



Design and Technology: Medium Term Plan

Year 1 Autumn Term 2019:

		Key Learning	Key Vocabulary
	Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • use pictures and words to state what they are making • say whether their products are for themselves or other users • describe what their products are for • use simple design criteria to help develop their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • generate ideas by drawing on their own experiences • use knowledge of existing ideas to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use ICT, where appropriate, to develop and show their ideas 	
	Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • plan by suggesting what to do next • select tools and equipment • select appropriate materials and components <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • with assistance, follow procedures for safety and hygiene • use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • with support, measure, mark out, cut and shape materials and components • with support, assemble, join and combine materials and components 	
	Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • say whether they like their design or not and why 	

		<p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • explore what products are and who or what they are for. • explore how products work and how or where they might be used. • explore what materials products are made from • explore what they like and dislike about products 	
	<p>Technical Knowledge</p>	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • about the simple working characteristics of materials and components • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shape • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking 	
	<p>Cooking and nutrition</p>	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that all food comes from plants or animals • that food comes from different places <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • name and group familiar foods e.g. vegetables and fruit • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating 	

Year 1 Spring Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • use pictures and words to state what they are making • say whether their products are for themselves or other users • describe what their products are for • use simple design criteria to help develop their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • generate ideas by drawing on their own experiences • use knowledge of existing ideas to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use ICT, where appropriate, to develop and show their ideas 	
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • plan by suggesting what to do next • select tools and equipment • select appropriate materials and components <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • with assistance, follow procedures for safety and hygiene • use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • with support, measure, mark out, cut and shape materials and components • with support, assemble, join and combine materials and components 	
Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • say whether they like their design or not and why <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • explore what products are and who or what they are for. 	

		<ul style="list-style-type: none"> • explore how products work and how or where they might be used. • explore what materials products are made from • explore what they like and dislike about products 	
	Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • about the simple working characteristics of materials and components • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shape • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking 	
	Cooking and nutrition	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that all food comes from plants or animals • that food comes from different places <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • name and group familiar foods e.g. vegetables and fruit • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating 	

Year 1 Summer Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • use pictures and words to state what they are making • say whether their products are for themselves or other users • describe what their products are for • use simple design criteria to help develop their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • generate ideas by drawing on their own experiences • use knowledge of existing ideas to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use ICT, where appropriate, to develop and show their ideas 	
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • plan by suggesting what to do next • select tools and equipment • select appropriate materials and components <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • with assistance, follow procedures for safety and hygiene • use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • with support, measure, mark out, cut and shape materials and components • with support, assemble, join and combine materials and components 	
Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • say whether they like their design or not and why <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • explore what products are and who or what they are for. 	

	<ul style="list-style-type: none"> • explore how products work and how or where they might be used. • explore what materials products are made from • explore what they like and dislike about products 	
Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • about the simple working characteristics of materials and components • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shape • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking 	
Cooking and nutrition	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that all food comes from plants or animals • that food comes from different places <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • name and group familiar foods e.g. vegetables and fruit • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating 	

Year 2 Autumn Term 2019:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • state what products they are making • say whether their products are for themselves or other users • describe what their products are for • state how their products will work with words and pictures • say how they will make their products suitable for their intended users • use simple design criteria to help develop their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • generate ideas by drawing on their own experiences • use knowledge of existing ideas to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use ICT, where appropriate, to develop and communicate their ideas 	
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • plan by suggesting what to do next • select from a range of tools and equipment, explaining their choices • select from a range of materials and components according to their characteristics <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • measure, mark out, cut and shape materials and components • assemble, join and combine materials and components • use finishing techniques, including those from art and design 	
Evaluating		

		<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • suggest how their products could be improved <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • explore what products are and who or what they are for • explore how products work and how or where they might be used • explore what materials products are made from • explore what they like and dislike about products 	
	<p>Technical Knowledge</p>	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • about the simple working characteristics of materials and components • about the movement of simple mechanisms such as levers, sliders, wheels and axles • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shapes • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking 	
	<p>Cooking and nutrition</p>	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that all food comes from plants or animals • that food has to be farmed, grown elsewhere (e.g. home) or caught <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • how to name and sort foods into the five groups in the Eat Well Plate • that everyone should eat at least five portions of fruit and vegetables every day • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating 	

