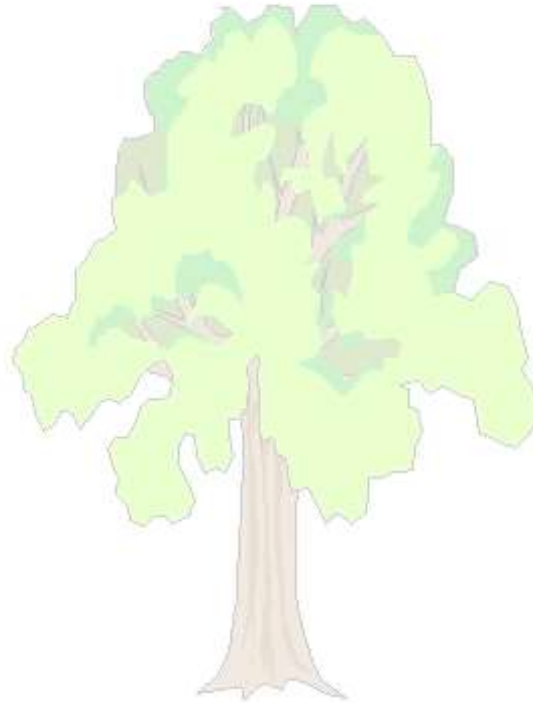


Year 4 Design and Technology Long Term Plan

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		How does a torch work? Electrical Systems			How can we adapt a recipe? Cooking and Nutrition



Year 4 Term 3 Medium Term Plan

Term 3 D&T – Electrical Systems – How does a torch work?		
National Curriculum Links	Key Vocabulary	Pupil Offer
<p>DT</p> <ul style="list-style-type: none"> - I know how most electrical systems work and can apply them to my products, for example, using switches, bulbs, buzzers or motors. - I know how to compute a basic program and can monitor and control my products. - I can plan and create an innovative, detailed design, with a criteria that is functional and fit for the purpose of particular individuals or groups. - I can explain my choice of materials, according to their function and aesthetic qualities. - I can use the design criteria to test and evaluate my ideas and products, with the intended user and purpose in mind. - I am aware of different inventors, designers, engineers and manufacturers and have an understanding of the products they have invented and developed. 	<p>battery bulb conductor circuit electricity insulator switch component target audience, aesthetics assemble sketch test evaluation</p>	<p>Making a torch</p>

Term 3	Session 1	Session 2	Session 3	Session 4	Session 5
Lesson Overview including Substantive knowledge	<p>TECHNICAL UNDERSTANDING How do electrical systems work?</p> <p>Pupils will use components to make complete circuits. They will use bulbs, wires and batteries to make complete circuits. They will then investigate what can make a bulb shine brighter.</p>	<p>TECHNICAL UNDERSTANDING What components are needed to make a torch work?</p> <p>Pupils will investigate the components needed inside a torch for the bulb to be able to light up. They will also investigate how to use metal objects to make their own switch.</p>	<p>DESIGN How does a torch work?</p> <p>Pupils will decide the materials they will need to make their torch. They will then design their torch, labelling exactly where components will be positioned.</p>	<p>MAKE Can I assemble my design?</p> <p>Pupils will use the components they have used in their design to actually make the torch. Children will need to create a switch using split pins and a paper clip.</p>	<p>EVALUATE Does my torch fit the design brief?</p> <p>Pupils will have the opportunity to test each other's torches. They will evaluate how well they have met the design brief and what they might do differently if they were to make another torch.</p>
Disciplinary Knowledge	<ul style="list-style-type: none"> - I know how most electrical systems work and can apply them to my products, for example, using switches, bulbs, buzzers or motors. 	<ul style="list-style-type: none"> - I know how most electrical systems work and can apply them to my products, for example, using switches, bulbs, buzzers or motors. 	<ul style="list-style-type: none"> - I can plan and create an innovative, detailed design, with a criteria that is functional and fit for the purpose of particular individuals or groups. - I can explain my choice of materials, according to their function and aesthetic qualities. - I can use the design criteria to test and evaluate my ideas and products, with the intended user and purpose in mind. 	<ul style="list-style-type: none"> - I can plan and create an innovative, detailed design, with a criteria that is functional and fit for the purpose of particular individuals or groups. 	<ul style="list-style-type: none"> - I can use the design criteria to test and evaluate my ideas and products, with the intended user and purpose in mind.

Organisation and Communication	Practical: making complete circuits	Investigate the inside of a torch	Labelled design of torch	Pupils will make their torch.	Pupils will evaluate their design.
Famous People					

Year 4 Term 6 Medium Term Plan

Term 6 D&T – Cooking and Nutrition – Adapting a bread recipe

National Curriculum Links	Key Vocabulary	Pupil Offer
DT <ul style="list-style-type: none"> - I can plan and create an innovative, detailed design, with a criteria that is functional and fit for the purpose of particular individuals or groups. - I can explain my choice of materials, according to their function and aesthetic qualities. - I can use the design criteria to test and evaluate my ideas and products, with the intended user and purpose in mind. 	adapt addition appearance budget buttery combine comment taste hygiene mix	compare construct cream crunchy cuboid cut design ingredients texture
		Thanksgiving feast

Term 6	Session 1	Session 2	Session 4	Session 3	Session 5
Lesson Overview including Substantive knowledge	RESEARCH What breads already exist? Children will taste-test a range of breads and evaluate taste, smell, texture and appearance. They will also decide what type of base bread they would like to make.	DESIGN & MAKE What is needed to make basic bread? Pupils will collect their own ingredients and equipment to make basic bread. Together, we will make a loaf of plain bread.	DESIGN What packaging will be suitable? Children to research a range of already-existing bread packaging.	MAKE What is needed to make basic bread? Pupils will collect their own ingredients and equipment to make basic bread. They will each follow the recipe for basic bread and add their chosen ingredients to make it unique.	EVALUATE Did my bread meet the design brief? Pupils will evaluate their own and each others' bread. They will comment on taste, smell, texture and appearance, as well as suggesting ways they could improve their bread next time.
Disciplinary Knowledge	-I understand that food is grown, reared, caught and traded in the UK, Europe and the wider world.	- I can explain my choice of materials, according to their function and aesthetic qualities.	- I can plan and create an innovative, detailed design, with a criteria that is functional and fit for the purpose of particular individuals or groups.	<ul style="list-style-type: none"> - I can plan and create an innovative, detailed design, with a criteria that is functional and fit for the purpose of particular individuals or groups. - I can explain my choice of materials, according to their function and aesthetic qualities. - I can use the design criteria to test and evaluate my ideas and products, with the intended user and purpose in mind. 	- I can use the design criteria to test and evaluate my ideas and products, with the intended user and purpose in mind.
Organisation and Communication	Taste-testing bread	Making basic bread and understanding the process.	Design own packaging for the bread.	Make own bread and add selected ingredient.	Pupils will evaluate their design.

Famous People

