DT Knowledge and Skills (Practical Knowledge)

CHAWTON C.E. PRIMARY SCHOOL
'Love, Courage and Fellowship'

Curriculum INTENT: At Chawton CE Primary School we believe that an engaging Design Technology curriculum will develop children's love of discovery of the world around them. We aim to inspire an appreciation of the design and technological elements of our surroundings. We recognise the importance of nurturing a culture where children take pride in how they plan, complete a build and discuss where improvements can be made. We believe that children need to develop a secure grasp of skills and knowledge in Design Technology; following a clear pathway of progression as they advance through the primary curriculum.

Progression of Skills and Understanding

Vocabulary						
Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	apron, construction, decoration, design, evaluate, fold, ingredient, materials, mechanism, nutrition, pattern, plan, recipe, textiles, texture	annotated diagram, appearance, dismantle, final design, net, dowel, dye, pulley system, pivot, wheel	artefact, axle, battery, brittle, bulb, bulb holder, buzzer, cam, chassis, circuit, conductor, current, design brief, electricity, energy, engineering, flexible, function, malleable, nail, nut, oscillate, performance, screw, shaft, slide switch, spring, washer, working drawing.	artefact, axle, battery, brittle, bulb, bulb holder, buzzer, cam, chassis, circuit, conductor, current, design brief, electricity, energy, engineering, flexible, function, malleable, nail, nut, oscillate, performance, screw, shaft, slide switch, spring, washer, working drawing.	aesthetics, applique, drill, fibre, friction, market research, mock-up, model, modify, parallel circuit, product analysis, prototype, ratchet, resistance, short circuit	aesthetics, applique, drill, fibre, friction, market research, mock-up, model, modify, parallel circuit, product analysis, prototype, ratchet, resistance, short circuit

Year R Overview

Design and Technology in the EYFS Framework falls across a number of areas of learning including Physical Development and Expressive Arts and Design. In addition, aspects within Communication and Language and Personal, Social and Emotional Development are linked as part of children being able to evaluate and improve their work. The Characteristics of Effective Teaching and Learning are threaded through all aspects of learning and are the fundamental ways in which children within EYFS learn. During the Early Years, children should be developing knowledge, skills and understanding which will prepare them for the Year 1 curriculum.

CHAWTON C.E. PRIMARY SCHOOL
'Love, Courage and Fellowship'

DT Knowledge and Skills (Practical Knowledge)

In preparation for the following practical knowledge, key skills and understanding in **Year 1:** Design, Make, Evaluate, Technical Knowledge Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private Know where to go for help and support when they have concerns about content or contact on the internet or other online technologies	**EYFS** **Expressive Arts and Design**	**Suggested EYFS Key Skills, Knowledge and Understanding (Curriculum)**
	The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.	Explain what they are making and which materials they are using and why. Select materials from a range that will meet a simple design criteria Select and name the tools needed to work the materials e.g. scissors for paper. Explore ideas by rearranging materials. Describe simple models or drawings of ideas and intentions and discuss their work as it progresses, saying what they like and do not like about items they have made and attempt to say why. Create designs using basic techniques. Build structures, joining components together. Explore simple hinges, wheels and axles. Use technical vocabulary when appropriate. Use scissors to cut straight and curved edges and hole punches to punch holes and use other basic tools such as a saw or hammer. Use a range of adhesives to join material. Discuss how closely their finished products meet their design criteria. Develop food vocabulary using taste, smell, texture and feel. Explore familiar food products e.g. fruit and vegetables and discuss the need for a variety of foods in a healthy diet. Stir, spread, knead and shape a range of food and ingredients. Work safely and hygienically. Measure and weigh food items using non statutory measures e.g. spoons, cups
	Linked Early Learning Goals *The ELGs should not be used in any way to limit the wide variety of rich experiences that are crucial to a broad and balanced curriculum.*	**Fine Motor Skills** • Use a range of small tools, including scissors, paint brushes and cutlery • Begin to show accuracy and care when drawing **Creating with Materials** • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function • Make use of props and materials when role playing characters in narratives and stories. • Share their creations, explaining the process they have used **Speaking** • Express their ideas and feelings about their experiences using full sentences **Listening, Attention and Understanding** • Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions • Make comments about what they have heard and ask questions to clarify their understanding **Managing Self** • Understand the importance of healthy food choices

https://www.data.org.uk/resource-shop/projects-on-a-page-full-pack-of-21-planners/

KEY STAGE ONE
National Curriculum Statements:

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
End of Key Stage One **National Curriculum Expectations**	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	Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria	Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from.

