



KS1 Geography Brazil



The design process is linked into every strand - objectives from this strand should be included when planning.

Textiles

- Carnivale masks / headwear - explore cutting and painting on textiles to create a carnivale mask.
- Create colourful necklaces or bracelets for carnivale using beads.

Objectives

- Cut textiles using scissors and a template.
- Decorate textiles using crayons, paint or sticking.
- Join textiles using glue.
- Thread beads or other objects to create a simple jewellery piece.

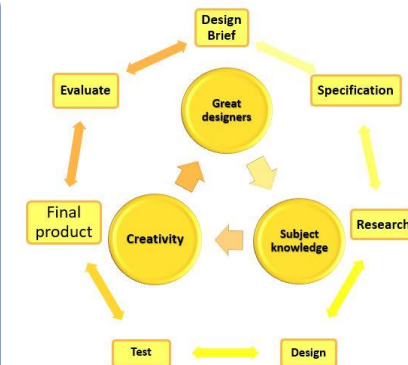


Food and Nutrition

- Explore the ingredients that are native to Brazil - Brazil grows one third of the world's oranges for example and is a leader in growing bananas, soy beans cacao and rice.
- Explore how to peel an orange safely - what methods can we use?
- Brigadeiro - Brazilian chocolate truffles. Make and market in Carnivale packaging
- Feijoada, traditional Brazilian stew.

Objectives

- Cut soft foods safely and hygienically using an appropriate tool.
- Measure using measuring cups and spoons.
- Assemble ingredients to make a simple recipe.
- Know where a range of fruits and vegetables come from.



Resistant Materials

- -Link to Carnivale masks - what is the best material to build a mask on to? How can we secure our head piece to make sure it doesn't fall off when we dance?
- -Carnival float van models - explore adding wheels to different structures to make a creative float.
- Exploring strong structures- Christ the Redeemer - what is it made from? How was it built?

Objectives

- Follow basic procedures for safety.
- Cut materials safely using scissors.
- Tear, fold and curl materials.
- Join using gluing and taping.
- Begin to use a simple hinge.
- Select materials and tools based on their properties.
- Create products based on a design.
- Explore and use simple mechanisms [for example, levers, sliders, wheels and axles], in their products.
- Build structures, exploring how they can be made stronger, stiffer and more stable.



Products and Designers

- Heitor da Silva Costa- Engineer Christ the Redeemer
- Look at a range of carnivale masks and their designers.
- Research famous Brazilian chefs.

Objectives

- Enjoy looking at different products and designs.
- Can say whether they like a product/design or not.
- Make a link between their work and a product.
- Start to ask their own questions about a product or design.





KS1 Science Materials



The design process is linked into every strand - objectives from this strand should be included when planning

Textiles

- Design and test a raincoat for Travelling Teddy
- Multimedia weaving using given parameters i.e. shiny, rough, waterproof.

Objectives

- Cut textiles using scissors and a template.
- Decorate textiles using crayons, paint or sticking.
- Join textiles using glue.
- Use a running stitch to join textiles (using pre-prepared holes).
- Create simple weaving using paper or large strips of fabric.

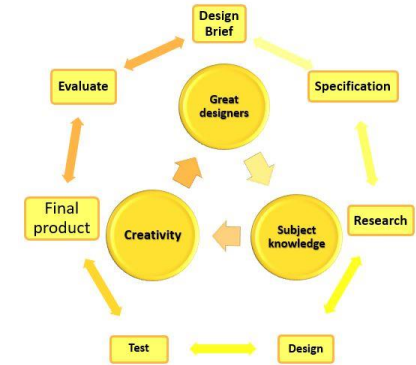


Food & Nutrition

- Which material would be best to keep my sandwich fresh? Test out different options such as foil, cling film, bees wax wraps, fabric - which keeps the sandwich fresh and not soggy? Start by making sandwiches! Opportunity to explore what you could/should put into a sandwich to make it balanced.

Objectives

- Cut soft foods safely and hygienically using an appropriate tool.
- Measure using measuring cups and spoons.
- Assemble ingredients to make a simple recipe.
- Discuss what a healthy and varied diet should look like, naming and sorting using the five main groups.
- Know where a range of fruits and vegetables come from.