Year 2 Spring Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • state what products they are making • say whether their products are for themselves or other users • describe what their products are for • state how their products will work with words and pictures • say how they will make their products suitable for their intended users • use simple design criteria to help develop their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • generate ideas by drawing on their own experiences • use knowledge of existing ideas to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use ICT, where appropriate, to develop and communicate their ideas 	
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • plan by suggesting what to do next • select from a range of tools and equipment, explaining their choices • select from a range of materials and components according to their characteristics <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • measure, mark out, cut and shape materials and components • assemble, join and combine materials and components • use finishing techniques, including those from art and design 	

	Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • suggest how their products could be improved <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • explore what products are and who or what they are for • explore how products work and how or where they might be used • explore what materials products are made from • explore what they like and dislike about products 	
	Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • about the simple working characteristics of materials and components • about the movement of simple mechanisms such as levers, sliders, wheels and axles • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shapes • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking 	
	Cooking and nutrition	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that all food comes from plants or animals • that food has to be farmed, grown elsewhere (e.g. home) or caught <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • how to name and sort foods into the five groups in the Eat Well Plate • that everyone should eat at least five portions of fruit and vegetables every day • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating 	

Year 2 Summer Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • state what products they are making • say whether their products are for themselves or other users • describe what their products are for • state how their products will work with words and pictures • say how they will make their products suitable for their intended users • use simple design criteria to help develop their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • generate ideas by drawing on their own experiences • use knowledge of existing ideas to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use ICT, where appropriate, to develop and communicate their ideas 	
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	Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • suggest how their products could be improved <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • explore what products are and who or what they are for • explore how products work and how or where they might be used • explore what materials products are made from • explore what they like and dislike about products 	
	Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • about the simple working characteristics of materials and components • about the movement of simple mechanisms such as levers, sliders, wheels and axles • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shapes • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking 	
	Cooking and nutrition	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that all food comes from plants or animals • that food has to be farmed, grown elsewhere (e.g. home) or caught <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • how to name and sort foods into the five groups in the Eat Well Plate • that everyone should eat at least five portions of fruit and vegetables every day • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating 	

Year 3/4 Autumn Term 2019:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • describe the purpose of their products • indicate the design features of their products that will appeal to intended users • explain how particular parts of their products work • gather information about needs and wants of particular individuals and groups • develop their own design criteria and use these to inform their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • share and clarify ideas through discussion • model their ideas using prototypes and pattern pieces • use annotated sketches, cross-sectional drawings and exploded diagrams to communicate their ideas • use computer aided design to develop and communicate their ideas • generate realistic ideas, focusing on the needs of the user • make design decisions that take account of the availability of resources 	<p>Prototype</p> <p>Exploded diagram</p>
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • select tools and equipment suitable for the task • explain their choice of tools and equipment in relation to the skills and techniques they will be using • select materials and components suitable for the task • explain their choice of materials and components according to the functional properties and aesthetic qualities • order the main stages of making <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components • measure, mark out, cut and shape materials and components with some accuracy • assemble, join and combine materials and components with some accuracy 	<p>Functional properties</p> <p>aesthetic</p>

	<ul style="list-style-type: none"> • apply a range of finishing techniques, including those from art and design with some accuracy 	
Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • identify the strengths and areas for development in their ideas and products • consider the views of others, including intended users, to improve their work • refer to their design criteria as they design and make • use their design criteria to evaluate their completed products <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • how well products have been designed and made <ul style="list-style-type: none"> • why materials have been chosen • what methods of construction have been used • how well products work to achieve their purposes • how well products meet user needs and wants • whether products can be recycled or reused <p><u>Evaluating – key events and individuals</u></p> <ul style="list-style-type: none"> • about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products 	
Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • how to use learning from science and maths to help design and make products that work • that materials have functional properties • that materials can be combined and mixed • that mechanical and electrical systems have an input, process and output • use some technical vocabulary for the projects they are undertaking • how mechanical systems such as levers create movement • how to program a computer to control their products • how to make strong, stiff shell structures • that a single fabric shape can be used to make a 3D textiles product • that food ingredients can be fresh, pre-cooked and processed 	Input Process Output Levers Fresh Pre-cooked processed
Cooking and nutrition	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chicken and cattle) and caught (such as fish) in the UK, Europe and the wider world <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p>	Grown Reared Caught

