Termly Curriculum Learning Overview 2022-23

Year: Whole School	Term: Spring 2023	Subject: Design and Technology

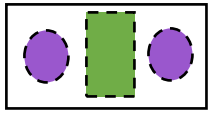
Key Elements	Nursery CONSTRUCTION: Shell Structures **Brief: To design and make an Easter basket to hold a small Easter egg.**	UFS CONSTRUCTION: FRAME STRUCTURES **Brief: To design and make a picture frame to display a special picture.**	Year 1 FOOD TECHNOLOGY **Brief: To design and make a topped pancake to celebrate pancake day.** **Focus Designer/Case study:** What is a chef?	Year 2 TEXTILES **Brief: To design and make a flag for an explorer.** **Focus Designer/Case study:** Orla Kiely (Textile designer) Also link to Explorers History/Geography topic.	Year 3 CONSTRUCTION: Mechanisms (Levers and Linkages) **Brief: To design and make a moving monster puppet for a young child.** **Focus Designer/Case study:** Jim Henson (puppeteer)	Year 4 FOOD TECHNOLOGY **Brief:** To design and make a pizza, using traditional Italian ingredients, for Year 4 pupils to enjoy. **Focus Designer/Case study:** Franco Pepe (chef)	Year 5 CONSTRUCTION: Frame Structures **Brief: To design and make a mini greenhouse to be used in the school quad.** [Can be used in summer term as part of plants topic in Science] **Focus Designer/Case study:** Nicolas Grimshaw (Architect - Eden Project) Agricultural Engineering – greenhouse technology	Year 6 CONSTRUCTION: Electrical Systems **Brief: To design and make a model carousel for a funfair company, which can be controlled by a computer program.** **Focus Designer/Case study:** Ada Lovelace (Mathematician, first computer programmer)
NC PoS	**Birth to three - Babies, toddlers and young children will be learning to:** • Explore different materials, using all their senses to investigate them. • Manipulate and play with different materials. • Use their imagination as they consider what they can do with different materials. • Make simple models which express their ideas **3 and 4 year olds will be learning to:** • Explore different materials freely, in order to develop their ideas about how to use them and what to make. • Develop their own ideas and then decide which materials to use to express them.	**Physical Development** **ELG: Fine Motor Skills** Children at the expected level of development will: - Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases; - Use a range of small tools, including scissors, paint brushes and cutlery; - Begin to show accuracy and care when drawing. **Expressive Arts and Design** **ELG: Creating with Materials** Children at the expected level of development will: - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;	**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**	**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**	**Design** • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • select from and use a wider range of materials and components, including construction materials,	**Design** • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • select from and use a wider range of materials and components, including construction materials, textiles and	**Design** • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to	**Design** • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their

	• Join different materials and explore different textures. • Create closed shapes with continuous lines, and begin to use these shapes to represent objects. **The three characteristics of effective teaching and learning are all extremely relevant in the implementation of the DT curriculum:** • playing and exploring - children investigate and experience things, and 'have a go' • active learning - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements • creating and thinking critically - children have and develop their own ideas, make links between ideas, and develop strategies for doing things	- Share their creations, explaining the process they have used; **The three characteristics of effective teaching and learning are all extremely relevant in the implementation of the DT curriculum:** • playing and exploring - children investigate and experience things, and 'have a go' • active learning - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements • creating and thinking critically - children have and develop their own ideas, make links between ideas, and develop strategies for doing things	• explore and evaluate a range of existing products • evaluate their ideas and products against design criteria	• explore and evaluate a range of existing products • evaluate their ideas and products against design criteria	textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	ingredients, according to their functional properties and aesthetic qualities **Evaluate** • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	their functional properties and aesthetic qualities **Evaluate** • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** apply their understanding of how to strengthen, stiffen and reinforce more complex structures	functional properties and aesthetic qualities **Evaluate** • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products.