Resistant Materials

- Designing a shelter fit for Travelling Teddy with climate and use constraints
- Continuous provision model making area - which materials make the best towers? How can I stick these materials together? How can I cut these materials safely?

Objectives

- Follow basic procedures for safety.
- Cut materials safely using scissors.
- Tear, fold and curl materials.
- Join using gluing.
- Begin to use hinges
- Select materials and tools based on their properties.
- Create products based on a design.
- Build structures, exploring how they can be made stronger, stiffer and more stable.



Products and Designers

- Olson Kundig Architecture
- Boden / Joules children's wear
- Yurt/ camping pod designs
- Frank Lloyd Wright- British architect
- Homes and shelters around the world (Masai huts, igloos)
- Emergency shelters

Objectives

- Enjoy looking at different products and designs.
- Can say whether they like a product/design or not.
- Make a link between their work and a product.
- Start to ask their own questions about a product or design.





KS1 History Explorers



The design process is linked into every strand - objectives from this strand should be included when planning

Textiles

- Design and make a flag to claim new land (Moon landing/ Columbus links)
- Aboriginal Weaving (Captain Cook)
- Aboriginal textile prints to make a bag



Objectives

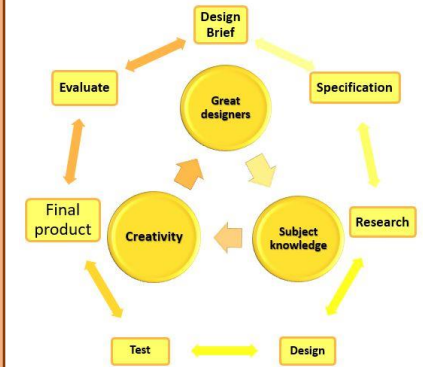
- Cut textiles using scissors and template.
- Decorate textiles using crayons, paint or sticking.
- Join textiles using glue.
- Use a running stitch to join textiles (using pre-prepared holes).
- Create simple weaving using paper or large strips of fabric.
- Thread beads or other objects

Food and Nutrition

- Christopher Columbus' food discoveries. Taste testing and planning a simple 'platter' to showcase the new world
- Space food - what do astronauts eat? How is their food preserved? Taste test freeze-dried options. Which foods can't be taken into space? Why?

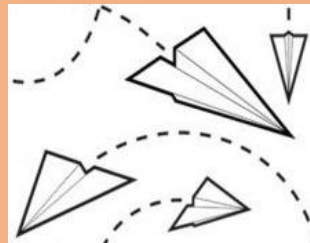
Objectives

- Cut soft foods safely and hygienically using an appropriate tool.
- Measure using measuring cups and spoons.
- Assemble ingredients to make a simple recipe.
- Discuss what a healthy and varied diet should look like, naming and sorting using the five main groups.
- Know where a range of fruits and vegetables come from.



Resistant Materials

- Space race shuttle design and prototype
- Floating boat testing - Link to Titanic
- Aerodynamic paper planes



Objectives

- Follow basic procedures for safety.
- Cut materials safely using scissors.
- Tear, fold and curl materials.
- Join using gluing and taping.
- Select materials and tools based on their properties.
- Create products based on a design..
- Build structures, exploring how they can be made stronger, stiffer and more stable.

Products and Designers

- Elon musk – Space X
- Boeing Corporation (NASA)
- Thomas Andrews – Titanic
- Geraldine Riley- Aboriginal textiles



Objectives

- Enjoy looking at different products and designs.
- Can say whether they like a product/design or not.
- Make a link between their work and a product.
- Start to ask their own questions about a product or design.





LKS2 Geography Rainforests



The design process is linked into every strand - objectives from this strand should be included when planning

Textiles

- Botanical stamps- sketch rainforest plants / leaves and then create simple foam stamps to decorate textiles eg. A napkin/ tote bag.
- Colourful weaving - inspired by the colours of the rainforest, create woven designs on a cardboard loom.



Objectives

- Cut textiles with scissors safely.
- Decorate textiles using stamping, printing and simple embellishment.
- Weave using a cardboard loom.

