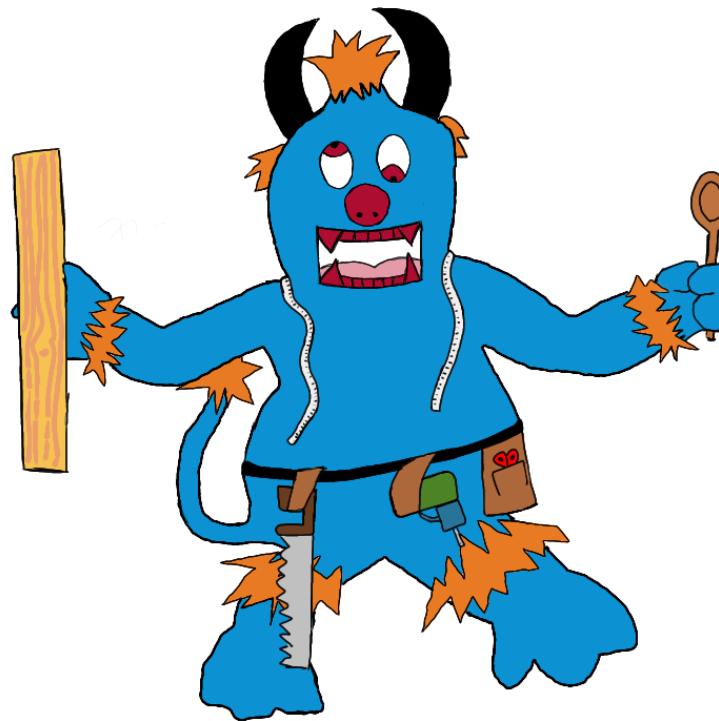


Design & Technology Intention Map

Key Stage One



Placing learning at the heart of everything we do.



KS1 Intention Map 2021 - 2022



Learning Intentions



1. Measure and weigh food items using non-standard measures, such as spoons and cups.
2. Prepare ingredients by peeling, grating, chopping and slicing.
3. Work safely and hygienically in construction and cooking activities.
4. Describe the types of food needed for a healthy and varied diet and apply the principles to make a simple, healthy meal.
5. Sort foods into groups by whether they are from an animal or plant source.
6. Identify the origin of some common foods (milk, eggs, some meats, common fruit and vegetables).

Bright Lights Big City

Knowledge Intentions

1. Hygiene rules include washing hands before handling food, cleaning surfaces, tying long hair back, storing food appropriately and wiping up spills.
2. Using non-standard measures is a way of measuring that does not involve reading scales. For example, weight may be measured using a balance scale and lumps of plasticine. Length may be measured in the number of handspans or pencils laid end to end.
3. Some ingredients need to be prepared before they can be cooked or eaten. There are many ways to prepare ingredients: peeling skins using a vegetable peeler, such as potato skins; grating hard ingredients, such as cheese or chocolate; chopping vegetables, such as onions and peppers and slicing foods, such as bread and apples.
4. Fruit and vegetables are an important part of a healthy diet. It is recommended that people eat at least five portions of fruit and vegetables every day.
5. A healthy diet should include meat or fish, starchy foods (such as potatoes or rice), some dairy foods, a small amount of fat and plenty of fruit and vegetables.

End products: produce a healthy balanced menu and bake bread based products linked to the Great Fire of London study.

The Kitchen



Jamie Oliver



Angela Hartnett



Paul Hollywood



Learning Intentions

1. Name and explore a range of everyday products and describe how they are used.
2. Explain how an everyday product could be improved.
3. Create a design to meet simple design criteria.
4. Generate and communicate their ideas through a range of different methods.
5. Select and use a range of materials, beginning to explain their choices.
6. Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.



Land A Hoy!

