse does	Whole School Theme: We Are Scientists Reading: Featherlight Geography: Arctic Norway (Europe) Science: Light	<u>Declarative:</u> <ul style="list-style-type: none"> Know the different properties of different materials <u>Procedural:</u> <ul style="list-style-type: none"> Choose materials fit for purpose Know how to make something strong and tall Understand the need for completing a successful brief
	Design & Technology Technical Knowledge & Skill L.O: To know that a lighthouse needs to be tall and strong		
	Design L.O: To know which materials to use that are appropriate for the brief		
	Make L.O: To know how to make my design stronger and more stable		
Evaluate L.O: To know why we evaluate our design			



lighthouse	A tower with a powerful light at the top that is built on or near the shore to guide sailors at night.
structure	A thing made up of a number of parts joined together in a certain way.
materials	The matter or substance that objects are made from.
light	Is a form of energy
strong	Not easily broken or damaged

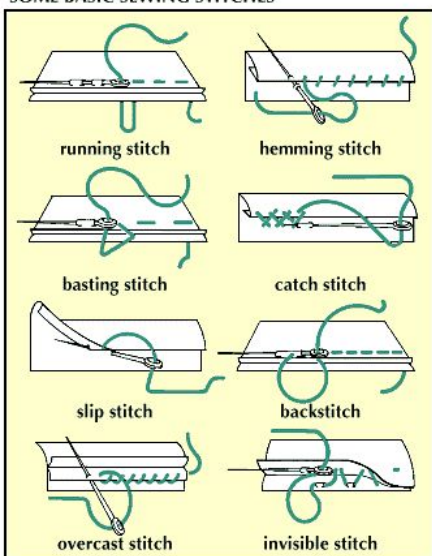
Design & Technology - Year 3 Summer 2: Scheme of Learning
Half Term Enquiry: Why are the ice caps melting?

D&T Enquiry: How can you keep warm in a cold place?
D&T Strand: Textiles

Textiles	<u>Lesson Plans</u>	Links	<u>Destinations</u> (I will be able to ...)
	Investigate L.O: To know that different materials are used for different purposes	Whole School Theme: ... So we can change our world! Reading: The Last Polar Bear Geography: Climate Change - Arctic	<p>Declarative:</p> <ul style="list-style-type: none"> Know that different materials have different properties (keeping warm) <p>Procedural:</p> <ul style="list-style-type: none"> Know how to join materials to make a piece of clothing Test and evaluate a product
	Design & Technology Technical Knowledge & Skill L.O: To know how to join materials (sewing)		
	Design L.O: To know why clothing is designed with function in mind		
	Make L.O: To know how to use sewing to join materials		
Evaluate L.O: To know why clothes are tested and evaluated against the brief			



SOME BASIC SEWING STITCHES

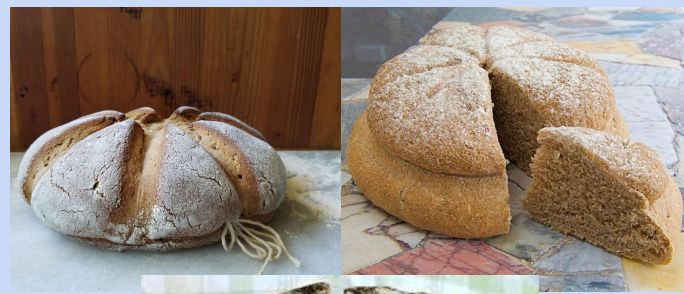


sewing	The act or process of working on fabric with a needle and thread.
stitch	One movement of a needle and thread through cloth or other material when sewing
functional	Serving a purpose or able to serve the intended purpose e.g the function of the coat is to keep the bear warm.
materials	The matter or substance that objects are made from.
purpose	A reason or plan that guides an action; design or goal.
warmth	The condition of being warm

Design & Technology - Year 4 Autumn 1: Scheme of Learning
Half Term Enquiry: What legacy did the Romans leave in Britain?

