



Design and Technology Curriculum – Year 1 and 2 – Cycle B

Please refer to Previous Years' Geography assessment documents linked to hierarchies

[Link to DT Association guidance](#) – Link to [Projects on a Page Documents](#)

Non- Negotiables	Developing Planning and Communicating Ideas	Evaluating Processes and Products	Knowledge and Understanding of Materials and Components
Year 1	<ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology 	<ul style="list-style-type: none"> Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable
Year 2	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <ul style="list-style-type: none"> Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. 	<ul style="list-style-type: none"> Identify what they could have done differently or how they could improve their work in future 	<ul style="list-style-type: none"> Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Term	Autumn	Spring	Summer
Topic	Toys - Textiles "Puppets" with use of E-Protfolios	"Making a moving picture"	Stiff Materials – wood/wheels: "Wheeled beach hut"
Resources	<p>E portfolios and pupils electronic workbook, http://web.data.org.uk/data/primary/eportfolios.php</p> <p>examples or pictures of a variety of finger and hand puppets from a range of cultures (see e-portfolio), fabric for learning sewing techniques eg plastic mesh, binca, hessian, fabric, preferably non-fraying eg felt, dipryl (disposable cloths), templates, fabric scissors, needles, thread, fabric glue, stapler, felt-tip pens, wool, sequins, buttons, small pieces of fabric to use as features for the puppets doweling</p>	<p>Planning resources available on the "shared drive"</p> <p>Mini-beast reference books, card, paper (variety of colours), paper straws, glue, stapler, felt-tip pens, split pins,</p>	<p>Pictures of vehicles, boxes, card, scissors, masking tape, card wheels, wooden wheels, axels (wood), vehicle kits, sellotape, masking tape,</p>
Vocabulary	<p>Designing - eg user, list, label, drawing, ideas, mock - up, choose, decide, evaluate, try out ideas, standard unit</p> <p>Making - eg plan, template, fabric, cutting out, sewing, needle, running stitch, gluing, adding knowledge and understanding, eg character, puppet, string puppet, marionette, hand-puppet, finger puppet, seam, stitch, thread, strong, quality, features, strengthen, reflective symmetry, position, to, towards</p>	<p>Sliding mechanism, lever, pivot, movement, wheel,</p>	<p>Designing – user, list, label, drawing, ideas, mock-up, choose, decide, evaluate, try, explore, investigate, plan, stable, wheel, axel, cab, body, chassis</p>
Lesson 1	<p>Year 1 - To investigate a range of puppets</p> <p>Year 2 – To investigate a range of puppets and their features.</p> <p>Activities: Children to discuss and explore a range of puppets, their features, what materials are used and what they are used for. They will have the opportunity to choose their favourite puppet, draw and label it</p> <p>Outcomes:</p> <p>Year 1 – Children describe what puppets are and how they are used • Children recognise and describe different types of puppets • Children identify the features of a puppets</p> <p>Year 2 - Children describe what puppets are and how they are used • Children recognise and describe a variety of different types of puppets • Children identify the features of a variety of puppets</p>	<p>Year 1 - To be able to create a sliding mechanism</p> <p>Year 2 – To be able to create a sliding mechanism</p> <p>Activities: In this first lesson, children will find out what a sliding mechanism is, and how it can be used to make a simple moving picture. They will then explore the sliding mechanism themselves in their independent activities, making a variety of simple moving pictures with different minibeasts.</p> <p>Outcomes:</p> <p>Year 1 – Children explain how a sliding mechanism works • Children make their own sliding mechanism • Children evaluate the sliding mechanisms they have made</p> <p>Year 2 - Children explain how a sliding mechanism works • Children make their own moving pictures using a sliding mechanism • Children evaluate the sliding mechanisms they have made, and identify areas where they could be improved</p>	<p>Year 1 - To investigate vehicles and their uses and features</p> <p>Year 2 – To investigate a variety of vehicles and their uses and features</p> <p>Activities: Children to explore and discuss a variety of different vehicles, their features and what they are used for. They will choose their favourite vehicle to compare, draw and label.</p> <p>Outcomes:</p> <p>Year 1 – Children can identify different types of vehicles • Children can identify the main features of a vehicle • Children can identify the uses for a variety of vehicles?</p> <p>Year 2 - Children can identify a variety of different types of vehicle • Children can identify the main features of a variety of vehicle • Children can identify the uses for a variety of vehicle</p>
Lesson 2	<p>Year 1 - To create a finger puppet.</p> <p>Year 2 – To be able to work with fabric to create a finger puppet.</p> <p>Activities: Children will to explore and discuss a variety of different finger puppets. Using the templates, they will work with fabric to create, make and decorate a finger puppet. (Y1s could create a lollypop puppet)</p> <p>Outcomes:</p> <p>Year 1 – • Children develop ideas by putting components together • Children discuss their finished work and evaluate what went well</p>	<p>Year 1 - To be able to use levers to create a moving mechanism</p> <p>Year 2 – To be able to use levers and pivots to create a moving mechanism</p> <p>Activities: Children are first shown a moving picture with a lever and pivot mechanism, and asked to explain how they think it works. They will then explore and discuss how it has been made, looking at how to hide the lever at the back of a picture too. Children then create moving pictures of minibeasts using the lever and pivot mechanism.</p>	<p>Year 1 – To investigate wheels and axles</p> <p>Year 2 – To investigate wheels, axles and chassis</p> <p>Activities: Children to understand how different parts of a vehicles help to make them work. They will practise attaching wheels to axles and chassis</p> <p>Outcomes:</p> <p>Year 1 – Children know what wheels and axles are • Children know a way of attaching wheels to axles</p> <p>Year 2 - Children know what wheels, axles and chassis are • Children know that there are two different ways of attaching wheels to axles • Children</p>