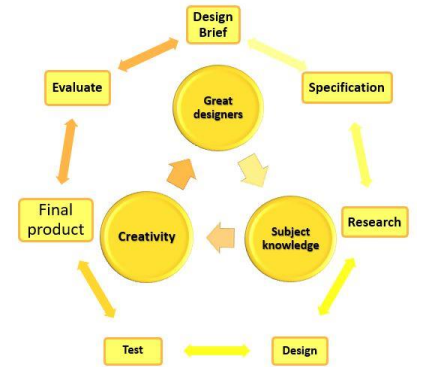


Food and Nutrition

- Forest fruit smoothies - which fruits are native to the rainforests of the world? How can we add greens to a smoothie to make it balanced?
- Eating leaves - which plants do we eat the leaves from? Taste test “leafy” foods - do they need to be cooked? Which leaves make the best wrap substitutes?

Objectives

- Cut a range of foods safely and hygienically with an appropriate tool.
- Measure ingredients using scales or jugs.
- Follow recipes, starting to use techniques such as peeling, chopping, slicing, mixing, spreading, baking or kneading.
- Know where a wider range of foods come from.
- Discuss the importance of a range of varied and nutritious foods.
- Discuss the importance of a balanced diet to provide energy for a healthy active lifestyle.



Resistant Materials

- Greenhouse design - why does a green house work?
- How can we move things safely up and down tall trees? (Pulleys opportunity)
- Treehouses - how can we safely join and secure materials to a tree without hurting it? Text methods using cardboard tubes as tree trunks.



Objectives

- Follow procedures for safety.
- Cut, tear and shape materials with increasing accuracy.
- Use a wider range of joining methods (e.g. fasteners, tabs, flange)
- Choose appropriate materials and tools for a product based on their functional properties and aesthetics.
- Strengthen, stiffen and reinforce a product using suitable materials.
- Make mechanical /moving elements (e.g. pulleys, levers and linkages)
- Choose appropriate materials by testing their properties using a prototype.

Products and Designers

- Textile designers - Lotta Jansdotter & Heather Moore (Skinny la Minx) - who use rubber stamps to design their prints for textiles.
- Look at different examples of tree houses around the world - consider how they are adapted to suit the weather too!



Objectives

- Continue to develop their knowledge of key designers and products.
- Can express an opinion about a product, giving simple reasons why.
- Make simple comparisons between designers and products.
- Make links between their work and the work of a designer/maker.
- Discuss when and where a product or design was created
- Begin to make links between key events and individuals in design and technology that have helped shape the world.
- Discuss: what products are; who they are for; how they are made and what materials are used





LKS2 History Romans



The design process is linked into every strand - objectives from this strand should be included when planning.

Textiles

- Explore the different properties of wool and linen fabrics - which would be best for making clothes? Or blankets? Explore folding and draping fabrics to design a simple garment without sewing.
- Weaving rugs - how do rugs add comfort & practicality to a home? Use natural materials (if possible) to weave a mini rug following a design on a cardboard loom.

Objectives

- Cut textiles with scissors safely.
- Thread a needle and tie a knot. (e.g. wool/embroidery needle)
- Weave using a cardboard loom.



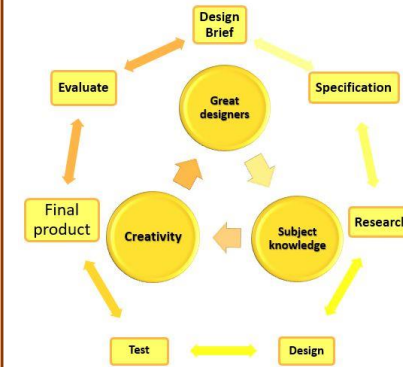
Food and Nutrition

- What foods are classed as 'Mediterranean' e.g. sun-dried tomatoes, artichokes – how are they preserved?
- Olive oil based dips - is olive oil healthy? What are the benefits / negatives?
- Bread with a Mediterranean twist - use a quick bread recipe (self-raising flour & Greek yoghurt / self raising flour with oil & water). Can you add other Mediterranean ingredients?