D&T Enquiry: Why does diet depend on where you live?
D&T Strand: Cooking & Nutrition

Cooking & Nutrition	Lesson Plans	Links	Destinations (I will be able to ...)
	Investigate L.O: To know what Romans ate and why	Whole School Theme: We Are A Community Reading: Julius Zebra History: Roman History Geography: Local study	<u>Declarative:</u> <ul style="list-style-type: none"> Know that diet depends on where you live and what is available Know there are safe and unsafe things to eat <i>(In Roman times the pipework was lead which led to some ill people) (Romans were able to grind grain finer due to them using a wheel which helped them protect their teeth)</i> <u>Procedural:</u> <ul style="list-style-type: none"> Know how to bake bread
	Design & Technology Technical Knowledge & Skill L.O: To know how bread was made by the Romans		
	Design L.O: To know why certain tools and ingredients were used in the baking of bread		
	Make L.O: To know how to bake bread		
Evaluate L.O: To know why choice of ingredients is important in the final outcome			

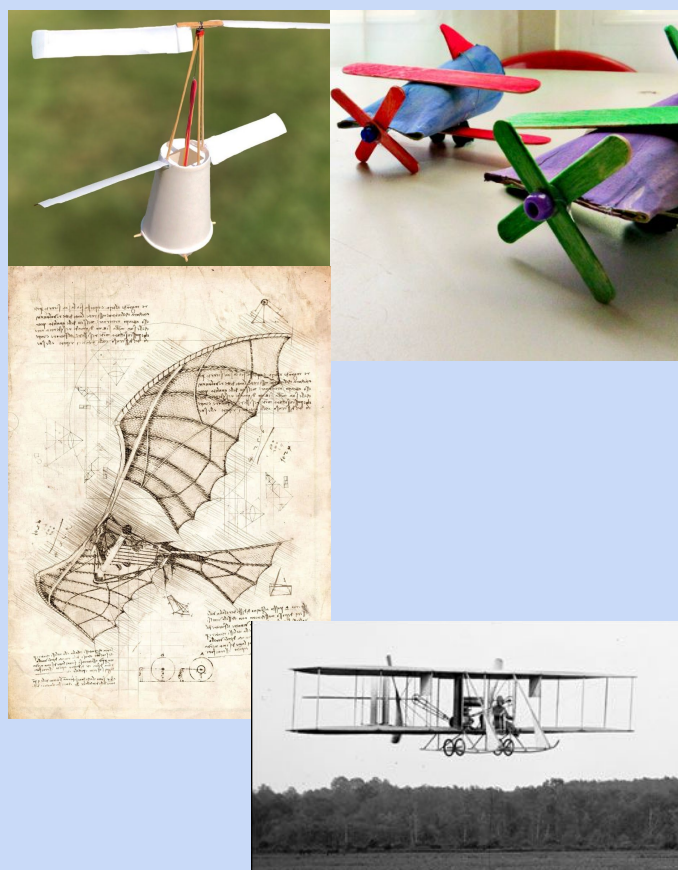


proving	When the yeast dough is allowed to rest and rise a final time before baking. Proving makes the dough much lighter and softer resulting in a well-risen loaf.
kneading	To work the dough, usually by hand, for the purpose of developing the glutens in the flour.
grain	Types of grass that produce seeds that can be eaten.
loaf	A shaped or molded mass of bread
bread	A food consisting of flour or meal that is moistened, kneaded into dough, and often fermented using yeast, and it has been a major sustenance since prehistoric times.

Design & Technology - Year 4 Spring 2: Scheme of Learning
Half Term Enquiry: How have inventions changed over time?

D&T Enquiry: How do objects fly?
D&T Strand: Construction

Construction	Lesson Plans	Links	Destinations (I will be able to ...)
	Investigate L.O: To know how past inventors designed machines to fly	Whole School Theme: We Are Scientists Reading: Clockwork History: Inventions over time	<u>Declarative:</u> <ul style="list-style-type: none"> Know how structures move (<i>Thrust</i>) <u>Procedural:</u> <ul style="list-style-type: none"> Know how to make something fit for purpose Understand that key individuals have helped shape the world (<i>Leonardo Da Vinci</i>)
	Design & Technology Technical Knowledge & Skill L.O: To know how to make something fly		
	Design L.O: To know why designs are created around a purpose		
	Make L.O: To know how to make something fly		
Evaluate L.O: To know why we evaluate our designs			



thrust	To push or drive with force.
drag	A force which tends to slow the movement of an object through liquid or gas.
lift	The force that acts at a right angle to the direction of motion through the air.
aerodynamic	The way objects move through the air.
weight	Is the force of gravity.
fly	An act of passing through air or space

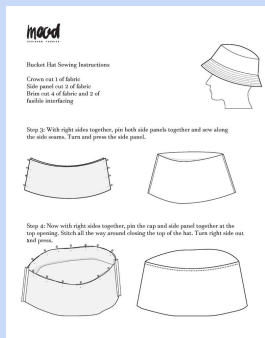
Design & Technology - Year 4 Summer 2: Scheme of Learning
Half Term Enquiry: Why are there more natural disasters than ever before?