		<ul style="list-style-type: none"> • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source • to attempt to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the Eat Well Plate • that to be active and healthy, food and drink are needed to provide energy for the body 	<p>Peeling, chopping, slicing, grating, mixing, spreading, kneading, baking</p>
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Year 3/4 Spring Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • describe the purpose of their products • indicate the design features of their products that will appeal to intended users • explain how particular parts of their products work • gather information about needs and wants of particular individuals and groups • develop their own design criteria and use these to inform their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • share and clarify ideas through discussion • model their ideas using prototypes and pattern pieces • use annotated sketches, cross-sectional drawings and exploded diagrams to communicate their ideas • use computer aided design to develop and communicate their ideas • generate realistic ideas, focusing on the needs of the user • make design decisions that take account of the availability of resources 	<p>Prototype</p> <p>Exploded diagram</p>
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • select tools and equipment suitable for the task • explain their choice of tools and equipment in relation to the skills and techniques they will be using • select materials and components suitable for the task • explain their choice of materials and components according to the functional properties and aesthetic qualities • order the main stages of making <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	<p>Functional properties</p> <p>aesthetic</p>

	<ul style="list-style-type: none"> • measure, mark out, cut and shape materials and components with some accuracy • assemble, join and combine materials and components with some accuracy • apply a range of finishing techniques, including those from art and design with some accuracy 	
Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • identify the strengths and areas for development in their ideas and products • consider the views of others, including intended users, to improve their work • refer to their design criteria as they design and make • use their design criteria to evaluate their completed products <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • how well products have been designed and made <ul style="list-style-type: none"> • why materials have been chosen • what methods of construction have been used • how well products work to achieve their purposes • how well products meet user needs and wants • whether products can be recycled or reused <p><u>Evaluating – key events and individuals</u></p> <ul style="list-style-type: none"> • about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products 	
Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • how to use learning from science and maths to help design and make products that work • that materials have functional properties • that materials can be combined and mixed • that mechanical and electrical systems have an input, process and output • use some technical vocabulary for the projects they are undertaking • how mechanical systems such as levers create movement • how to program a computer to control their products • how to make strong, stiff shell structures • that a single fabric shape can be used to make a 3D textiles product • that food ingredients can be fresh, pre-cooked and processed 	Input Process Output Levers Fresh Pre-cooked processed

	<p>Cooking and nutrition</p>	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chicken and cattle) and caught (such as fish) in the UK, Europe and the wider world <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source • to attempt to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the Eat Well Plate • that to be active and healthy, food and drink are needed to provide energy for the body 	<p>Grown</p> <p>Reared</p> <p>Caught</p> <p>Peeling, chopping, slicing, grating, mixing, spreading, kneading, baking</p>
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Year 3/4 Summer Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • describe the purpose of their products • indicate the design features of their products that will appeal to intended users • explain how particular parts of their products work • gather information about needs and wants of particular individuals and groups • develop their own design criteria and use these to inform their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • share and clarify ideas through discussion • model their ideas using prototypes and pattern pieces • use annotated sketches, cross-sectional drawings and exploded diagrams to communicate their ideas • use computer aided design to develop and communicate their ideas • generate realistic ideas, focusing on the needs of the user • make design decisions that take account of the availability of resources 	<p>Prototype</p> <p>Exploded diagram</p>
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • select tools and equipment suitable for the task • explain their choice of tools and equipment in relation to the skills and techniques they will be using • select materials and components suitable for the task • explain their choice of materials and components according to the functional properties and aesthetic qualities • order the main stages of making <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	<p>Functional properties</p> <p>aesthetic</p>

