

Key Stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.

They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

Design ♣ 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

Make ♣ 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

Evaluate ♣ explore and evaluate a range of existing products ♣ evaluate their ideas and products against design criteria Technical knowledge ♣ 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.

Food and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity.

Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to: Key stage 1 ♣ use the basic principles of a healthy and varied diet to prepare dishes ♣ understand where food comes from.



DT Curriculum Phase 1 - Year A

	DT Curriculum Phase 1 - Year A					
	Autumn Term		Spring Term		Summer Term	
	Food and Nutrition		Food	Structure	Food	Mechanism
	Nutrition	Winter Soup	Bread (food) and make a bread basket to hold it (structure).	Tudor Houses (linked to Fire of London) Bread basket	Ice cream	Lever moving ocean picture
Knowledge	Learn what food comes from the UK and what food we import from the rest of the world. Learn what food is specifically made or grown in Lincolnshire. Food hygiene Know the different types of nutrition: fats, proteins, fibre, dairy, fruit and vegetables Name some foods that belong in each food group. Learn what we mean by a balanced diet. Learn why we must keep hydrated and the normal intake of water we need.	To know the difference between fruits and vegetables. To learn how to cut vegetables safely. To know the ingredients of a Winter Soup. Learn how to use a hob safely.	Learn how to use an oven safely. Learn the role of yeast and why we need to leave it to activate. Discuss how we know when the bread is ready.	Bread basket Decide what materials you could use to make a bread basket. Consider the properties of different materials (link to science) and which materials would be the most suitable. Consider how the bread basket will be functional and practical. Also consider what size you need it to be so that it is fit for purpose. Consider how to strengthen the basket. Consider how you could make it appealing for a buyer if you were to sell it. Houses Decide what materials are suitable for the body and the roof of the structure. Ensure the materials used are not only strong and secure but resemble those used in 1666. Reflect on how to make a structure stable so that it will stand up securely. Learn how to attach the roof. Learn that different joining techniques that can be used. Understand the benefits of reversing a cardboard box. Look	Know that some foods need to be refrigerated or frozen. Understand why this is the case. Link to science work on materials, solids and liquids. Learn how temperature can affect the state of something and change it from a solid to a liquid.	Learn about different types of mechanism. Learn about levers and linkages. Explain that a lever mechanism requires a load and an effort and a fulcrum. The movement it makes is called an oscillating motion Learn that the whole that he split pin goes in must not exceed the size of the pin itself.

					at how it is joined. What join is used? Learn how different materials can be joined inc glue, tape, staples or paper fasteners. What are the benefits and disadvantages of using different materials to join?		
	Design		Decide which vegetables we will include. Write a list of ingredients and a letter to Mr Heborn to ask him to get the ingredients from the shop.	Write a list of ingredients. Decide on the shape of your bread roll. Which shapes are more appealing?	Basket Design your basket and label how you intend to join materials and strengthen the basket so it will hold your bread roll sufficiently. Consider how you are going to join and strengthen the basket. Consider suitable size and outline this on your design. Tudor House Reverse the cardboard box. Draw a diagram of your house, label the materials and equipment you need to make your house.	Design your favourite ice cream topping. How can you make the topping more appealing?	Design an ocean picture. Decide where the fulcrum in your picture will go. Decide where you want the movement to go to. How can you make the picture more appealing?
	Make		Chop Slice Cut Mix Pour Measure Stir Boil Simmer	Knead Weigh Mix Pour Roll	Basket Make your basket in accordance with your design. Ensure it is strong and practical enough to hold a bread roll. Tudor House Follow your design. Use suitable materials so that it is stable and stands up as intended.	Weigh Pour Mix Sieve Stir Freeze whisk	Sketch out the outline based on your design. Take into account that for the levers to be secure they need to be thicker than the split pin. Ensure the lever is long enough to reach the area you want it to.
	Evaluate		Discuss what we like and don't like about the soup. What did we decide we enjoyed and didn't enjoy?	Evaluate what we liked and disliked about the bread rolls? Consider which shapes were more successful and why you thought this.	Bread basket Evaluate the bread basket by assessing if it adequately holds your bread roll. Was it fit for purpose? Was it appealing? Consider how you could change it in the future? Judge the appealability of all the bread baskets made by the class. Which ones were more appealing and why? House Evaluate the Tudor house what are you pleased with? What would you improve?	Taste and evaluate the ice cream you made. Evaluate it as: Green – its scrumptious Amber – its ok I'll eat it but I don't love it. Red – ooh no thank you not for me.	Consider does the object move enough distance? How could you change your design so it moves further or a shorter distance? Look at the class pictures as a whole. Which ones were more appealing and more eye catching? Why?
	Vocabulary						
		hygiene, healthy, fats, proteins, fibre, dairy, fruit and vegetables, import, locally, worldwide	Chop, mix, stir, measure, slice, cut, boil, simmer, weigh, recipe,	mix, stir, measure, pour, knead, roll, weigh, recipe, hygienic, heat, safely, roll, rise, yeast,	Properties, function, technique, strengthen, flexible, join, attach, materials, stability, stable, label,	Weigh, pour, mix, stir, whisk, hygienic, safely, design, equipment, evaluate,	Ruler, hole punch, slider, axel, wheels, accurate, evaluate, design, plan, materials, collage.