YEAR 1/2 : CYCLE A

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
Why is London Burning? Make houses to set alight.	• have own ideas (and plan what to do next) • use pictures and words to plan, begin to use models • explain what my product is for, and how it will work • research similar existing products • choose best tools and materials, and explain choices	• explain what I'm making and why it fits the purpose • select tools/equipment to cut, shape, join, finish and explain choices • choose suitable materials and explain choices depending on characteristics. • try to use finishing techniques to make product look good • work in a **safe** and hygienic manner	• talk about my work, linking it to what I was asked to do • use materials, explain how they work, audience, where they might be used • begin to talk about what could make product better and what I would do differently if I were to do it again and why, using design criteria • describe what went well, using design criteria	• measure, cut and join textiles to make a product, with some support • choose suitable textiles • measure, join and cut textiles together to make a product, and explain how I did it • understand that a 3D textile structure can be made from two identical fabric shapes.	
How do you travel around the world on a sleigh? Wheels and axels – design and make a vehicle for Father Christmas!	• have own ideas (and plan what to do next) • use pictures and words to plan, begin to use models (and begin to use ICT) • design a product for myself following design criteria	• select tools/equipment to cut, shape, join, finish and explain choices • measure, mark out, cut and shape components, with support. • try to use finishing techniques to make product look good	• talk about my work, linking it to what I was asked to do • talk about existing products considering: use, materials, how they work, audience, where they might be used • begin to talk about what could make product better and what I would do differently if I were to	• begin to measure and join materials (in different ways), with some support • describe differences in materials • suggest ways to make material/product stronger	

	• choose best tools and materials, and explain choices	• work in a safe and hygienic manner	do it again and why, using design criteria	• begin to understand how to use wheels and axles	
Can animals dance?					
Does Chocolate grow on trees? Mothers' Day cards – using 'pop up' levers and sliders mechanisms	• have own ideas (and plan what to do next) • use pictures and words to plan, begin to use models (and begin to use ICT) • design a product for myself following design criteria • choose best tools and materials, and explain choices	• select tools/equipment to cut, shape, join, finish and explain choices • measure, mark out, cut and shape components, with support. • try to use finishing techniques to make product look good	• begin to talk about what could make product better and what I would do differently if I were to do it again and why, using design criteria	• begin to measure and join materials (in different ways), with some support • suggest ways to make material/product stronger	
What makes me me!?					
What was life like at the seaside in the past? Create a line to carry a basket (Lighthouse Keeper stories) from the house to the lighthouse – origami. Make a healthy sandwich for Mr Grinling.	• have own ideas (and plan what to do next) • explain what I want to do (and describe how I may do) • explain what my product is for, and how it will work (how it will be suitable for the user) • use pictures and words to plan, begin to use models (and begin to use ICT) • design a product for myself following design criteria • research similar existing products • choose best tools and materials, and explain choices • use knowledge of existing products to produce ideas	• explain what I'm making and why it fits the purpose • consider what I need to do next • select tools/equipment to cut, shape, join, finish and explain choices • measure, mark out, cut and shape, and components, with support. • choose suitable materials and explain choices depending on characteristics. • try to use finishing techniques to make product look good • work in a **safe and hygienic** manner	• talk about my work, linking it to what I was asked to do • talk about existing products considering: use, materials, how they work, audience, where they might be used • talk about things that other people have made • begin to talk about what could make product better and what I would do differently if I were to do it again and why, using design criteria	• begin to measure and join different materials, with some support • suggest ways and use them to make material/product stronger	• follow basic food safety rules when preparing and cooking food • recognise a range of familiar ingredients (eg vegetables, dairy, eggs) • cut, peel and grate safely, with support/confidence • (with help and supervision), assemble and arrange cold ingredients (eg **sandwich**, fruit kebabs, bruschetta)