Vocabulary	**<u>Subject Specific</u>** design **<u>Content Specific</u>** handle join test	**<u>Subject Specific</u>** design designer **<u>Content Specific</u>** measure saw join	**<u>Subject Specific</u>** designer brief product **<u>Content Specific</u>** recipe crêpe Scotch pancake batter whisk	**<u>Subject Specific</u>** designer brief product user **<u>Content Specific</u>** needle thread running stitch pattern piece applique	**<u>Subject Specific</u>** product user technology **<u>Content Specific</u>** mechanism lever linkage fixed pivot loose pivot	**<u>Subject Specific</u>** consumer modification **<u>Content Specific</u>** pizza dough knead locality pizzaiolo	**<u>Subject Specific</u>** technology technique production (previous subject vocab will also need referencing) **<u>Content Specific</u>** greenhouse agricultural engineering frame structure triangulation reinforce	**<u>Subject Specific</u>** technology innovation application of knowledge (previous subject vocab will also need referencing) **<u>Content Specific</u>** computer programming controller motor software hardware
Key questions / knowledge and understanding to be explained	*Why is it a good idea to draw a design before making something?* It's a good idea to create a design so that you can plan what you	*Why is it a good idea to draw a design before making something?* It's a good idea to create a design so that you can plan what you	*What is a pancake?* A pancake is a thin, flat cake which is made from batter and fried in a pan. It can be served	*What is a textile designer?* A textile designer designs things made of fabric. They might design the pattern that	*Who was Jim Henson and what did he design?* Jim Henson was an American puppeteer who died in 1990 aged	*Who is Franco Pepe?* Franco Pepe is a famous Italian chef, from a city called Caiazzo, which is close to Naples in Italy. He owns several	*Who is Nicolas Grimshaw and what has he designed?* Nicolas Grimshaw is a British architect, who is 81 years old. He studied	*Who was Ada Lovelace and what did she do?* Ada Lovelace was born in London in 1815. She was a brilliant mathematician and is often considered

	are going to do. Your work might turn out better if you have made a plan. *What is a basket?* A basket is a container with a handle. It can hold something and help you carry it. *How can we fasten a handle onto our basket?* Investigate different ways of joining - glue, tape, elastic bands, paper clips, staples etc. Which will work best/be the strongest? *How can we test if the handle is strong enough?* Place your egg in the basket and try to pick it up! If your handle is strong it won't break!	are going to do. Your work might turn out better if you have made a plan. *What is a designer?* A designer is someone who decides on something that they want to make, then draws a picture of it, then makes it! Designers use their imagination and have to try and solve problems. When we do DT we are all designers! *What is a picture frame?* A picture frame is used to hold a picture or photo, so you can display it. It keeps the picture safe and makes it look nice. Some picture frames have decoration on them. *How can we saw wood safely?* [Adult to model] We need to use a bench hook to hold the wood securely. You need to push the wood into the bench hook with one hand, and saw with the other. You don't need to press too hard with the saw, use a gentle sweeping motion. you must make sure your fingers are nowhere near the saw blade. *Why is it important to measure our wood pieces?* We need to measure our wood pieces so that we can make a neat rectangle for our frame. The two long sides need	with sweet or savoury toppings. *What is the difference between a crêpe and a Scotch pancake?* A crêpe is a very thin pancake but a scotch pancake is thicker and fluffier. Crêpes tend to be larger in size, whereas scotch pancakes are quite small. *What is a batter?* Batter is a runny mixture of flour, eggs and milk, which is used to make pancakes. Scotch pancake batter has baking powder in it, to make the pancakes rise, whereas crêpe batter doesn't, so it makes a flatter pancake. *What is whisking?* Whisking means mixing ingredients together quickly using an action that lets some air get into it, to make the mixture lighter. A whisk is the best tool to use for this. *How can we prepare food safely?