	<p>Year 2 - Children use a template to cut out appropriate sizes of fabric • Children develop ideas by putting components together • Children discuss their finished work and evaluate what went well and what could be improved</p>	<p>Outcomes: Year 1 – •Children understand the term 'lever' • Children combine and join materials to make their own lever mechanisms • Children explain how their lever works Year 2 - •Children understand the terms 'lever' and 'pivot' • Children combine and join materials to make their own lever and pivot mechanisms • Children explain how their lever and pivot mechanism works</p>	<p>experiment with a range of materials and techniques to combine wheels, axles and chassis</p>
Lesson 3	<p>Year 1 - To develop and practise running stitch Year 2 – To develop and practise sewing skills Activities: Children will learn different sewing techniques to use when creating a puppet. They will practise these skills before making their actual puppet. Y2 use a needle and thread to attach buttons and other features to material Outcomes: Year 1 – Children use running stitch to join two pieces of fabric together • Children know how to work safely with a variety of sharp tools, such as needles and scissors Year 2 -Children use running stitch and/or over stitch to join two pieces of fabric together? • Children use a needle and thread to attach buttons and other features to material • Children know how to work safely with a variety of sharp tools, such as needles and scissors</p>	<p>Year 1 - To be able to create a wheel mechanism Year 2 – To be able to create a wheel mechanism Activities: Children are shown a third way in which to make a moving picture by creating a wheel mechanism. They will be encouraged to discuss how it works as a class before having the chance to practise making their own moving minibeast pictures using the wheel mechanism. Outcomes: Year 1 –Children cut out (with support) and join components to create a wheel mechanism • Children evaluate their work and identify areas for future development Year 2 - Children describe what a pivot is • Children cut out and join components to create a wheel mechanism • Children evaluate their work and identify areas for future development</p>	<p>Year 1 - To be able to investigate ways of creating and decorating the body of a vehicle Year 2 – To be able to investigate ways of creating and decorating the body of a vehicle. Activities: Children to explore and discuss the different ways of creating the vehicle’s body. They will use a variety of different boxes and modelling equipment to explore different ways of creating the bodies of vehicles. Outcomes: Year 1 – • Children choose materials to use as the body of a vehicle • Children know a way of combining materials to create the body of a vehicle • Children identify different ways of decorating the body of a vehicle Year 2 - • Children choose materials to use as the body of a vehicle • Children identify different ways of combining materials to create the body of a vehicle • Children identify different ways of decorating the body of a vehicle including ICT</p>
Lesson 4	<p>Year 1 -To be able to design a glove/finger puppet. Year 2 – To be able to design a glove puppet. Activities: Outcomes: Children to use the skills they have acquired to design their own glove puppet. They will recap the possible techniques to use and share their ideas to help create their designs. Year 1 – Children design a puppet for a particular purpose • Children describe what materials and tools they will need to make their puppet Year 2 -• Children design a glove puppet for a particular purpose • Children describe what materials and tools they will need to make their puppet • Children describe the steps they will need to take to make their puppet</p>	<p>Year 1 - To design a picture with a moving mechanism Year 2 – To design a picture with a moving mechanism Activities: In this lesson children will apply what they have learnt about the three different types of moving mechanisms to design their own moving minibeast picture for an author who is creating a children’s book about minibeasts. Outcomes: Year 1 – Children design their own moving picture • Children (with support) choose a suitable moving mechanism for their design Year 2 - Children design their own moving picture • Children choose a suitable moving mechanism for their design • Children explain how the mechanism will make their picture move</p>	<p>Year 1 - To be able to design a vehicle. Year 2 – To be able to design a vehicle with an identified purpose Activities: Children to design their own vehicle using the techniques previously explored, as well as following the success criteria. Outcomes: Year 1 – Children design a vehicle • Children describe which materials and tools they will need to make their vehicles • Children discuss their designs Year 2 -Children design a vehicle to include wheels, axles, chassis and bodies • Children describe which materials and tools they will need to make their vehicles • Children discuss their designs and say what they think and feel about them</p>
Lesson 5	<p>Year 1 - To be able to make a puppet. Year 2 – To be able to follow a design to make a puppet. Activities: Children to follow their designs to create their glove puppet. They should think about the appropriate materials to use and to work safely and carefully. Outcomes: Year 1 – Children describe the steps they will need to take to create their puppet Year 2 - Children describe the steps they will need to take to create their puppet • Children follow their designs to create their puppets • Children work safely and sensibly when working with a variety of materials and tools</p>	<p>Year 1 - To make a minibeast-themed moving picture Year 2 – To make a minibeast-themed moving picture Activities: Children will be encouraged to think carefully about the mechanism they are going to make, the equipment they will need, and their order of work, before beginning to create their moving picture based on their design from the previous lesson. Outcomes: Year 1 – Children follow a design to create a picture with a moving mechanism • Children work safely with a variety of tools • Children identify ways in which they can improve their finished products Year 2 - Children follow a design to create a picture with a moving mechanism • Children work safely with a variety of tools and materials to create a moving mechanism • Children identify ways in which they can improve their finished products</p>	<p>Year 1 – To be able to make a vehicle Year 2 – To be able to make a vehicle based on a design. Activities: Children to follow their designs to create and make their vehicles using a range of craft materials. They will need to make sure they are working safely and carefully. Outcomes: Year 1 – • Children create a vehicle • Children use a variety of materials and tools safely to create a vehicle • Children identify ways in which they could improve their products Year 2 -• Children follow a design to create a vehicle • Children use a variety of materials and tools safely and effectively to create a vehicle • Children identify ways in which they could improve their products and amend accordingly</p>