YEAR 1/2 : CYCLE B

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
What was it like to live in a castle?					
What's so great about Great Britain?					
Will we ever land on the moon again? Make a moon buggy, or a buggy to explore another planet!	• have own ideas (and plan what to do next) • explain what I want to do (and describe how I may do)	• explain what I'm making and why it fits the purpose • select tools/equipment to measure, cut, shape, join, finish and explain choices	• talk about my work, linking it to what I was asked to do • talk about existing products considering: use, materials, how they work, audience, where they might be used	• begin to measure and join different materials in different ways, with some support • use own ideas to try to make product stronger	

DT Knowledge and Skills (Practical Knowledge)

	• explain what my product is for, and how it will work (how it will be suitable for the user) • use pictures and words to plan, begin to use models (and begin to use ICT) • design a product for myself following design criteria • research similar existing products • choose best tools and materials, and explain choices	• choose suitable materials and explain choices depending on characteristics. • try to use finishing techniques to make product look good • work in a **safe** and hygienic manner	• begin to talk about what could make product better and what I would do differently if I were to do it again and why, using design criteria	• begin to understand how to use wheels and axles	
Will my bulb still grow if we plant it upside down?					
What is life as a bug like? Sew a simple bug sock puppet	• explain what I want to do (and describe how I may do) • explain what my product is for, and how it will work (how it will be suitable for the user) • use pictures and words to plan, begin to use models (and begin to use ICT) • design a product for myself following design criteria • research similar existing products • choose best tools and materials, and explain choices	• select tools/equipment to cut, shape, join, finish and explain choices • measure, mark out, cut and shape, and components, with support. • choose suitable materials and explain choices depending on characteristics. • try to use finishing techniques to make product look good • work in a **safe** and hygienic manner	• talk about existing products considering: use, materials, how they work, audience, where they might be used • talk about things that other people have made • begin to talk about what could make product better and what I would do differently if I were to do it again and why, using design criteria	• begin to measure and join different materials, with some support	
What's so special about Chawton? Create a simple healthy meal using products grown in Chawton	• explain what I want to do (and describe how I may do)	• explain what I'm making and why it fits the purpose • consider what I need to do next • work in a **safe** and **hygienic** manner	• talk about my work, linking it to what I was asked to do • talk about things that other people have made • begin to talk about what could make product better and what I would do differently if I were to do it again and why, using design criteria	• cut, peel and grate safely, with support/confidence	• understand that we all need a balanced diet to be healthy and active and need to eat more or less of different foods • use the 'eatwell' plate • follow basic food safety rules when preparing and cooking food • understand the importance of water and drinking water regularly • understand the importance of regular meals and healthy snacks

CHAWTON C.E. PRIMARY SCHOOL
'Love, Courage and Fellowship'

Assessment Notes to pass on for the year 3/4 teacher:					

KEY STAGE TWO: National Curriculum Statements

End of Key Stage Two **National Curriculum Statements**	*Use research and develop design criteria* to inform the design of *innovative*, functional, appealing products that are fit for purpose, *aimed at particular individuals or groups* Generate, develop, model and communicate their ideas through discussion, *annotated sketches, cross-sectional and exploded diagrams,* prototypes, *pattern pieces* and computer-aided design	Select from and use a *wider range of tools and equipment* to perform practical tasks [for example, cutting, shaping, joining and finishing], *accurately* Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their *functional properties and aesthetic qualities*	*Investigate and analyse* a range of existing products. Evaluate their ideas and products against *their own design criteria* and *consider the views of others to improve their work.* *Understand how key events and individuals in design and technology have helped shape the world*	Apply their understanding of how to strengthen, stiffen and reinforce more *complex structures* *Understand* and use mechanical systems in their products [for example, *gears, pulleys, cams,* levers and *linkages*] *Understand and use electrical systems in their products [for example, series circuits*	*Understand and apply* the principles of a healthy and varied diet *Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques* *Understand seasonality,* and know where and *how a variety of ingredients are grown, reared, caught and processed.*

YEAR 3/4: CYCLE A

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
How do you walk like an Egyptian?					
How can we look after our world? savoury recipes from around the world	• follow a given design criteria and begin to create my own, making decisions. • have at least one idea about how to create a product	• select suitable tools/equipment, explain choices; begin to use them accurately	• look at design criteria while designing and making • use design criteria to evaluate finished product	• use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	• carefully select ingredients • make the product look attractive