* We need to follow food hygiene and safety rules when preparing food. Food hygiene means working in a safe, clean way that stops germs and bacteria from getting onto food when you are preparing it. Good food hygiene is important so that people don't get ill from eating your food. Safety rules are important so that you don't hurt	is put on the fabric as well. A textile designer may design things like clothes, bags, cushions, tea towels, curtains, blankets – anything you use that is made out of fabric *Who is Orla Kiely and what does she design?* Orla Kiely is a textile designer who comes from Ireland but lives in London, in England. She is 58 years old. She studied Art and Design at university, and now she is a very successful textile designer. She designs things like bags, bedsheets and cushions, and you can buy her products in lots of shops or on the internet. She has a very memorable style, which uses bright colours and simple, repeating shapes. *What is applique?* Applique means making a pattern/picture on fabric by sewing on other fabric pieces. *What is a pattern piece?* A pattern piece is a paper template which is used to then cut out fabric pieces. *What is running stitch?* Running stitch is a simple way of stitching, where the stitches go in a straight line, without overlapping, with a small gap between each stitch.	53. He started making puppets while he was at high school. He designed some very famous puppets which were on TV shows and in films – Fraggle Rock, Sesame Street and The Muppets. His puppets were mostly monsters and were brightly coloured and textured. *What is the function of mechanisms in children's toys?* A mechanism is used to create movement in a toy. The moving parts bring life to a toy and make it more interesting for children to play with. *What is a lever/linkage?* A lever is a rigid bar which moves around a pivot. A linkage is system is a set of related parts or components used to create an outcome. In a lever and linkage mechanism, the "input movement" is where the user pushes or pulls a card strip. The "output movement" is where one or more parts move. *What is a fixed/loose pivot?* A fixed pivot secures the lever to the the back piece, however a loose pivot is only secured to the lever, therefore it has increased movement.	restaurants and is said to be one of the best pizza chefs in the world. He learnt how to make pizza from his father who was a baker. Pepe does not use machines to make his pizza dough, believing it should always be done by hand. https://www.greatitalianchefs.com/chefs/franco-pepe https://guide.michelin.com/en/article/people/franco-pepe-best-pizza-interview *What is meant by locality in food/ ingredients?* 'Locality' means using ingredients that are produced close to where you are cooking/eating them. Franco Pepe believes in using local produce to make his pizzas – ingredients such as olive oil, mozzarella and pork come from close to his restaurant in Caiazzo. *What is pizza?* Pizza is made by first creating a dough using wheat flour, oil, salt and water, then shaping this into a flat base. It is then topped with tomato, cheese, and toppings, and baked in a hot oven (traditionally a wood-fired oven). Pizzas have been around in some form for hundreds of years, but pizzas as we eat them today originated in Italy, in the city of Naples, around 250 years ago.	architecture at University, then he had his own architecture company. He has designed many famous buildings and structures in the UK, including the Eden Project. The Eden Project is in Cornwall, in the south of England. It is a visitor attraction consisting of giant domes (called biomes) which contain many different plant species from all over the world. It is to teach people about plants, conservation and climate. The biomes are made from a steel tube frame, made up of lots of hexagons. They are covered in a thick, clear plastic. The temperature and moisture inside the biomes is controlled, so that plant species from different climates can survive. *What is agriculture?* Agriculture means the farming of animals or plants in order to provide food. *How has design changed agriculture and food production?* Huge commercial greenhouses are designed and built, in order to grow fruit and vegetables all year round. These products are then sold to supermarkets/ shops and transported all over the world. (Google image search 'commercial greenhouses' and 'commercial	the world's first computer programmer. She worked with Charles Babbage, who was the inventor of an early calculator. Lovelace compared Babbage's machine to a weaving machine, which followed patterns to make a design. She imagined that a machine could also follow patterns, or codes, to calculate numbers or form letters, and thus went on to write the first computer program. Lovelace correctly predicted that computers would go on to be used for many more things than just calculating numbers. *What is computer programming?