Objectives

- Cut a range of foods safely and hygienically with an appropriate tool.
- Measure ingredients using scales or jugs.
- Follow recipes, starting to use techniques such as peeling, chopping, slicing, mixing, spreading, baking or kneading.
- Cook using a pan or oven safely (with supervision and support).
- Know where a wider range of foods come from.
- Discuss the importance of a range of varied and nutritious foods.
- Discuss the importance of a balanced diet to provide energy for a healthy active lifestyle.



Resistant Materials

- Roman Shields – Material strength investigation - what would be the best material to protect a Roman soldier?
- Roman catapult - how do they work? How can we make it fly longer/higher?

Objectives

- Follow procedures for safety.
- Cut, tear and shape materials with increasing accuracy.
- Use a wider range of joining methods (e.g. fasteners, tabs, flange)
- Choose appropriate materials and tools for a product based on their functional properties and aesthetics.
- Strengthen, stiffen and reinforce a product using suitable materials.
- Make mechanical /moving elements (e.g. pulleys, levers and linkages)
- Choose appropriate materials by testing their properties using a prototype.

Products and Designers

- Find out about famous Mediterranean chefs and how they use the ingredients Romans would have used in the past.
- Leonardo da Vinci - engineer
- Look at historical sources - Roman textiles which have survived.

Objectives

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Textiles

- Create fossil-inspired stamps - using foam and found materials to make a simple relief then printing onto fabric to make a design.
- Rock embroidery - inspired by layers of rock, create an embroidered artwork by using embroidery and adding other embellishments.



Objectives

- Cut textiles with scissors safely.
- Thread a needle and tie a knot. (e.g. wool/embroidery needle)
- Use a running stitch to join textiles.
- Decorate textiles using stamping, printing and simple embellishment.



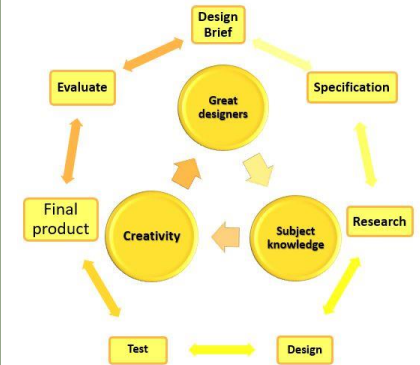
Food and Nutrition

- Rocky Road bars (layers of rock)
- Quick cheesecake - inspired by rock layers - build no-bake cheesecakes (mini) adding a base sand (biscuit) layer then fruit compotes and cream cheese - explore why we put the biscuits at the bottom instead of other ingredients.



Objectives

- Cut a range of foods safely and hygienically with an appropriate tool.
- Measure ingredients using scales or jugs.
- Follow recipes, starting to use techniques such as peeling, chopping, slicing, mixing, spreading, baking or kneading.
- Discuss the importance of a balanced diet to provide energy for a healthy active lifestyle.



Resistant Materials

- House models - explore joining techniques that could be applied to wood as an alternative to stone as a potentially more renewable house building option. How do they join the wood without nails or screws?
- Brick sorter - use a range of methods & materials to cut and shape different levels to allow children to sort Lego bricks by size. This is similar to how soil can be separated/filtered.
- Archaeological pulley system design – the big dig: Getting found items from the ground to the surface.

Objectives

- Follow procedures for safety.
- Cut, tear and shape materials with increasing accuracy.
- Use a wider range of joining methods (e.g. fasteners, tabs, flange)
- Choose appropriate materials and tools for a product based on their functional properties and aesthetics.
- Strengthen, stiffen and reinforce a product using suitable materials.
- Make mechanical /moving elements (e.g. pulleys, levers and linkages)
- Choose appropriate materials by testing their properties using a prototype.

Products and Designers

- Embroidery artists - Michele Carragher (her costumes for The Secret Garden)
- Architects who only build with wood. Log cabins from USA & around the world.

Objectives

- Continue to develop their knowledge of key designers and products.
- Can express an opinion about a product, giving simple reasons why.
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- Discuss when and where a product or design was created
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UKS2 Geography North America



The design process is linked into every strand - objectives from this strand should be included when planning.