Lesson 6	<p>Year 1 - To be able to evaluate a finished product. Year 2 – To be able to evaluate a finished product. Activities: Children to share and demonstrate their puppets. They will then evaluate their own puppets. Outcomes: Year 1 – Children evaluate their own finished products and say what they think and feel about them Year 2 - Children evaluate their own finished products and say what they think and feel about them • Children comment on the work of others and offer their opinions • Children identify ways in which they could improve their work in the future</p>	<p>Year 1 - To evaluate a moving minibeast picture Year 2 – To evaluate a moving minibeast picture Activities: In this final lesson, children will evaluate their completed moving minibeast picture. After beginning to discuss some evaluative questions with a partner and the class, children will then continue this self-assessment in their independent activities. Outcomes: Year 1 – • Do children understand what it means to evaluate? • Can children evaluate their own moving picture? • Can children identify ways to improve their moving picture? Year 2 -• Do children understand what it means to evaluate? • Can children evaluate their own moving picture? • Can children identify ways to improve their moving picture?</p>	<p>Year 1 - To be able to evaluate a finished product. Year 2 – To be able to evaluate a finished product. Activities: Children will share their vehicles with their friends, making sure that wheels are working and the chassis is strong. They will then evaluate their vehicle, explaining how their vehicle could be improved if they were to make it again. Outcomes: Year 1 – Children evaluate a finished product by identifying what they did well • Children evaluate a finished product by identifying what could be improved Year 2 -Children evaluate a finished product by identifying what they did well • Children evaluate a finished product by identifying what could be improved • Children identify ways in which they could improve their work with DT in the future</p>
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Assessment Criteria

	Exploring Existing Products	Developing Ideas	Making New Products	Evaluating
Year 1	<ul style="list-style-type: none"> • I can make evaluative comments about existing products. 	<ul style="list-style-type: none"> • I can use pictures and words to show what I want to do. 	<ul style="list-style-type: none"> • I can name, choose and use tools appropriately. • I can assemble and join materials and parts to make a model that reflects my ideas. • I can use scissors to cut along a straight or curved line accurately. • I can, with some support, join fabrics using simple running stitch. 	<ul style="list-style-type: none"> • I can evaluate my own product against design criteria.
Year 2	<ul style="list-style-type: none"> • I can identify existing products which use mechanisms, and explain how they work. 	<ul style="list-style-type: none"> • I can use pictures, words and models to describe my design. 	<ul style="list-style-type: none"> • I can measure, cut, shape and join a range of materials. • I can incorporate a simple electrical circuit into a model. • I can attach a wheel to a chassis to make a vehicle with an axle. • I can incorporate simple flap or folds into a product. • I can use simple finishing techniques to improve my product’s appearance. 	<ul style="list-style-type: none"> • I can identify how I could improve my work in the future.