	<ul style="list-style-type: none"> • measure, mark out, cut and shape materials and components with some accuracy • assemble, join and combine materials and components with some accuracy • apply a range of finishing techniques, including those from art and design with some accuracy 	
Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • identify the strengths and areas for development in their ideas and products • consider the views of others, including intended users, to improve their work • refer to their design criteria as they design and make • use their design criteria to evaluate their completed products <p><u>Evaluating – Existing products</u></p> <ul style="list-style-type: none"> • how well products have been designed and made <ul style="list-style-type: none"> • why materials have been chosen • what methods of construction have been used • how well products work to achieve their purposes • how well products meet user needs and wants • whether products can be recycled or reused <p><u>Evaluating – key events and individuals</u></p> <ul style="list-style-type: none"> • about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products 	
Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • how to use learning from science and maths to help design and make products that work • that materials have functional properties • that materials can be combined and mixed • that mechanical and electrical systems have an input, process and output • use some technical vocabulary for the projects they are undertaking • how mechanical systems such as levers create movement • how to program a computer to control their products • how to make strong, stiff shell structures • that a single fabric shape can be used to make a 3D textiles product • that food ingredients can be fresh, pre-cooked and processed 	Input Process Output Levers Fresh Pre-cooked processed

<p>Cooking and nutrition</p>	<p>Cooking and nutrition – Where food comes from</p> <ul style="list-style-type: none"> • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chicken and cattle) and caught (such as fish) in the UK, Europe and the wider world 	<p>Grown</p> <p>Reared</p> <p>Caught</p>
	<p>Cooking and nutrition – Food preparation, cooking and nutrition</p> <ul style="list-style-type: none"> • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source • to attempt to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the Eat Well Plate • that to be active and healthy, food and drink are needed to provide energy for the body 	<p>Peeling, chopping, slicing, grating, mixing, spreading, kneading, baking</p>

Year 5/6 Autumn Term 2019:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • describe the purpose of their products • indicate the design features of their products that will appeal to intended users • explain how particular parts of their products work • carry out research, using surveys, questionnaires and web-based resources • identify the needs of particular individuals • develop a plan to guide thinking • develop their own design criteria and use these to inform their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • share and clarify ideas through discussion • model their ideas using prototypes / small models • use annotated sketches, cross-sectional drawings and exploded diagrams to communicate their ideas • use computer aided design to develop and communicate their ideas • generate realistic ideas, focusing on the needs of the user • make design decisions that take account of the availability of resources 	<p>Prototype</p> <p>Exploded diagram</p>
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • select tools and equipment suitable for the task • explain their choice of tools and equipment in relation to the skills and techniques they will be using • select materials and components suitable for the task • explain their choice of materials and components according to the functional properties and aesthetic qualities • order the main stages of making • produce appropriate lists of tools, equipment and materials that they need <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	<p>Functional properties</p> <p>aesthetic</p>

		<ul style="list-style-type: none"> • measure, mark out, cut and shape materials and components with accuracy • assemble, join and combine materials and components with accuracy • apply a range of finishing techniques, including those from art and design with some accuracy • demonstrate resourcefulness when tackling practical problems 	
	<p>Evaluating</p>	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • identify the strengths and areas for development in their ideas and products • consider the views of others, including intended users, to improve their work • critically evaluate the quality of the design, manufacture and fitness for purpose of their products • evaluate their ideas and products against their original design specification <p><u>Evaluating – Existing products</u></p> <p>Pupils will be taught to investigate and analyse:</p> <ul style="list-style-type: none"> • identify how well products have been designed and made <ul style="list-style-type: none"> • explain why materials have been chosen • explain some basic methods of construction that have been used • explain how well products work to achieve their purposes • how much products cost to make • how sustainable materials in products are <p><u>Evaluating – key events and individuals</u></p> <ul style="list-style-type: none"> • about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products 	
	<p>Technical Knowledge</p>	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • use some learning from science and maths to help design and make products that work • that materials can be combined and mixed to create more useful characteristics • that mechanical and electrical systems have an input, process and output • the correct technical vocabulary for the projects they are undertaking • how mechanical systems such as cams or pulleys or gears create movement • how to program a computer to monitor changes in the environment and control their products • how to reinforce and strengthen a 3D framework 	<p>Input</p> <p>Process</p> <p>Output</p> <p>Cams</p> <p>Pulleys</p> <p>Gears</p>