	• create and design a plan which shows order, equipment and tools and describe it to others, using a labelled sketch	• select appropriate materials, fit for purpose and explain choices. • work through a plan in order • consider how good product will be	• say what I would change to make design better • learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products		• begin to understand food comes from UK and wider world • prepare and cook some dishes safely and hygienically • begin to understand about food being grown, reared or caught in the UK or wider world
Where have we come from?					
Where are the seven wonders of the world? Create a structure based on a 'Wonder of the World'	• follow a given design criteria and begin to create my own • create a plan which shows order, equipment and tools and describe it to others • describe a design using an accurately labelled sketch and words • make a prototype • begin to use computers to show design	• select suitable tools/equipment, explain choices; begin to use them accurately • work through a plan in order • begin to measure, mark out, cut and shape materials/components with some accuracy • begin to assemble, join and combine materials and components with some accuracy • begin to apply a range of finishing techniques with some accuracy	• look at design criteria while designing and making • use design criteria to evaluate finished product • say what I would change to make design better • begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose • begin to understand by whom, when and where products were designed • learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products	• work accurately to make cuts and holes to avoid mistakes • join materials, making strong, stiff structures • continue working on product even if the original didn't work • select appropriate tools / techniques • alter product after checking, to make it better	
How does it go round and round?					
What was life like in Chawton during the Regency period?					

YEAR 3/4 : CYCLE B

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
Were the Vikings raiders or traders?					
Where does the bang come from? lamps and lanterns- using electrical systems: simple circuits and switches	• follow a given design criteria and begin to create my own • create a plan which shows order, equipment and tools and describe it to others	• select suitable tools/equipment/materials, explain choices; begin to use them accurately • work through a plan in order	• look at design criteria while designing and making • use design criteria to evaluate finished product • learn about some inventors/designers/	• work and measure accurately to make cuts and holes • join materials to make strong, stiff structures/products and explain how to do this	

DT Knowledge and Skills (Practical Knowledge)

	• describe a design using an accurately labelled sketch and words • explain how product will work • make a prototype • begin to use computers to show design • use research for design ideas	• begin to measure, mark out, cut shape, assemble materials/ components with some accuracy • begin to apply a range of finishing techniques with some accuracy	engineers/chefs/ manufacturers of ground-breaking products • research whether products can be recycled or reused	• select appropriate tools / techniques • begin to try new/different ideas and do so with increasing confidence • understand that a simple fabric shape can be used to make a 3D textiles project • use simple circuit in product • use number of components in circuit • program a computer to control product	
Who built the roads? Building the Colosseum Mechanical Systems - Levers and linkages	• follow a given design criteria and begin to create my own • create a plan which shows order, equipment and tools and describe it to others • describe a design using an accurately labelled sketch and words • explain how product will work • make a prototype • use research for design ideas	• select suitable tools/equipment, explain choices; begin to use them accurately • select appropriate materials, fit for purpose and explain choices. • work through a plan in order • begin to measure, mark out, cut, shape, join and combine materials/ components with some accuracy	• look at design criteria while designing and making • use design criteria to evaluate finished product • learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products	• work accurately to measure and make cuts and holes • begin to make strong, stiff structures by joining materials and explain how • continue working on product even if the original didn't work • select appropriate tools / techniques • alter product after checking, to make it better • use levers and linkages to create movement	
Why is the Earth so angry? mechanical systems – pneumatics Explore in relation to volcanoes/lava	• follow a given design criteria and begin to create my own • create a plan which shows order, equipment and tools and describe it to others • describe a design using an accurately labelled sketch and words • make design decisions	• select suitable tools/equipment, explain choices; begin to use them accurately • select appropriate materials, fit for purpose and explain choices. • work through a plan in order • begin to measure, mark out, cut and shape materials/ components with some accuracy	• look at design criteria while designing and making • use design criteria to evaluate finished product • say what I would change to make design better	• select appropriate tools / techniques • use pneumatics to create movement	

CHAWTON C.E. PRIMARY SCHOOL
'Love, Courage and Fellowship'

DT Knowledge and Skills (Practical Knowledge)