			hygienic, safely, equipment, evaluate, Instructions	equipment, evaluate, Instructions, recipe, method, equipment, ingredients,	design, components, features, flange joints, slots, L Brace, tabs and but joints, glue, tape, paper fastens, evaluate,	Instructions, recipe, method, equipment, ingredients, freeze, temperature, degrees appealing preferences, appeal, preferred, appealability extend, lifespan	Oscillating motion, effort, load, fulcrum, bar, bolt levers, sliders, wheels, axel, pulleys, linkage
--	--	--	--	--	---	---	--



DT Curriculum Phase 1 - Year A

Autumn 1 Food

Autumn 2 Food : Winter Soup

Lesson 1

Learn what food comes from the UK and what food we import from the rest of the world.

Understand why certain foods need to be imported and can't be produced or grown in the UK. Link to climate.

Learn what food is specifically made or grown in Lincolnshire.

To know the difference between fruits and vegetables.

Recognise winter vegetables and discuss which are more suitable for soup.

To know the ingredients of Winter Soup

Decide which vegetables we need to buy.

To write a shopping list and a letter to Mr Hebborn asking him to get the ingredients.

Vocab

fruit and vegetables, import, locally, worldwide

Winter, root vegetables, seeds, fruit, ingredients, recipe, purchase,

Lesson 2

Know the different types of nutrition: fats, proteins, fibre, dairy, fruit and vegetables

Name some foods that belong in each food group.

To learn how to cut vegetables safely.

To use the bridge strategy to cut vegetables.

Learn how to use a hob safely.

To make two versions of winter soup chunky and smoothie.

Use a blender to blend the ingredients to make smoothie soup.

Food hygiene

Evaluate the soup : what did you like and dislike about it. Which option did you prefer?

Vocab

fats, proteins, fibre, dairy, carbohydrate fruit and vegetables,

Chop Slice Cut Mix Pour Measure Stir Boil Simmer Blend weigh, recipe, hygienic, safely, equipment, evaluate, Instructions, Method, Evaluate hygiene

Lesson 3

Learn what we mean by a balanced diet.

Learn why we must keep hydrated and the normal intake of water we need.

Create a balanced plate of food.

Vocab	Understand the need for a balanced diet to stay healthy.	
	Balanced, hydrated, hydrate, diet, carbohydrate, proteins, dairy, fats, healthy	