D&T Enquiry: Which materials will best protect us from the sun?
D&T Strand: Textiles

Textiles	<u>Lesson Plans</u>	Links	<u>Destinations</u> (I will be able to ...)
	Investigate L.O: To know how people use clothes to protect themselves in different environments	Whole School Theme: ... So We Can Change Our World! Reading: Floodland Science: Living things and their habitats Geography: Natural Disasters	Declarative: <ul style="list-style-type: none"> Know that different materials have different properties Procedural: <ul style="list-style-type: none"> Know how to join material in different ways and evaluate the best Test, evaluate and improve a product
	Design & Technology Technical Knowledge & Skill L.O: To know different ways of joining materials		
	Design L.O: To know why designs are created around a purpose		
	Make L.O: To know which joins are the best for the purpose of the design		
Evaluate L.O: To know why we evaluate our designs			



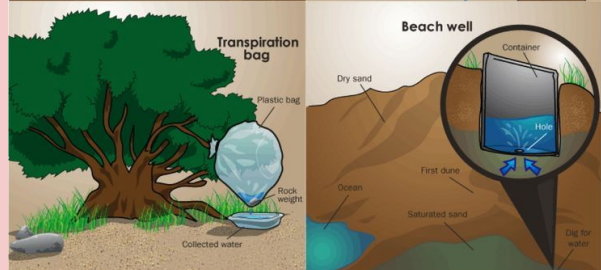
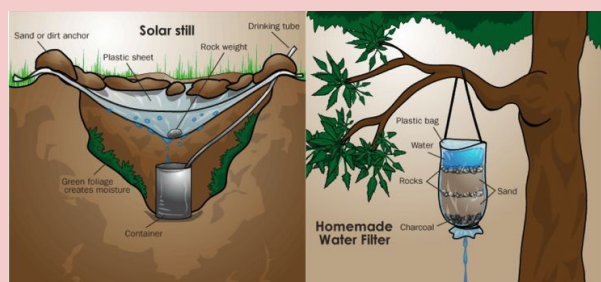
seam	The fold, line or groove made by sewing together or joining two edges or two pieces.
fabric	A cloth made by knitting or weaving together fibres.
reinforce	To strengthen by additional assistance, material or support.
fastenings	Something such as a clasp or zip that you use to fasten something and keep it shut
stitch	One movement of a needle and thread through cloth or other material when sewing
Sun hat	A hat that is worn to protect the head and neck from the sun.



Design & Technology - Year 5 Spring 1 Scheme of Learning
Half Term Enquiry: Could you survive in the wilderness?

D&T Enquiry: What materials are available to us in the wilderness?
D&T Strand: Textiles

Textiles	<u>Lesson Plans</u>	Links	<u>Destinations</u> (I will be able to ...)
	Investigate L.O: To know materials are natural and man-made	Whole School Theme: <i>We Are Geographers</i> Reading: <i>Holes</i> Science: <i>Properties of Materials</i> Geography: <i>Wilderness Biome</i>	<u>Declarative:</u> <ul style="list-style-type: none"> Know some materials are natural and some are man made <u>Procedural:</u> <ul style="list-style-type: none"> Know how to join different types of materials Seek out and value other people's opinions and advice
	Design & Technology Technical Knowledge & Skill L.O: To know how to use different types of materials		
	Design L.O: To know why using materials naturally occurring can support our survival		
	Make L.O: To know how to use materials to create storage for water		
Evaluate L.O: To know why we need other people's opinion on designs.			

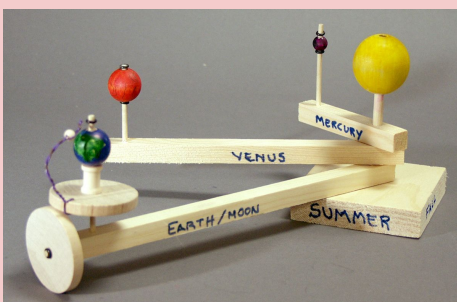
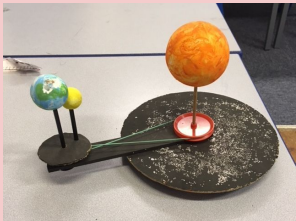
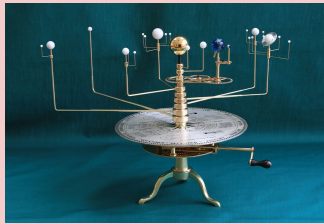


permeable	A material which allows water or liquids to flow through it.
impermeable	A material that does not allow water or liquid to pass through it.
transparent	Letting light pass through and giving a clear view of objects on the other side.
stitch	One movement of a needle and thread through cloth or other material when sewing
seam	The fold, line or groove made by sewing together or joining two edges or two pieces.
storage	A place for storing goods

Design & Technology - Year 5 Spring 2 Scheme of Learning
Half Term Enquiry: Could we survive on another planet?