* Computer programming is a series of instructions that tell a computer to perform an action. Computer programming can be written in different programming languages, such as Scratch. *What is software/ hardware?* Software is the programs/instructions that tell the hardware what to do. Hardware is all the components that are connected to the computer, i.e. the controller, motor, wires etc. *What is the controller?* In this project you will use a Crumble controller. The crumble controller is a small circuit board which receives and processes the instructions passed to it from the computer

		to be the same length, and the two short sides need to be the same length. *How can we join wood together?* Wood can be joined neatly and securely using cardboard triangles and PVA glue. 	yourself or others when preparing food.			*What is a pizzaiolo?* A pizzaiolo is a person who makes pizza. Franco Pepe is a pizzaiolo, and so will you be during this project! *What is kneading?* Kneading means working dough by stretching and squeezing it with your hands. It combines the ingredients together, and makes the dough smooth and elastic.	greenhouses aerial view' to show size/scale.) The changes this has brought means that in the UK we can eat fruit/veg which would not normally grow here, and also it is available all year round, not just certain times of year. This has changed the food we eat, e.g. compared to when our Grandparents were younger. *How does a greenhouse work?* A greenhouse is a structure made of a frame (usually metal) covered in clear glass (or sometimes plastic) panels. It works by trapping the heat from sunlight, creating a warm environment for plants to live in, all year round. *What is a frame structure?* A frame structure is a made from a skeleton of beams/supports that are attached together to provide a rigid frame. The frame is then covered in a material such as glass, fabric or plastic, to create flat sides and a roof. *What is triangulation?* Triangulation is the use of triangles to reinforce a structure and make it stronger/more stable. A triangle is one of the strongest shapes.	software in which you will write your code. The controller then sends outputs to the hardware, in this case the motor or lights, so that they follow the coded instructions. *What is the motor?* The motor is a piece of hardware that changes electrical current into movement - eg. a spinning motion.
Suggested Lesson Sequence **5 x 90 minutes**	**1. Design Brief and Research** • Show design brief and discuss what they are	**1. Design Brief and Research** • Show design brief and discuss what the	**Lesson 1a: Research (15 mins)** • Show design brief and discuss: What is our product?	**Lesson 1a: Research (45 mins)** • Show design brief and discuss: What is our product?	**Lesson1a: Research (90 mins)** • Show design brief and discuss: What is our product?	**Lesson 1a: Research (45 mins)** • Show design brief and discuss: What is our product?	**Lesson 1a: Research (45 mins)** • Show design brief and discuss: What is our product?	**Lesson 1a: Research (90 mins)** • Show design brief and discuss: What is our product?

	going to design and make. • Explore a range of baskets and discuss their shape/features/ construction/function etc. - What are they used for? - Who might use one? - What shape are they? - What are they made from? - Which ones do you like? Why? Eggs could be put in to test them. **2. Design** • Recap design brief and what was learned from research about baskets. • Model drawing a simple picture to show what your basket will look like. • Children to draw their designs. **3. Make** • Ensure children have their designs in front of them. • Demonstrate how to make the basket, using paper/card. • Children to make their basket with support as required, attempting to cut and join independently and choosing their joining method if possible. **4. Evaluate** • Children to test if their basket will hold an Easter egg. • Children to evaluate verbally.	