	DT Curriculum Phase 1 - Year A	
	Spring 1 (Structure) Bread Basket	Spring 1 (Structure) Tudor Houses
Lesson 1	LO : To design and create a plan for a structure to hold a bread roll. Label the materials needed. Consider: 1. The material to use and the properties of the chosen material so it is fit for purpose. 2. Consider the size, so that it is functional and practical. 3. Consider how it will be carried and how you will strengthen the basket. 4. Consider how it will be appealing if someone was to buy it.	LO : To create a diagram of a design for a structure that represents a house from the Stuart Period. To label the materials needed. Consider: 1. The features to be included 2. The materials to use to ensure it is strong, secure but also flammable.
Vocab	Properties, function, technique, strengthen, flexible, join, attach, materials, stability, stable, label, design, components, features, suitability, suitable	Properties, function, technique, strengthen, diagram, label, materials, suitability, suitable
Lesson 2	LO : To learn how to strengthen a structure and use different joining techniques. To make a bread basket in accordance with your design. Consider: 1. Flange 2. Slots 3. L Brace 4. Butt joint	LO: To learn how to reverse a cardboard box and the name of the joining techniques used to piece it back together.

	5. Tabs	
Vocab	technique, strengthen, flexible, join, attach, materials, stability, stable, design, components, features, flange joints, slots, L Brace, tabs and but joints, glue, tape, paper fastens,	Properties, function, technique, strengthen, , join, attach, materials, stability, stable, tab join
Lesson 3	LO : To evaluate your basket by assessing if it adequately holds your bread roll. Consider the appealability of all the bread rolls in the class. Which ones were more appealing and why?	LO : To follow your design to create a strong and robust structure.
Vocab	Consider : 1. Was the material fit for purpose? 2. Consider whether the size was functional and practical. 3. Consider how you would change it if you were to make it again in the future.	
	Properties, function, technique, strengthen, evaluate,	Properties, function, technique, strengthen, flexible, join, attach, materials, stability, stable, label, design, components,
Lesson 4		LO : To follow your design to create a roof and to use suitable joining techniques to attach it to the body of the house.
Vocab		Properties, function, technique, strengthen, flexible, join, attach, materials, stability, stable, label, design, components, features, flange joints, slots, L Brace,
Lesson 5		LO : To evaluate your structure.

		Consider: What are you pleased with and what would you do differently?
Vocab		Properties, function, technique, strengthen, evaluate,



DT Curriculum Phase 1 - Year A

Summer 1 (Food)

Ice Cream

Summer 2 (Mechanisms)

Lesson 1

LO: To know that some foods need to be refrigerated or frozen. Understand why this is the case.

Link to science work on materials, solids and liquids.

LO: To understand and name different types of mechanisms including levers, sliders, wheels & axles, pulleys, and linkages.

Vocab

freeze, temperature, degrees, refrigeration, solid, liquid, extend, life span,

Ruler, hole punch, slider, axle, wheels, design, plan, materials, collage. Oscillating motion, effort, load, fulcrum, bar, bolt, levers, sliders, wheels, axle, pulleys, linkage

Lesson 2

LO : Design your favourite ice cream topping. Discuss how you can make the topping more appealing?

LO : Design an ocean collage with a moving part using a lever. Label where the fulcrum will be positioned and where you intend the movement to go to.

Vocab

design, equipment, freeze, temperature, degrees, appealing, preference, appeal, preferred appealability

Ruler, hole punch, slider, axle, wheels, accurate, evaluate, design, plan, materials, collage.

Lesson 3 Vocab	LO : To make ice cream and learn how temperature can affect the state of something and change it from a solid to a liquid.	LO: To create the background drop of your moving picture design. To carefully use you plan.
	Weigh, pour, mix, stir, whisk, hygienic, safely, design, equipment, Instructions, recipe, method, equipment, ingredients, freeze, temperature, degrees, appealing, preference,	design, plan, materials, collage, hole punch, movement, lever
Lesson 4	LO : To taste and evaluate the ice cream you made using a traffic light criteria.	LO: To create the moving part of the picture and the lever and attach it to your picture. Consider: The length of the lever needs to reach to your desired point. The width of the lever needs to be wider than the split pin. Hole the split pin goes into must not exceed the size of the pin.
Vocab	Weigh, pour, mix, stir, whisk, hygienic, safely, design, equipment, evaluate, Instructions, recipe, method, equipment, ingredients, freeze, temperature, degrees, appealing, preference,	Ruler, hole punch, accurate, evaluate, design, plan, materials, collage. oscillating motion, effort, load, fulcrum,
Lesson 5		LO: To explain to an adult how the movement of your picture operates using vocabulary you have learnt. Evaluate your moving picture: Consider: 1. Does the object move enough distance? 2. How could you change your design so it moves further or a shorter distance?