1. Everyday products are objects that are used routinely at home and school, such as a toothbrush, cup or pencil. All products are designed for a specific purpose.
2. Products can be improved in different ways, such as making them easier to use, more hardwearing or more attractive.
3. Fruit and vegetables are an important part of a healthy diet. It is recommended that people eat at least five portions of fruit and vegetables every day.
4. Different materials are suitable for different purposes, depending on their specific properties. For example, glass is transparent, so it is suitable to be used for windows.
5. Design criteria are the explicit goals that a project must achieve.
6. Ideas can be communicated in a variety of ways, including written work, drawings and diagrams, modelling, speaking and using information and communication technology.
7. Different materials are suitable for different purposes, depending on their specific properties. For example, glass is transparent, so it is suitable to be used for windows.
8. Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong, but it can be difficult to paint.

End products: evidence of design & make process that leads to a product or piece of clothing that could help keep Spikey / Cuddly Toy dry in the rain.

The Design Studio



**Charles
Macintosh**



**Noel
Bibby**



Learning Intentions

1. Generate and communicate their ideas through a range of different methods.
2. Explore how a structure can be made stronger, stiffer and more stable.
3. Explain how closely their finished products meet their design criteria and say what they could do better in the future.
4. Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.
5. Use wheels and axles to make a simple moving model.
6. Use a range of mechanisms (levers, sliders, wheels and axles) in models or products.
7. Explain how an everyday product could be improved.
8. Explain why a designer or inventor is important.



Towers, Tunnels & Turrets

Knowledge Intentions

1. Ideas can be communicated in a variety of ways, including written work, drawings and diagrams, modelling, speaking and using information and communication technology.
2. Structures can be made stronger, stiffer and more stable by using cardboard rather than paper and triangular shapes rather than squares. A broader base will also make a structure more stable.
3. An axle is a rod or spindle that passes through the centre of a wheel to connect two wheels.
4. A mechanism is a device that takes one type of motion or force and produces a different one. A mechanism makes a job easier to do. Mechanisms include sliders, levers, linkages, gears, pulleys and cams.
5. Finished products can be compared with design criteria to see how closely they match. Improvements can then be planned.
6. Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong, but it can be difficult to paint.
7. Products can be improved in different ways, such as making them easier to use, more hardwearing or more attractive.
8. Many key individuals have helped to shape the world. These include engineers, scientists, designers, inventors and many other people in important roles.

End products: evidence of a design & make process that leads to successful models of free standing towers and working drawbridges.

The Workshop



Sir Christopher Wren



Renzo Piano



John Nash





KS1 Intention Map 2022 - 2023



Learning Intentions



1. Name and explore a range of everyday products and describe how they are used.
2. Explain how an everyday product could be improved.
3. Create a design to meet simple design criteria.
4. Generate and communicate their ideas through a range of different methods.
5. Talk about their own and each other's work, identifying strengths or weaknesses and offering support.
6. Explain how closely their finished products meet their design criteria and say what they could do better in the future.
7. Select and use a range of materials, beginning to explain their choices.
8. Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.

Moonzoom

1. Everyday products are objects that are used routinely at home and school, such as a toothbrush, cup or pencil. All products are designed for a specific purpose.
2. Products can be improved in different ways, such as making them easier to use, more hardwearing or more attractive.
3. Design criteria are the explicit goals that a project must achieve.
4. Ideas can be communicated in a variety of ways, including written work, drawings and diagrams, modelling, speaking and using information and communication technology.
5. A strength is a good quality of a piece of work. A weakness is an area that could be improved.
6. Finished products can be compared with design criteria to see how closely they match. Improvements can then be planned.
7. Different materials are suitable for different purposes, depending on their specific properties. For example, glass is transparent, so it is suitable to be used for windows.
8. Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong, but it can be difficult to paint.
9. Two products can be compared by looking at a set of criteria and scoring both products against each one.

Knowledge Intentions

End product: evidence of a design & make process of an alien glove puppet.