		<ul style="list-style-type: none"> • that a 3D textiles product can be made from a combination of fabric shapes • that a recipe can be adapted by adding or substituting one or more ingredients 	
	<p>Cooking and nutrition</p>	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chicken and cattle) and caught (such as fish) in the UK, Europe and the wider world • that seasons may affect the food available • how food is processed into ingredients that can be eaten or used in cooking <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source – they will also control the temperature of the heat source • how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • that recipes can be adapted to change the appearance, taste, texture and aroma • that different food and drink contain different substances – nutrients, water and fibre – that are needed for health • work within a budget 	<p>Grown</p> <p>Reared</p> <p>Caught</p> <p>Processed</p> <p>Peeling, chopping, slicing, grating, mixing, spreading, kneading, baking</p>

Year 5/6 Spring Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • describe the purpose of their products • indicate the design features of their products that will appeal to intended users • explain how particular parts of their products work • carry out research, using surveys, questionnaires and web-based resources • identify the needs of particular individuals • develop a plan to guide thinking • develop their own design criteria and use these to inform their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • share and clarify ideas through discussion • model their ideas using prototypes / small models • use annotated sketches, cross-sectional drawings and exploded diagrams to communicate their ideas • use computer aided design to develop and communicate their ideas • generate realistic ideas, focusing on the needs of the user • make design decisions that take account of the availability of resources 	<p>Prototype</p> <p>Exploded diagram</p>
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • select tools and equipment suitable for the task • explain their choice of tools and equipment in relation to the skills and techniques they will be using • select materials and components suitable for the task • explain their choice of materials and components according to the functional properties and aesthetic qualities • order the main stages of making • produce appropriate lists of tools, equipment and materials that they need <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	<p>Functional properties</p> <p>aesthetic</p>

	<ul style="list-style-type: none"> • measure, mark out, cut and shape materials and components with accuracy • assemble, join and combine materials and components with accuracy • apply a range of finishing techniques, including those from art and design with some accuracy • demonstrate resourcefulness when tackling practical problems 	
Evaluating	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • identify the strengths and areas for development in their ideas and products • consider the views of others, including intended users, to improve their work • critically evaluate the quality of the design, manufacture and fitness for purpose of their products • evaluate their ideas and products against their original design specification <p><u>Evaluating – Existing products</u></p> <p>Pupils will be taught to investigate and analyse:</p> <ul style="list-style-type: none"> • identify how well products have been designed and made <ul style="list-style-type: none"> • explain why materials have been chosen • explain some basic methods of construction that have been used • explain how well products work to achieve their purposes • how much products cost to make • how sustainable materials in products are <p><u>Evaluating – key events and individuals</u></p> <ul style="list-style-type: none"> • about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products 	
Technical Knowledge	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • use some learning from science and maths to help design and make products that work • that materials can be combined and mixed to create more useful characteristics • that mechanical and electrical systems have an input, process and output • the correct technical vocabulary for the projects they are undertaking • how mechanical systems such as cams or pulleys or gears create movement • how to program a computer to monitor changes in the environment and control their products • how to reinforce and strengthen a 3D framework 	Input Process Output Cams Pulleys Gears

		<ul style="list-style-type: none"> • that a 3D textiles product can be made from a combination of fabric shapes • that a recipe can be adapted by adding or substituting one or more ingredients 	
	<p>Cooking and nutrition</p>	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chicken and cattle) and caught (such as fish) in the UK, Europe and the wider world • that seasons may affect the food available • how food is processed into ingredients that can be eaten or used in cooking <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source – they will also control the temperature of the heat source • how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • that recipes can be adapted to change the appearance, taste, texture and aroma • that different food and drink contain different substances – nutrients, water and fibre – that are needed for health • work within a budget 	<p>Grown</p> <p>Reared</p> <p>Caught</p> <p>Processed</p> <p>Peeling, chopping, slicing, grating, mixing, spreading, kneading, baking</p>

Year 5/6 Summer Term 2020:

	Key Learning	Key Vocabulary
Designing	<p><u>Designing – Understanding contexts, users and purposes</u></p> <ul style="list-style-type: none"> • work within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment • describe the purpose of their products • indicate the design features of their products that will appeal to intended users • explain how particular parts of their products work • carry out research, using surveys, questionnaires and web-based resources • identify the needs of particular individuals • develop a plan to guide thinking • develop their own design criteria and use these to inform their ideas <p><u>Designing - Generating, developing, modelling and communicating ideas</u></p> <ul style="list-style-type: none"> • share and clarify ideas through discussion • model their ideas using prototypes / small models • use annotated sketches, cross-sectional drawings and exploded diagrams to communicate their ideas • use computer aided design to develop and communicate their ideas • generate realistic ideas, focusing on the needs of the user • make design decisions that take account of the availability of resources 	<p>Prototype</p> <p>Exploded diagram</p>
Making	<p><u>Making - Planning</u></p> <ul style="list-style-type: none"> • select tools and equipment suitable for the task • explain their choice of tools and equipment in relation to the skills and techniques they will be using • select materials and components suitable for the task • explain their choice of materials and components according to the functional properties and aesthetic qualities • order the main stages of making • produce appropriate lists of tools, equipment and materials that they need <p><u>Making – Practical skills and techniques</u></p> <ul style="list-style-type: none"> • follow procedures for safety and hygiene • use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	<p>Functional properties</p> <p>aesthetic</p>

		<ul style="list-style-type: none"> • measure, mark out, cut and shape materials and components with accuracy • assemble, join and combine materials and components with accuracy • apply a range of finishing techniques, including those from art and design with some accuracy • demonstrate resourcefulness when tackling practical problems 	
	<p>Evaluating</p>	<p><u>Evaluating – Own ideas and products</u></p> <ul style="list-style-type: none"> • identify the strengths and areas for development in their ideas and products • consider the views of others, including intended users, to improve their work • critically evaluate the quality of the design, manufacture and fitness for purpose of their products • evaluate their ideas and products against their original design specification <p><u>Evaluating – Existing products</u></p> <p>Pupils will be taught to investigate and analyse:</p> <ul style="list-style-type: none"> • identify how well products have been designed and made <ul style="list-style-type: none"> • explain why materials have been chosen • explain some basic methods of construction that have been used • explain how well products work to achieve their purposes • how much products cost to make • how sustainable materials in products are <p><u>Evaluating – key events and individuals</u></p> <ul style="list-style-type: none"> • about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products 	
	<p>Technical Knowledge</p>	<p><u>Technical knowledge – Making products work</u></p> <ul style="list-style-type: none"> • use some learning from science and maths to help design and make products that work • that materials can be combined and mixed to create more useful characteristics • that mechanical and electrical systems have an input, process and output • the correct technical vocabulary for the projects they are undertaking • how mechanical systems such as cams or pulleys or gears create movement • how to program a computer to monitor changes in the environment and control their products • how to reinforce and strengthen a 3D framework 	<p>Input</p> <p>Process</p> <p>Output</p> <p>Cams</p> <p>Pulleys</p> <p>Gears</p>

		<ul style="list-style-type: none"> • that a 3D textiles product can be made from a combination of fabric shapes • that a recipe can be adapted by adding or substituting one or more ingredients 	
	<p>Cooking and nutrition</p>	<p><u>Cooking and nutrition – Where food comes from</u></p> <ul style="list-style-type: none"> • that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chicken and cattle) and caught (such as fish) in the UK, Europe and the wider world • that seasons may affect the food available • how food is processed into ingredients that can be eaten or used in cooking <p><u>Cooking and nutrition – Food preparation, cooking and nutrition</u></p> <ul style="list-style-type: none"> • how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source – they will also control the temperature of the heat source • how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • that recipes can be adapted to change the appearance, taste, texture and aroma • that different food and drink contain different substances – nutrients, water and fibre – that are needed for health • work within a budget 	<p>Grown</p> <p>Reared</p> <p>Caught</p> <p>Processed</p> <p>Peeling, chopping, slicing, grating, mixing, spreading, kneading, baking</p>