		3. Look at the class pictures as a whole. Which ones were more appealing and more eye catching? Why?
Vocab		Ruler, hole punch, design, plan, materials, collage, oscillating motion, effort, load, fulcrum, levers,



DT Curriculum Phase 1 - Year B

	DT Curriculum Phase 1 - Year B					
	Autumn Term			Spring Term		Summer Term
	Food and Nutrition			Food	Structure	Mechanism
	Nutrition	Shortbread face	Pancakes	Moon Buggy / Planet decoration	Fruity Coleslaw	Slider moving picture
Knowledge	Food hygiene Know the different types of nutrition: fats, proteins, fibre, dairy, fruit and vegetables Learn how different types of food help our bodies in different ways. Know some foods which belong in each food groups. Learn what we mean by a balanced diet Establish that it is ok to have treats in moderation. Learn why breakfast is important.	To taste shortbread and determine what are the characteristics of it. Discuss how is it different to a biscuit? Evaluate what we like and dislike and how this will influence our own creation. Food safety around using an oven. Discuss the importance of accuracy of measurements and attention to detail.	Importance of not having the pan too cool or too hot. Food safety around using a hob. Suitable temperature.	Moon Buggy <i>Note this topic also touches on a form of mechanism – axel and wheels.</i> Decide what materials are suitable for the body. Discuss how we can ensure our designs are strong and stable. Learn about the role of an axel and wheels and how they work. Learn how to attach an axel and the importance of ensuring they are level. Learn how different materials can be joined inc glue, tape, staples or paper fasteners. Discuss what features to include so that the moon buggy would be fit for purpose as a moon buggy, Planet <i>(DT and ART some of the decoration are collage some structures)</i> Learn that different joining techniques can be used and these can add stability. Inc: flange joints, slots, L Brace, tabs and but joints. Consider different materials and how some materials are easier than others to attach or provide different levels of flexibility or stability.	Know where food comes from – Animal, plant or animal and plant. Learn how to cut fruit and vegetables safely.	DT and Art as some of the decoration builds on our spring learning of collage. Learn about different forms of mechanism: levers, sliders, axel and wheels. Recall we have already used axels and wheels. Learn we are going to create a moving picture using a slider.

	Design		Draw a design a shortbread face. Design the features in icing and sweets. Label the features. Write a list of what makes a good shortbread.	Design Design a pancake Explore different topping choices. Explain why you have decided on your design.	Generate ideas for features. Select and decide on a range of components and materials. Label design and explain a simple plan. Decide on what features to include and the resources to be used. Consider how they will be attached and what will be used to attach them.	Write a shopping list to Mr Hebborn for what you will need to make your fruity coleslaw. Learn that some foods need to be kept in the fridge and some don't and why this is.	Create a setting design for a moving picture. Consider appealability as a picture. Label the materials you need, consider why you have chosen specific materials. Ensure you have identified where the moving object will be placed and where the hole punch is needed is on your design.
	Make		Skills: Weighing Sieving Rolling Mixing Kneading Cutting with a cutter Piping bag – icing	Skills: Weighing Pouring Cracking Heating Melting Frying Squeeze Whisk Write instructions for how to make a pancake.	Select materials in accordance with your plan. Join materials in different ways. Explore with different ways of fixing materials. Learn how to make the fixings more stable, stronger and stiffer.	Skills Washing Chopping Peeling Grating Mixing Stirring	Use collage to create a picture in line with the details on your plan. Measure accurately where to hole punch and use a rule to ensure your hold are level and you cut the line as straight as possible.
	Evaluate		To evaluate the size, texture, decoration and taste. (Through discussions with peers and teachers). What did we agree we liked and didn't like about our shortbread.	Evaluate why some pancakes were a success and why others were not. What do you consider it the reason for the success and fails? How could you make it better in the future? What tips will you give you parents when they make pancakes?	Discuss whether the design fulfilled the design criteria. Suggest how you could improve it. Make simple judgements about what went well and what didn't go well.	Taste the coleslaw you make. Evaluate it as: Green – its scrumptious Amber – its ok I'll eat it but I don't love it. Red – ooh no thank you not for me.	Explain if your design is successful. Complete a tick sheet evaluation report. Complete a class and peer evaluation of how we could do it differently in the future.
	Vocabulary						
		hygiene, healthy, fats, proteins, fibre, dairy, fruit and vegetables ,	mix, stir, measure, weigh, recipe, piping, kneading, hygienic, cutting, safely, design, equipment, evaluate, Instructions	mix, stir, measure, pour, weigh, recipe, hygienic, heat, safely, design, equipment, evaluate, Instructions, recipe, method, equipment, ingredients, whisk evaluate	Properties, function, technique, strengthen, flexible, join, attach, materials, stability, stable, label, design, components, features, flange joints, slots, L Brace, tabs and but joints, glue, tape, paper fastens, evaluate, axel, wheels circular motion,	Cut, slice, grate, mix, stir, measure, pour, squeeze, recipe, hygienic, heat, safely, design, equipment, evaluate, Instructions, recipe, method, equipment, ingredients,	Ruler, hole punch, slider, axel, wheels, accurate, evaluate, design, plan, materials, collage.



