

Barndale Activate Curriculum DT Overview

22/23	DT											
Topic	Cooking & Nutrition Evaluating & Testing				Creative, Technical & Practical Evaluating & Testing				Designing & Making Evaluating & Testing			
Who/When	Hedgehogs	Autumn 1	Hedgehogs	Autumn 2	Hedgehogs	Spring 1	Hedgehogs	Spring 2	Hedgehogs	Summer 1	Hedgehogs	Summer 2
Skills	<ul style="list-style-type: none"> Rolls, flattens, tars, joins and moulds pliable material Communicates about the effects of different tools on dough Experiments with the use of tools with dough Expects/predicts something taken out of the freezer to feel cold Communicates that they need to wear an apron Chooses a flavour from a choice of three to add to their cooking Communicates a strong 'no' to unwanted food Recognises food by sight, smell and taste Identifies that leaves grow on plants Identifies that plants grow 		<ul style="list-style-type: none"> Helps wash and put away equipment Manipulates a dial Compares the weight of two objects with assistance Stirs food in a bowl Asks for specific ingredient to add eg type of vegetable or filling Chooses a favourite fruit or vegetable when two are offered Identifies sweet and sour foods after tasting Expresses an opinion with appropriate language Copes with most foods offered as part of a typical meal Points to parts of a plant when they are named Identifies human needs eg food/drink Communicates about how they feel if they eat too much/or when they are hungry 		<ul style="list-style-type: none"> Selects an electrical object that will give light Finds an item in their immediate environment that will move/make a sound/can be pulled/pushed Uses electricity to move an object Demonstrates understanding that each switch in a two-way Understands that they need to push the switch in a particular point to achieve a desired result Uses a variety of simple tools to make a model with assistance Demonstrates an awareness that specific actions cause an expected result Tests new/unfamiliar objects Identifies textures they feel on materials after verbal prompt Communicates about an aspect of their model/product 		<ul style="list-style-type: none"> Snips with scissors Rolls, flattens, tears, joins and moulds pliable material Grasps tools independently Puts an object together with assistance Turns a screw toy clockwise/anticlockwise Imitates a member of staff using a range of equipment Indicates that batteries are needed to provide power Uses tools with their preferred hand Indicates that different things move at different speeds Uses tools effectively on pliable material Rolls pliable material into different shapes Examines parts of familiar objects up close Explores similar products made from two different materials 		<ul style="list-style-type: none"> Requests a tool or object for a purpose States simply how they will make a product Suggests a way to decorate or colour their product Makes a product for a familiar purpose Builds a tower of 7 bricks Works in 2D/3D Includes a range of materials in their work in a variety of ways Turns objects to align them Tests new/unfamiliar objects Identifies that they can pull, blend, or squash a material after manipulating it Communicates about an aspect of their model or product 		<ul style="list-style-type: none"> Stacks, organises and re-organises blocks or boxes Handles a range of containers of different sizes, materials and openings Explores the use of building bricks Looks for appropriate shapes, materials or sizes to fit or match their product Shows an appreciation of a subject's elements through modelling Examines part of familiar objects up close Explores similar products made from 2 different materials 	

			• Explains in simple terms what their product does			
Assessment	Steps 1 & 2	Steps 1 & 2	Steps 1 & 2	Steps 1 & 2	Steps 1 & 2	Steps 1 & 2