Textiles

- Quilting - this is a craft well-loved and practiced throughout USA - look at the history of this and explore making a mini quilt using the paper piecing technique (this includes seam allowance and only requires running & whip stitches - linked to Math shape)

Objectives

- Use seam allowance and back stitch to join textiles to create a simple product (e.g. A cushion or soft toy)
- Use a pattern/template to mark and cut fabric into a specific shape
- Thread a needle and tie a knot, including finishing a thread and starting a new one within a project.
- Choose appropriate materials for a textile product based on its use.

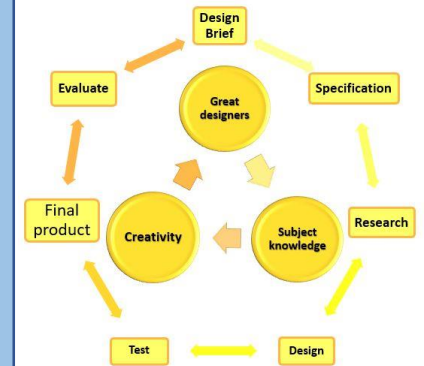
Food and Nutrition

- North American food for the 4th July
- Indigenous food staples
- Fast food culture - is it healthy? Why? Why not? How could it be made more nutritious?



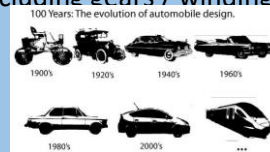
Objectives

- Discuss why we need to store and handle food hygienically (micro-organisms).
- Measure ingredients with a degree of accuracy using an appropriate measuring device.
- Scale recipes up or down accordingly.
- Design their own simple savoury recipes and test them.
- Use a range of baking and cooking techniques with increasing confidence (e.g. boiling, frying, baking, grilling, steaming, roasting, microwaving)
- Begin to explain why a recipe or meal is healthy or not, giving reasons based on their understanding.



Resistant Materials

- Design packaging for fast food - look at what materials are needed to ensure no leaks / keep it warm or cold.
- Cars - look at the development of car design & make a simple vehicle including gears / winding mechanisms.



Objectives

- Follow procedures for safety with a wider range of tools and processes.
- Cut and shape materials based on their design with increasing accuracy.
- Choose appropriate tools and methods to cut and form a wider range of materials.
- -Choose appropriate materials by testing their properties using prototypes, justifying their choices.
- -Make mechanical /moving elements (e.g. gears, cams and pneumatics)
- Use a wider range of joining methods (e.g. inserts, wrap, gusset, notch)

Products and Designers

- Historical & contemporary quilts - explore how the art has changed and grown throughout history - why did women make quilts in the past? Why are they made now?
- Car designers throughout history.

Objectives

- Can discuss a range of key designers and products.
- Express an opinion about a product, justifying reasons.
- Make links between their work and the work of others, noting specific influences and techniques.
- Explore: how well products have been designed and made; why materials have been chosen; what methods of construction have been used; how well products achieve their purpose.



UKS2 Science Electricity



The design process is linked into every strand - objectives from this strand should be included when planning.

Textiles

- Design and make a mobile phone pouch with headphone accessory pouch
- Design and make a gadget bag for sleepovers to transport your tech
- Explore conductive thread and its uses - embroider onto fabric to create gloves for using touch screens in the cold.



Objectives

- Use seam allowance and back stitch to join textiles to create a simple product (e.g. A cushion or soft toy)
- Use a pattern/template to mark and cut fabric into a specific shape
- Use cross stitch, running stitch or filling stitch.
- Use applique
- Thread a needle and tie a knot, including finishing a thread and starting a new one within a project.
- Choose appropriate materials for a textile product based on its use.
- Weave using a variety of materials.
- Sew a button or bead onto a project.