Where does my food go? Create a meal from our edible gardens: healthy and varied diet.	• follow a given design criteria and begin to create my own • create a plan which shows order, equipment and tools and describe it to others • describe a design using an accurately labelled sketch and words • make design decisions	• select suitable tools/equipment, explain choices; begin to use them accurately	• look at design criteria while designing and making • use design criteria to evaluate finished product • say what I would change to make design better • learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products	• select appropriate tools / techniques • use equipment safely • prepare and cook some dishes safely and hygienically • use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	• carefully select ingredients • think about how to grow plants to use in cooking • explain how food and drink are needed for active/healthy bodies • think about presenting product in interesting/ attractive ways • understand ingredients can be fresh, pre-cooked or processed • begin to understand about food being grown, reared or caught in the UK or wider world • describe eat well plate and how a healthy diet=variety / balance of food and drinks
Why is our world changing?					
Assessment Notes to pass on for the year 5/6 teacher:					

DT Knowledge and Skills (Practical Knowledge)

CHAWTON C.E. PRIMARY SCHOOL
'Love, Courage and Fellowship'

KEY STAGE TWO:
National Curriculum Statements:

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
End of Key Stage Two **National Curriculum Statements**	*Use research and develop design criteria* to inform the design of *innovative*, functional, appealing products that are fit for purpose, *aimed at particular individuals or groups* Generate, develop, model and communicate their ideas through discussion, *annotated sketches, cross-sectional and exploded diagrams,* prototypes, *pattern pieces* and computer-aided design	Select from and use a *wider range of tools and equipment* to perform practical tasks [for example, cutting, shaping, joining and finishing], *accurately* Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their *functional properties and aesthetic qualities*	*Investigate and analyse* a range of existing products. Evaluate their ideas and products against *their own design criteria* and *consider the views of others to improve their work.* *Understand how key events and individuals in design and technology have helped shape the world*	Apply their understanding of how to strengthen, stiffen and reinforce more *complex structures* *Understand* and use mechanical systems in their products [for example, *gears, pulleys, cams,* levers and *linkages*] *Understand and use electrical systems in their products [for example, series circuits*	*Understand and apply* the principles of a healthy and varied diet *Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques* *Understand seasonality,* and know where and *how a variety of ingredients are grown, reared, caught and processed.*

YEAR 5/6: CYCLE A

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
What did we learnt from the ancient civilisations?					
Are we at the centre of the universe? Using pulleys or gears to show relationship between planets/universe https://nustem.uk/activity/levers-pulleys-and-gears-key-stages-1-2/	• create own design criteria and specification • follow and refine a logical plan and explain it to others • use annotated sketches, cross-sectional planning and exploded diagrams • clearly explain how parts of design will work, (and how they are fit for purpose) • independently model and refine design ideas by making prototypes and using pattern pieces	• use selected tools and equipment precisely/with a good level of precision • create, follow,(and adapt) detailed step-by-step plans • accurately assemble, join and combine materials /components • (mainly) accurately apply a range of finishing techniques • use techniques that involve a number of steps	• evaluate quality of design while designing and making; (is it fit for purpose?) • evaluate ideas and finished product against specification, stating if it's fit for purpose • test and evaluate final product; (explain what would improve it and the effect different resources may have had) • discuss some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products	• explain how product meets design criteria • use cams, pulleys and gears to create movement • make a prototype • use a range of joining techniques • think carefully about what would improve product	
How close did the civil war come to Chawton?					
How can we not lose words?					
Does the punishment fit?					
Do you have the skills? Chawton Bake Off	• create own design criteria and specification • follow and refine a logical plan and explain it to others	• use selected tools and equipment precisely/with a good level of precision • produce suitable lists of tools, equipment, materials	• discuss some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products	• be confident to try new / different ideas • think carefully about what would improve product	• understand a recipe can be adapted by adding / substituting ingredients • explain seasonality of foods

Baking and Forest School: adapt savoury recipes to change features **Combining Different fabric shapes** Leavers' banner	• make design decisions, considering, resources (and cost) • come up with innovative design ideas		• research and discuss how sustainable materials are • consider the impact of products beyond their intended purpose •	• use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.	• learn about food processing methods • name some types of food that are grown, reared or caught in the UK or wider world • adapt recipes to change appearance, taste, texture or aroma. • prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source.