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Topic	Cooking & Nutrition Evaluating & Testing				Creative, Technical & Practical Evaluating & Testing				Designing & Making Evaluating & Testing			
Who/When	Squirrels	Autumn 1	Squirrels	Autumn 2	Squirrels	Spring 1	Squirrels	Spring 2	Squirrels	Summer 1	Squirrels	Summer 2
Skills	<ul style="list-style-type: none">Expresses the term hot and cold appropriatelyMeasures using a range of non-numerical measuring equipment, cups, spoonsRecognises that very hot objects can burnBegins to use scalesCuts soft foods safelyMakes a simple savoury dish with assistanceDrains liquids using a sieve or colanderTastes tests some fruit & vegetablesClassifies food by taste and textureIdentifies that eating a variety of food is necessary to stay healthyIdentifies fruit and vegetablesNames a range of farm animals		<ul style="list-style-type: none">Lists ways to cool something down/heat something upCracks an egg with supportSpreads a filling using a knife carefullyPeels food, eg fruit, boiled eggsSuggests why they need to wash fruit and vegetables before eatingGathers together equipment they requireDesigns and makes a healthy non-cooked item eg smoothie, fruit saladClassifies some common foods as savoury or sweetIdentifies plants that humans can eatIdentifies that some festivals are celebrated with special foodsSuggests three healthy dessertsNames some fruit and vegetables which are		<ul style="list-style-type: none">Stops activating a switch when the action is completePresses a switch to complete an image on a screenRepeats switch pressing at appropriate timeExplores the results of pressing a button on a robotDescribes how objects move using simple terms correctlyMakes a simple lever with assistanceLists examples of software which can be activated by switchesCreates a simple electrical circuit using cells, bulbs, buzzersCreates simple programmes using symbols eg robotDescribes the purpose of their product		<ul style="list-style-type: none">Folds, tears, cuts paper and cardHammers gently with supportCompares toolsJoins different materialsMarks the material where a join/cut needs to be madeDraws a line with a rulerDraws round shape templatesInserts paper fasteners for card linkagesJoins materials by overlappingMakes holes in soft wood using a hand drillDemonstrates how to turn a screwdriver/hold a nail/hold a hammerIdentifies simple processes they need to develop to improve their designDescribes two simple properties of common materials		<ul style="list-style-type: none">Makes a simple drawing to illustrate their ideaMakes a model containing several partsBuilds using geometric construction materialBuilds using interlocking cogsMakes products, structures, objects using construction materials eg straws to build 3D frameworkSelects materials generally appropriate to the task when making a productFollows simple plans to make an objectDiscusses their work using appropriate vocabularyIdentifies some reasons why a specific material is used for a taskSuggests away they can improve their product		<ul style="list-style-type: none">Builds models with clay or pliable materialsLabels a simple diagramFollows a simple pictorial plan to recreate a modelWrites captions or labels on their drawingsRecords ideas using drawing or information and communication technologyDiscusses and explains their design ideasIdentifies simple processes they need to develop to improve their design or make workSuggests a way they can improve their productExplains simply how a product they are evaluating works	

	<ul style="list-style-type: none"> Suggests where plants we eat are grown Identifies some main food groups Suggests three healthy snacks 	<p>grown in the UK and other countries</p> <ul style="list-style-type: none"> Recognises that food can be purchased or grown at home 	<ul style="list-style-type: none"> Discuss their work using appropriate vocabulary Describes the effect of turning an object on/off Compares their completed work simply against the original design criteria when evaluating their product 	<ul style="list-style-type: none"> Lists the materials an object is made from Suggests what a product is for and who might use it 	<ul style="list-style-type: none"> Suggests what a product is for and who might use it 	
Assessment	Steps 3 & 4	Steps 3 & 4	Steps 3 & 4	Steps 3 & 4	Steps 3 & 4	Steps 3 & 4

22/23	DT											
Topic	Cooking & Nutrition Evaluating & Testing				Creative, Technical & Practical Evaluating & Testing				Designing & Making Evaluating & Testing			
Who/When	Foxes	Autumn 1	Foxes	Autumn 2	Foxes	Spring 1	Foxes	Spring 2	Foxes	Summer 1	Foxes	Summer 2
Skills	<ul style="list-style-type: none"> Names the equipment they may need when following a recipe Peels or cuts using a variety of methods Recognises some standard units used to measure weight Recognises the abbreviations for metric units of mass/capacity Identifies simple ways they can avoid spreading or catching germs Adds toppings or garnish to their foods Makes a healthy non-cooked item which 		<ul style="list-style-type: none"> Explains the use of cooking equipment (hob, toaster) Identifies tools which could be dangerous Outlines some health and safety rules for cooking or preparing food Picks out the ingredients from a range of foods needed in a recipe Measures using a range of numerical measuring equipment with some support Describes the taste, smell, feel and texture of food using simple vocabulary 		<ul style="list-style-type: none"> Scores card before folding Identifies some techniques for using common tools Identifies different ways of joining materials Suggests why they need to saw in a straight line Holds a saw correctly Saws with 1:1 support Puts tools away safely Identifies tools which could be dangerous Chooses different joins which are generally appropriate to task Draws lines along a straight edge Justifies their choice of design from a selection of ideas 		<ul style="list-style-type: none"> Follows instructions to make a simple mechanism Describes what a simple mechanism does eg lifts Explains how they think a lever works Makes objects move using wheels, axes and/or construction kits Employs a simple mechanism in their product Explain how they think a simple mechanism works Clasps an object in a vice wit support Saws using a junior hacksaw Grips an object with pliers 		<ul style="list-style-type: none"> Employs simple finishing techniques when working with a range of materials Communicates about their art and design work as it develops Demonstrates safe use of tools when making their product Combines construction kits with other material Considers the final appearance of their product Follows instructions when using tools Measures components in their design product with some care 		<ul style="list-style-type: none"> Creates simple plans of their designs Investigates actual items or products as starting point Creates a model mock-up of part or all of the product Designs or makes a product using knowledge from previous work Describe what they like/dislike about an object/product Gives reasons why materials are used for specific purposes States how an object works when evaluating, using some technical language 	