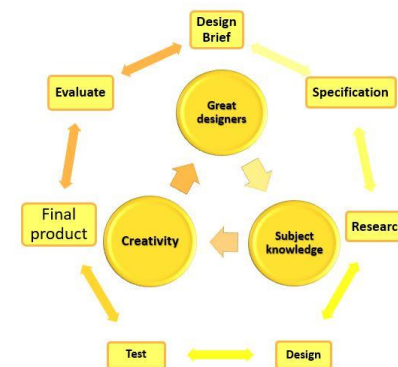
Food and Nutrition

- Research task- How electricity revolutionised cooking.
- Creating a recipe set for simple microwave recipes for older children to cook independently.



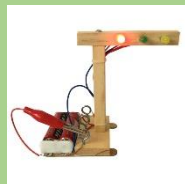
Objectives

- Discuss why we need to store and handle food hygienically (micro-organisms).
- Measure ingredients with a degree of accuracy using an appropriate measuring device.
- Scale recipes up or down accordingly.
- Design their own simple savory recipes and test them.
- Use a range of baking and cooking techniques with increasing confidence (e.g. boiling, frying, baking, grilling, steaming, roasting, microwaving)
- Begin to explain why a recipe or meal is healthy or not, giving reasons based on their understanding.



Resistant Materials

- Design a toy prototype with more than 1 electrical component
- Design and make a doorbell
- Prototype a 'steady hand/ buzzer game'



Objectives

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- Cut and shape materials based on their design with increasing accuracy.
- Choose appropriate tools and methods to cut and form a wider range of materials.
- Choose appropriate materials by testing their properties using prototypes, justifying their choices.
- Make mechanical /moving elements (e.g. gears, cams and pneumatics)
- Use a wider range of joining methods (e.g. inserts, wrap, gusset, notch)
- Incorporate a more complex electrical system into their designs (e.g. more than one component / adding a switch).
- Use computing to program, monitor and control their products.

Products and Designers

- Apple
- Percy Spencer – Microwave oven
- Joshua Lionel Cowen- invented First electrical toy train
- Dyson – Engineering study

Objectives

- Can discuss a range of key designers and products.
- Express an opinion about a product, justifying reasons.-Make links between their work and the work of others, noting specific influences and techniques.
- Explore: how well products have been designed and made; why materials have been chosen; what methods of construction have been used; how well products achieve their purpose.



UKS2 History Victorians



The design process is linked into every strand - objectives from this strand should be included when planning.

Textiles

- Cross stitch / blackwork embroidery to create a simple decoration or bauble - sew together with seam allowance and add beading.

Objectives

- Use seam allowance and back stitch to join textiles to create a simple product (e.g. A cushion or soft toy)
- Use a pattern/template to mark and cut fabric into a specific shape
- Use cross stitch, running stitch or filling stitch.
- Use applique
- Thread a needle and tie a knot, including finishing a thread and starting a new one within a project.
- Choose appropriate materials for a textile product based on its use.
- Weave using a variety of materials.
- Sew a button or bead onto a project.



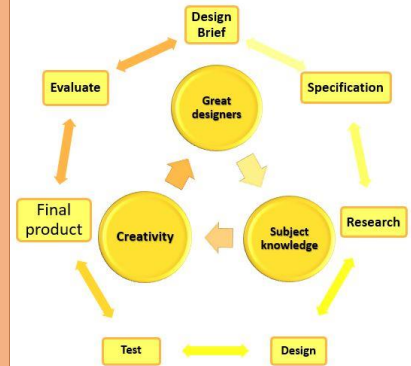
Food and Nutrition

- A feast fit for a Queen. Design and make a Victoria sponge fit for a royal banquet
- Create a balanced afternoon tea platter for a Victorian 'high tea'
- How was food preserved in Victorian times? How is it different now? Which method is best?



Objectives

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- Use a range of baking and cooking techniques with increasing confidence (e.g. boiling, frying, baking, grilling, steaming, roasting, microwaving)
- Begin to explain why a recipe or meal is healthy or not, giving reasons based on their understanding.



Resistant Materials

- Victorian toys and automata
- Victorian Entertainment – Puppets
- Isambard Kingdom Brunel Bridge design



Objectives

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- Use computing to program, monitor and control their products.

Products and Designers

- Arts and Crafts movement.
- Traditional Victorian crafts
- Isambard Kingdom Brunel
- Alfred Bird – Inventor of the Victoria sponge in 1843



Objectives

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