Aspley Guise Village School

Design Technology: Scheme of Work

Materials	Reception	Year 1	Year 2	Year 3	Year 4
Paper/ Cardboard / Plastic	Christmas decorations	House Logo / Label for Fruit Salad	Moving Books Kites	Light Sources	Rainforest pop-up book
Sculpture	Junk modeling				Sculpture using foil
Clay	Diva pots				Figure sculpture
Wood	Bug hotel	A moving vehicle with wheels and axles			Roman catapualt/chariot/maze (Wooden toy)
Food	Porridge, soup, Gingerbread men, cakes, Fruit kebabs	Fruit salad		Mexican cookery including salsa, tortilla, nachos	
Textiles	Felt beanstalk		Sew a puppet		Sewn bag
Pneumatics	Spray bottle painting			Create a product using pneumatics	
Other materials	Natural pine cone bird feeders				

DT Progression of Skills and Knowledge

Design Criteria to be able to research a range of different products from varying diversities. To be able to comment on the range of different purposes. To develop design based on research	To be able to say what it is they are making To be able to look at a product and say what it is To be able to say who uses it e.g. bird feeder To be able to say simply statements e.g. what is making it move To be able to say how they will make it work	Develop ideas through talking, templates and mockups. Understand how a product works and how it is used Identify where you might find the product Explain what product they will be designing and making Explain who their product will be used by and how it will work	Identify the materials used to make the product Express an opinion about the product Identify where you might find this product Explain what product they will be designing and making Explain who will use it Explain how parts of their product works Use own experiences of existing products to develop ideas that meet the need of user and considers availability of resources	Identify who made the product, when it was made and what its purpose is Understand how mechanical systems create movement Identify what the product has been made from Research facts about famous inventors/chefs designers etc linked to product Understand and gather information about what a particular group or people want from a product Describe the purpose of their product and how it will work /draw	Identify who made the product, when it was made and what its purpose is Understand how to use Pulleys and moving elements for pop up books Identify what the product has been made from Research facts about famous designers etc linked to product Understand and gather information about what a particular group or people want from a product Describe the purpose of their product and explain how parts will work

Planning	Follow simple one and two step verbal instructions Look at pictures of things they want to make describing the main features	Discuss what their steps for making could be Represent ideas through talking and drawing	Discuss what their steps for making could be Represent ideas through talking, drawing of annotated sketches	Share and discuss ideas with others Order the main stages of making -plan sequence Choose materials to use based on suitability of their properties	Share and discuss ideas with others Order the main stages of making a -plan sequence. Record the plan with labels/writing Choose materials to use based on suitability of

	Decide what they want to make Select the materials and choose simple tools and techniques to make what they set out to do	Decide what they want to make and describe Select the materials from a limited range and choose simple tools and techniques to make what they set out to do Change and adapt their work as it progresses	Choose materials to use based on suitability of their properties Use kits/reclaimed materials to develop an idea Create templates/pattern pieces and explore materials whilst developing ideas	Represent ideas in annotated sketches,computer based programmes (where appropriate) Create pattern pieces and prototypes	their properties Represent ideas in annotated Sketches,cross sectional diagrams,computer based programmes (where appropriate) Create pattern pieces and prototypes of an initial design

Making-skills and techniques	Explore large construction materials eg bricks,planks,crates, drain pipes Explore smaller construction materials eg lego,small wooden blocks,straws and playdough Use junk modelling materials to make simple representations of people,places and objects Find end of sellotape independently	Choose suitable tools for making a home and a wheeled vehicle Follow safety and food hygiene procedures to use a range of tools Measure, mark, cut , shape materials and components using a template Join, assemble and	Choose suitable tools for making pop up book, kites and a puppet whilst explaining why they should be used Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components Join, assemble and combine materials and components eg different stitches eg running, blanket,back	Choose suitable tools for making tlight sourcer, Mexican food whilst explaining why they should be used. Incorporate an electrical circuit Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components with some accuracy Join, assemble and combine materials and components with some accuracy	Choose suitable tools for making wooden toy and bag whilst explaining why they should be used. Use design criteria whilst making Follow safety and food hygiene procedures Measure, mark, cut and shape materials and components with some accuracy. Make structures more stable. Join, assemble and

	Use scissors safely Fold ,tear and cut paper and card Roll paper	combine materials and components e.g. glue, tape. Use glue gun with adult help (Transport) Explore different materials and decide which are best to match criteria eg tubes,dowel,cotton reels	Use finishing techniques,	Use finishing techniques, including skills learnt in Art	combine materials and components with some accuracy Use finishing techniques, including skills learnt in Art with some accuracy
	Follow simple one and two step verbal instructions Look at pictures of things they want to make describing the main features Decide what they want to make Select the materials and choose simple tools and techniques to make what they set out to do	Safely use a range of tools,materials and equipment including knives	Develop skills of cutting,joining,making prototypes Know a variety of different stitches including running,back,blanket stitch Investigate different ways of stiffening a variety of materials Explore and use mechanisms e.g. levers ,slides, wheels and axles	Safely measure,mark out,cut,join and assemble with some accuracy Create design using annotated sketches,cross sectional drawings and simple computer program Make sensible choices from a range of tools and plan when to use them Know how to make a circuit To understand how mechanical systems create movement	Safely use tools and equipment to cut,shape,join and finish more accurately Apply techniques learnt to strengthen,stiffen and reinforce more complex structures Know how to use pulleys, levers and linkages

Nutrition	Develop a food vocabulary using taste, smell	Give egs of food that is grown Select right ingredients		Name foods from all food groups Understand food has to be farmed ,grown,caught in Europe and the wider world	

	Group familiar food products e.g. fruit and vegetables Understand why we wash our hands before cooking and know how to work safely and hygienically (hair tied back, do not sneeze in it etc) Mix ingredients together, texture Chop softer ingredients using a safe blunt knife Spoon ingredients into cases Plant edible plants eg carrots	To know and use basic principles of a healthy and varied diet Develop a food vocabulary using taste,smell,texture and feel Group familiar food products eg fruit and vegetables Learn that fruit and vegetables grow in certain seasons Cut and chop a range of ingredients Work safely and hygienically Measure and weigh food items using spoons, cups Understand the need for a variety of foods in a diet	Use a wider range of cooking techniques to prepare food safely Understand that food comes from plants or animals Understand that food has to be farmed, caught, or grown.Give egs Cut,peel,grate chop a range of ingredients working safely and hygienically Know and use the basic principles of a healthy and varied diet to prepare dishes eg pizza.	To be able to safely prepare and cook a variety of foods Understand that recipes can be changed by adding or taking away ingredients Understand that the seasons can affect food produce Know how to follow a recipe Make healthy eating choices from an understanding of a balanced diet	Be able to name foods from all food groups Analyse smell,texture and appearance of a range of ingredients

Evaluation of design and purpose against their own criteria and increasingly	To be able to share their creations, explaining the processes they have used. To be able to say how their product is appealing	To understand the word, 'evaluate' and how to evaluate their design/product against their own criteria	To understand how to assess according to purpose, functionality and appeal	To investigate and analyse existing products and their own considering factors of purpose, functionality and appeal	To investigate and analyse existing products and their own considering factors of purpose, functionality and appeal

against functional and aesthetic properties, considering views of others to improve their work	and how it could be improved		To communicate ideas through designing and making	Explain how parts of their product works and why	Explain how parts of their product works and why and how it can be changed to be more functional.