	<ul style="list-style-type: none"> adheres to a specific element Taste tests a variety of unusual fruit and vegetables Recognises that a balanced diet helps us remain healthy Lists where they would source the food used in a meal 	<ul style="list-style-type: none"> Plans and makes a healthy packed lunch Arranges food attractively on a plate Suggests why the correct amount of a range of food helps humans remain healthy 	<ul style="list-style-type: none"> Explains how and why they would change or improve a specific area of their product 	<ul style="list-style-type: none"> Evaluates a product against simple given criteria Suggests alternative materials for an object to be made from 	<ul style="list-style-type: none"> Compares their end product with their design criteria Suggests some ways they could improve a specific area of their own design work Explains why the properties of a material is suitable or unsuitable for a purpose 	<ul style="list-style-type: none"> Gives simple examples of how the uses for a material have changed over time
Assessment	Steps 5 & 6	Steps 5 & 6	Steps 5 & 6	Steps 5 & 6	Steps 5 & 6	Steps 5 & 6

22/23	DT											
Topic	Cooking & Nutrition Evaluating & Testing				Creative, Technical & Practical Evaluating & Testing				Designing & Making Evaluating & Testing			
Who/When	Badgers	Autumn 1	Badgers	Autumn 2	Badgers	Spring 1	Badgers	Spring 2	Badgers	Summer 1	Badgers	Summer 2
Skills	<ul style="list-style-type: none"> Lists ways food is preserved and why we preserve food Recognises the common imperial measures for weight and capacity Outlines how to store food safely Lists simple routines to help stop the spread of germs Prepares a range of simple food ingredients Recognises different ingredients combine to create different tastes 		<ul style="list-style-type: none"> Measures and weighs wet ingredients appropriately Lists the range of skills they used when preparing and cooking their recipes Relates knowledge of food hygiene to preparing and cooking food Sources a recipe for something they wish to cook which involves a given technique Recognises that the appearance of food is important Recognises that climate and other conditions affect 		<ul style="list-style-type: none"> Writes programmes that accomplish specific goals Includes a control box to operate switch Includes simple circuits in their product Recognises simple mechanical systems Suggests a mechanism to use in their product to fulfil a specific requirement Changes speed/direction using mechanisms 		<ul style="list-style-type: none"> Identifies what makes items stable or stronger Selects tools relating to their functionality Marks the position for screws or nails using a tool Includes the use of simple construction materials where appropriate Aids the finish of their product using sandpaper Joins using a low temperature glue gun Joins materials using temporary/permanent fastenings 		<ul style="list-style-type: none"> Chooses materials to fit the aesthetic quality of their design Measures, marks out and cuts with some accuracy Refers to their design or plans whilst making Works out the order of the process when making their product Selects materials relating to their functionality Demonstrates techniques which are multi-step 		<ul style="list-style-type: none"> Decides on the criteria for a product Communicates realistic ideas Gathers information about the needs or wants of a particular group or individual to aid their design Designs a product to be used in different contexts Produces detailed plans using a range of techniques Creates realistic designs which are suitable to task Creates a design criteria which demonstrates 	

	<ul style="list-style-type: none"> • Recognises that some foods are imported and exported • Makes simple dishes using a hob • Peels/grates safely • Describes how they could change their recipe to suit someone with specific tastes, cultural needs/diet • Makes comparisons between the costs of foods, drinks and meals • Taste tests different herbs and spices • Recognises that an overall diet affects the health of a person 	<p>when and where food is grown or reared</p> <ul style="list-style-type: none"> • Designs a meal within a specific budget • Prepares and cooks a savoury and a sweet dish • Confidently follows a recipe • Evaluates the food they have prepared or cooked, giving reasons why it did or did not end up as planned • Suggests ways to recycle food • Organises a plate to show appropriate portions for each food group 	<ul style="list-style-type: none"> • Identifies how to strengthen, stiffen or reinforce a range of materials and applies this to different materials • Tests their product • Considers the visual impact of the finished product • Outlines how modifications for improvements suggested by others could be implemented and how they would improve their product 	<ul style="list-style-type: none"> • Makes holes accurately • Describes linear motion • Joins a range of materials eg slotting movements • Drills two pieces of material together • Uses machine tools safely and accurately under supervision • Describes how improvements suggested by others would improve their final product • Outlines the effect of modifications that were made during the making process 	<ul style="list-style-type: none"> • Suggests ways to proceed when problems occur • Makes modifications as work is in progress • Assembles materials in accordance with plans • Tests their product • Explains the reasons why modifications were made • Researches some of the great designers in different areas of study • Comments on the effectiveness of their product when evaluating their ideas and products 	<p>attention to atheistic and function of a product</p> <ul style="list-style-type: none"> • Investigates and analyses a range of products using key words to describe their findings • Suggests reasons why or how a designer generated an original idea which improved an existing model
Assessment	Steps 7 & 8	Steps 7 & 8	Steps 7 & 8	Steps 7 & 8	Steps 7 & 8	Steps 7 & 8