The Design Studio





Learning Intentions

1. Measure and weigh food items using non-standard measures, such as spoons and cups.
2. Prepare ingredients by peeling, grating, chopping and slicing.
3. Work safely and hygienically in construction and cooking activities.
4. Describe the types of food needed for a healthy and varied diet and apply the principles to make a simple, healthy meal.
5. Sort foods into groups by whether they are from an animal or plant source.
6. Identify the origin of some common foods (milk, eggs, some meats, common fruit and vegetables).



Wriggle & Crawl

Knowledge Intentions

1. Hygiene rules include washing hands before handling food, cleaning surfaces, tying long hair back, storing food appropriately and wiping up spills.
2. Using non-standard measures is a way of measuring that does not involve reading scales. For example, weight may be measured using a balance scale and lumps of plasticine. Length may be measured in the number of handspans or pencils laid end to end.
3. Some ingredients need to be prepared before they can be cooked or eaten. There are many ways to prepare ingredients: peeling skins using a vegetable peeler, such as potato skins; grating hard ingredients, such as cheese or chocolate; chopping vegetables, such as onions and peppers and slicing foods, such as bread and apples.
4. Fruit and vegetables are an important part of a healthy diet. It is recommended that people eat at least five portions of fruit and vegetables every day.
5. A healthy diet should include meat or fish, starchy foods (such as potatoes or rice), some dairy foods, a small amount of fat and plenty of fruit and vegetables.

End products: observe, taste and smell raw honeycomb and taste different types of local honey – cook honey flap jacks or try savoury honeyed carrot soup

The Kitchen



Michael Caines



Cherish Finden



Mary Berry





Learning Intentions

1. Generate and communicate their ideas through a range of different methods.
2. Select the appropriate tool for a task and explain their choice.
3. Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.
4. Explore how a structure can be made stronger, stiffer and more stable.
5. Construct simple structures, models or other products using a range of materials.
6. Explain how closely their finished products meet their design criteria and say what they could do better in the future.
7. Explain why a designer or inventor is important.



Street Detectives

Knowledge Intentions

1. Design criteria are the explicit goals that a project must achieve.
2. Ideas can be communicated in a variety of ways, including written work, drawings and diagrams, modelling, speaking and using information and communication technology.
3. Different tools have characteristics that make them suitable for specific purposes. For example, scissors are used for cutting paper because they have sharp, metal blades that can cut through thin materials.
4. Different materials can be used for different purposes, depending on their properties. For example, cardboard is a stronger building material than paper. Plastic is light and can float. Clay is heavy and will sink.
5. Structures can be made stronger, stiffer and more stable by using cardboard rather than paper and triangular shapes rather than squares. A broader base will also make a structure more stable.
6. A strength is a good quality of a piece of work. A weakness is an area that could be improved.
7. Finished products can be compared with design criteria to see how closely they match. Improvements can then be planned.

End product: evidence of a design & make process for a new school hall.

The Workshop



John Wood



Dame Zaha Habib



Sir Norman Foster





Checklist

National Curriculum Programme of Study		2020 - 2021	2021 - 2022
Design & Technology	Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.	T1, T4, T6	T2, T5, T6
	Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.	T1, T4, T6	T2, T5, T6
	Critique, evaluate and test their ideas and products and the work of others.	T1, T4, T6	T2, T5, T6
	Understand and apply the principles of nutrition and learn how to cook.	T1	T5
	Design		
	Design purposeful, functional, appealing products for themselves and other users based on design criteria.	T4	T2
	Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.	T4, T6	T2, T6
	Make		
	Select from and use a range of tools and equipment to perform practical tasks.	T1, T4, T6	T2, T5, T6
	Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.	T4, T6	T2, T6
Evaluate			
Explore and analyse a range of existing products.		T4	T2
Evaluate their ideas and products against their own design criteria.		T1, T4, T6	T2, T5, T6
Technological Knowledge			
Build structures, exploring how they can be made stronger, stiffer and more stable.		T6	T6
Explore and use mechanisms, in their products.		T6	T6
Cooking & Nutrition			
Use the basic principles of a healthy and varied diet to prepare dishes.		T1	T5
Understand where food comes from.		T1	T5