D&T Enquiry: How do models help us understand scientific concepts?
D&T Strand: Construction

Construction	<u>Lesson Plans</u>	Links	<u>Destinations</u> (I will be able to ...)
	Investigate L.O: To know what models and prototypes are	Whole School Theme: <i>We Are Scientists</i> Reading: <i>Boom</i> Science: <i>Earth & Space</i> History: <i>Space Race - Causes & Consequences</i>	<p><u>Declarative:</u></p> <ul style="list-style-type: none"> Know that you can make a model of something much bigger <p><u>Procedural:</u></p> <ul style="list-style-type: none"> Know how to use moving components like gears, pulleys & linkages in a model Understand the need for precise planning and prototypes
	Design & Technology Technical Knowledge & Skill L.O: To know how prototypes are used in design		
	Design L.O: To know why precise planning is required when designing a model of something bigger		
	Make L.O: To know how to create a moving prototype		
Evaluate L.O: To know why we evaluate prototypes and models			



orrery	An mechanical model showing the relative positions and motions of the planets and moons.
prototype	A test, or original, model of a product or a technology from which improvements, upgrades or fundamental changes can be made.
model	A replica of something. A model may be a working copy, made to scale or larger than life.
axle	Is a bar that goes through the wheels, keeping them in place and allowing them to turn.
pulley	A small wheel with a grooved rim used with a rope or chain to change the direction of a pulling force and in combination increase the force applied by lifting.
spherical	Having or nearly having the shape of a sphere; rounded

Design & Technology - Year 5 Summer 1 Scheme of Learning
Half Term Enquiry: Why did the Vikings travel so far?

D&T Enquiry: What did the Vikings eat and why?
D&T Strand: Cooking & Nutrition

Cooking & Nutrition	<u>Lesson Plans</u>	Links	<u>Destinations</u> (I will be able to ...)
	Investigate L.O: To know that a healthy diet was reliant on preserving food	Whole School Theme: <i>We Are Historians</i> Reading: <i>Viking Boy</i> History: <i>The Anglo-Saxons & the Vikings</i>	<u>Declarative:</u> <ul style="list-style-type: none"> Know that a healthy diet was reliant on preservation of food Know food can be caught and eaten raw or pickled <u>Procedural:</u> <ul style="list-style-type: none"> Know how to fry/barbeque food safely (<i>Anglo Saxons boiled everything and vikings barbequed everything</i>)
	Design & Technology Technical Knowledge & Skill L.O: To know the different ways of cooking		
	Design L.O: To know why Vikings ate specific types of meals		
	Make L.O: To know how to cook meat		
Evaluate L.O: To know why we evaluate recipes			



preservation	The action of preserving something - keeping something safe from injury, harm or destruction (decay in food)
barbeque	A meal at which meat, fish, or other food is cooked out of doors on a rack over an open fire or on a special appliance.
fry	Cook (food) in hot fat or oil, typically in a shallow pan.
pickled	Preserving food in a vinegar or brine e.g. pickled onions.
healthy	In a good physical or mental condition.

Design & Technology - Year 6 Spring 1 Scheme of Learning
Half Term Enquiry: How does migration help us survive?

D&T Enquiry: How can our clothes help show who we are?
D&T Strand: Textiles

Textiles	<u>Lesson Plans</u>	Links	<u>Destinations</u> (I will be able to ...)
	Investigate L.O: To know different materials have aesthetic properties	Whole School Theme: <i>We Are Geographers</i> Reading: <i>The boy at the back of the class</i> History: <i>The Windrush</i> Geography: <i>Human Geography - Migration</i>	<p><u>Declarative:</u></p> <ul style="list-style-type: none"> Know that materials have aesthetic properties <p><u>Procedural:</u></p> <ul style="list-style-type: none"> Use a variety of materials and joining techniques Evaluate my product against my own design and consider and respond to the views of others to improve
	Design & Technology Technical Knowledge & Skill L.O: To know the process of creating a piece of clothing		
	Design L.O: To know why artists reflect their culture in their designs		
	Make L.O: To know how use knowledge of sewing process to create a individual piece		
Evaluate L.O: To know why designers evaluate their product against their initial design.			