YEAR 5/6: CYCLE B

	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE	FOOD AND NUTRITION
What would you like to invent? using cams/motorised framework to make a steam punk inspired object	• draw on market research (interviews and questionnaires) to inform design • identify features of design that will appeal to the user • create own design criteria and specification • come up with innovative design ideas • follow and refine a logical plan and explain it to others • use annotated sketches, cross-sectional planning and exploded diagrams • independently model and refine design ideas by making prototypes and using pattern pieces	• use selected tools and equipment precisely/with a good level of precision • produce suitable lists of tools, equipment, materials needed,(considering constraints) and select the most appropriate • create, follow,(and adapt) detailed step-by-step plans • explain how product will appeal to audience; (make changes to improve quality) • accurately measure, mark out, cut, shape, assemble and join materials/components • (mainly) accurately apply a range of finishing techniques • use techniques that involve a number of steps	• do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose • evaluate how much products cost to make and how innovative they are • research and discuss how sustainable materials are	• make a prototype • reinforce and strengthen a 3D frame • select materials carefully, considering intended use of the product (the aesthetics and functionality) and refine • explain how product meets design criteria	
What was it like to be an evacuee?					
How can we be guardians of our world? moving toys and mechanisms	• draw on market research (interviews and questionnaires) to inform design • use research of user's individual needs, wants, requirements for design	• use selected tools and equipment precisely/with a good level of precision • produce suitable lists of tools, equipment, materials needed,(considering constraints) • select appropriate materials, fit for purpose; explain choices,	• do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose	• select materials carefully, considering intended use of the product (the aesthetics and functionality). • explain how product meets design criteria • reinforce and strengthen a 3D frame	

	• identify features of design that will appeal to the intended user • create own design criteria and specification • come up with innovative design ideas • follow and refine a logical plan and explain it to others • use annotated sketches, cross-sectional planning and exploded diagrams • make design decisions, considering, resources (and cost) • clearly explain how parts of design will work, (and how they are fit for purpose) • independently model and refine design ideas by making prototypes and using pattern pieces • use computer-aided designs	considering functionality (and aesthetics) • create, follow,(and adapt) detailed step-by-step plans • explain how product will appeal to audience; (make changes to improve quality) • accurately measure, mark out, cut and shape materials/components • accurately assemble, join and combine materials/components • (mainly) accurately apply a range of finishing techniques • use techniques that involve a number of steps • I can/begin to be resourceful with practical problems	• evaluate how much products cost to make and how innovative they are • research and discuss how sustainable materials are • consider the impact of products beyond their intended purpose	• refine product after testing, considering aesthetics, functionality and purpose • incorporate hydraulics and pneumatics • be confident to try new / different ideas • use cams, pulleys and gears to create movement	
What does the rainforest do for us?					
Who lives in a house like this? Electrical Systems: Monitoring and Control	• draw on market research (interviews and questionnaires) to inform design • use research of user's individual needs, wants, requirements for design • identify features of design that will appeal to the intended user • create own design criteria and specification • use annotated sketches, cross-sectional planning and exploded diagrams • independently model and refine design ideas by making prototypes and using pattern pieces • use computer-aided designs	• use selected tools and equipment precisely/with a good level of precision • select appropriate materials, fit for purpose; explain choices, considering functionality (and aesthetics) • create, follow,(and adapt) detailed step-by-step plans • use techniques that involve a number of steps • resourceful with practical problems	• consider the impact of products beyond their intended purpose	• explain how product meets design criteria • refine product after testing, considering aesthetics, functionality and purpose • use different types of circuit in product • think of ways in which adding a circuit would improve product • program a computer to monitor changes in environment and control product	

CHAWTON C.E. PRIMARY SCHOOL
'Love, Courage and Fellowship'

DT Knowledge and Skills (Practical Knowledge)

What do I need to keep healthy? Using real fire at Forest School to cook a healthy snack **Combining Different fabric shapes** Leavers' banner	• create own design criteria and specification • follow and refine a logical plan and explain it to others • make design decisions, considering, resources (and cost) • come up with innovative design ideas	• use selected tools and equipment precisely/with a good level of precision • produce suitable lists of tools, equipment, materials	• research and discuss how sustainable materials are • consider the impact of products beyond their intended purpose	• be confident to try new / different ideas • think carefully about what would improve product • use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.	• understand a recipe can be adapted by adding / substituting ingredients • adapt recipes to change appearance, taste, texture or aroma. • prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source.
Assessment Notes to pass on for the year 7 transition teacher:					