DT Curriculum Phase 1 - Year B

Autumn 1 Nutrition

Autumn 2 Shortbread

Lesson 1

- Food hygiene
- Know the different types of nutrition: fats, proteins, fibre, dairy, fruit and vegetables
- Learn how different types of food help our bodies in different ways.
- Know some foods which belong in each food groups.
- Learn what we mean by a balanced diet
- Establish that it is ok to have treats in moderation.
- Learn why breakfast is important.

- To taste shortbread and determine what are the characteristics of it.
- Discuss how is it different to a biscuit?
- Evaluate what we like and dislike and how this will influence our own creation.
- Food safety around using an oven.
- Discuss the importance of accuracy of measurements and attention to detail.

Vocab

Lesson 2 Vocab		
Lesson 3 Vocab		
Lesson 4 Vocab		
Lesson 5		

Vocab		
Lesson 6		
Vocab		
Lesson 7		

Vocab		
Lesson 8		
Vocab		

	DT Curriculum Phase 1 - Year B	
	Spring 1 Pancakes	Spring 2 Moon Buggy / Planet decoration
Lesson 1	Importance of not having the pan too cool or too hot. Food safety around using a hob. Suitable temperature.	<i>Moon Buggy</i> <i>Note this topic also touches on a form of mechanism – axel and wheels.</i> Decide what materials are suitable for the body. Discuss how we can ensure our designs are strong and stable. Learn about the role of an axel and wheels and how they work. Learn how to attach an axel and the importance of ensuring they are level. Learn how different materials can be joined inc glue, tape, staples or paper fasteners. Discuss what features to include so that the moon buggy would be fit for purpose as a moon buggy,

Vocab		<i>Planet</i> <i>(DT and ART some of the decoration are collage some structures)</i> Learn that different joining techniques can be used and these can add stability. Inc: flange joints, slots, L Brace, tabs and but joints. Consider different materials and how some materials are easier than others to attach or provide different levels of flexibility or stability.
Lesson 2		
Vocab		
Lesson 3		
Vocab		

Lesson 4		
Vocab		
Lesson 5		
Vocab		

Lesson 6		
Vocab		
Lesson 7		
Vocab		
Lesson 8		
Vocab		



Spring 2
Moving picture

Summer 2
Fruity Coleslaw

Lesson 1

DT and Art as some of the decoration builds on our spring learning of collage.

Learn about different forms of mechanism: levers, sliders, axel and wheels. Recall we have already used axels and wheels.

Learn we are going to create a moving picture using a slider.

Know where food comes from – Animal, plant or animal and plant.

Learn how to cut fruit and vegetables safely.

Vocab

Lesson 2

Vocab

Lesson 3

Vocab

Lesson 4		
Vocab		
Lesson 5		
Vocab		

Lesson 6		
Vocab		
Lesson 7		
Vocab		
Lesson 8		
Vocab		