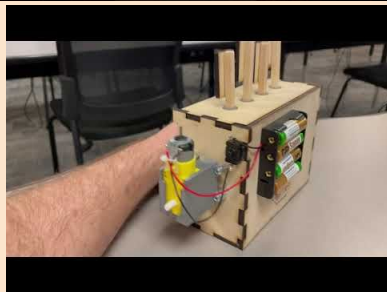
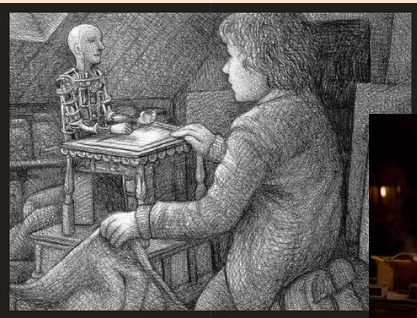
aesthetic	Concerned with beauty or the appreciation of beauty.
batik	An art and craft that is popular around the world. It originated from Indonesia and uses wax-resist dyes applied to cloth.
ankara	A type of common material for clothing in West Africa and Central Africa.
culture	The language, customs, ideas and art of a particular group of people.
print	An image created on one surface, and transferred to another, in a process that is repeatable, thereby enabling the production of multiple impressions.

Design & Technology - Year 6 Summer 1 Scheme of Learning

Half Term Enquiry: What events led to Islam as we know it today? (**Previous Enquiry Link** - How has electricity impacted the evolution of film?)

D&T Enquiry: How can we make mechanical objects move?
D&T Strand: Construction

Construction	Lesson Plans	Links	Destinations (I will be able to ...)
	Investigate L.O: To know how electrical and mechanical components can make things move	Previous Half Terms Learning Link Whole School Theme: <i>We Are Scientists</i> Reading: <i>Hugo</i> Science: <i>Electricity</i>	<u>Declarative:</u> <ul style="list-style-type: none"> Know electrical and mechanical components can be used to make something work <u>Procedural:</u> <ul style="list-style-type: none"> Know how to use circuits incorporating switches, bulbs, buzzers or motors Understand programming, monitoring and control in my product
	Design & Technology Technical Knowledge & Skill L.O: To know how designers make their designs move		
	Design L.O: To know how designers incorporate electrical and mechanical components in their designs		
	Make L.O: To know how to use mechanical and electrical components		
	Evaluate L.O: To know why designers evaluate their final product		

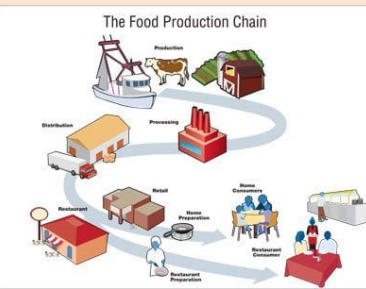


automaton	Is a self-operating machine, or a machine or control mechanism designed to automatically follow a predetermined sequence of operations.
circuits	A path for electricity to move through
mechanism	The working or moving part or process that causes a result
figure	Bodily shape or form especially of a person

Design & Technology - Year 6 Summer 2 Scheme of Learning
Half Term Enquiry: What can we do to change our world?

D&T Enquiry: How does time of the year impact access to specific foods?
D&T Strand: Cooking & Nutrition

Cooking & Nutrition	<u>Lesson Plans</u>	Links	<u>Destinations</u> (I will be able to ...)
	Investigate L.O: To know what foods are available at different times (Seasonality)	Whole School Theme: ... So We Can Change Our World Reading: Trash Geography: Climate Change - Sustainability Science: Evolution & Inheritance	<p>Declarative:</p> <ul style="list-style-type: none"> Know about a healthy and varied diet <p>Procedural:</p> <ul style="list-style-type: none"> Know that they can use a range of cooking techniques (<i>boiling, frying, barbequing, etc</i>) Understand seasonality and use this in my choices
	Design & Technology Technical Knowledge & Skill L.O: To know how to choose appropriate foods and cooking techniques for a planet friendly diet		
	Design L.O: To know how to use knowledge of how and when food grows to design a meal		
	Make L.O: To know how to make appropriate choices in preparing a planet-friendly meal		
Evaluate L.O: To know why we evaluate our choices and this helps us improve			



sustainability	Using natural resources in a way that we could keep doing for a long time.
seasonal	Fresh food where their taste and nutritional value is considered to be at their highest when they are in season (particular time of year)
method	A way, plan or procedure for doing something e.g. cooking