product is and how they will become a designer. • Explore a range of picture frames and discuss their shape/ features/ construction/ function etc. (Research could be done in an area of continuous provision or as a set task on a table) - What are they used for? - Who might use one? - What shape are they? - What are they made from? - Which ones do you like? Why? • Discuss what materials could be used to make our own picture frame. **2. Design** • Recap design brief and what was learned from research. • Show a prototype frame made in the way they will make theirs and briefly discuss how it has been made. • Discuss why we create a design before making something in DT. • Model drawing a simple design and writing a list of required materials/tools (eg. wood, paper, glue, pencil, saw). • Children to create their designs and add list of materials/tools (where appropriate dependent on writing skills - could use a word bank or tell an adult for them to scribe). **3. Make** • Demonstrate safe use of a saw/bench hook to cut wood.	What is its purpose? Who is our user? What skills will we need to use? • Find out if children have made pancakes before and if they know what ingredients are needed and what cooking method is used. Watch a video of pancakes being made and discuss what 'batter' is and what 'whisking' is. • Learn about the different types of pancake - crêpe and scotch and discuss the differences. **Lesson 1b: Research (30 mins)** • Taste crepes/scotch pancakes to see which they prefer. Taste a variety of toppings. Children to record in a simple table which they liked/preferred. **Lesson 1c: Research (45 mins)** • Cover the basic principles of food hygiene: - wash hands before starting - ensure equipment (e.g. chopping board, knives) is clean - ensure surfaces are wiped clean before using to prepare food - ensure chilled foods are kept in a fridge - clean area/equipment properly after finishing • Cover basic principles of safe use of sharp knives: - grim knife firmly - keep fingers out of way	What is its purpose? Who is our user? Why might an explorer need a flag? • Explore flags in class: What are they made from? How are they joined together? What do you like/dislike about them? (Can be written or verbal) **Lesson 1b: Research (45 mins)** • What is a designer? • What is a textile designer? • Introduce Orla Kiely and show her designs. • What do you notice about them? i.e. bright colours, simple geometric shapes, repetition. • Stick a few examples in book and write a few notes on her designs. **Lesson 1c: Research (45 mins)** • Introduce running stitch. Show video/ demonstrate, inc. how to thread needle, tie a knot. • Children to practise a short line of running stitch on small piece of hessian. **Lesson 2: Design (90 mins)** • Discuss and reflect on findings from research on case study and sewing skills. • We will design a flag in the style of Orla Kiely, using bright, simple shapes. We will sew the shapes onto the flag – this is called applique.	What is its purpose? Who is our user? – what might our user want the product to be like? • What is a puppet? • Introduce Jim Henson • Discuss the style of his puppets – often monsters, bright colours, lots of texture, hair/fur, cute/ appealing, movement • Draw one of puppets and add notes. **Lesson 1b: Research (90 mins)** • What are levers/ linkages? • How do levers/ linkages work to create movement? • What is a fixed/loose pivot? • Look at examples of these mechanisms and identify the different parts. • Have a go at making a simple lever/linkage system. **Lesson 2: Design (90 mins)** • Discuss and reflect on findings from research on case study and making mechanisms. • Model drawing design (front and back) and labelling parts, including parts of mechanism. • What tools/materials will we need? Model listing these. • Children to create design, showing front and back of puppet. **Lesson 3: Make (135 mins)**	What is its purpose? Who is our user? • What do you already know about pizza? – eg where does it come from, how is it made etc. • Look at brief history of pizza and how it is made. • Introduce Italian ingredients that might be used to make pizza (see if the children already know any) – e.g. olive oil, tomatoes, cheeses - mozzarella, parmesan, cured meats - salami, prosciutto, olives, anchovies. • Introduce term 'pizzaiolo'. • Children to learn briefly about chef/pizzaiolo Franco Pepe – his life/ achievements/ beliefs • Introduce concept of local ingredients – use Pepe as an example as he uses ingredients from the area local to his restaurant in Caiazzo. The children will use Italian ingredients when designing/making their pizzas. **Lesson 1b: Research (90 mins)** • Recap design brief and prior learning about pizza/Italian ingredients. • Children to taste a variety of Italian pizza toppings (could be on pizzas or just on their own). • Record how each tastes, and whether they like it. Think about	What is its purpose? Who is our user? • Who is Nicolas Grimshaw? • What is the Eden Project? Look at pics and discuss construction and purpose (see notes above). • Children could stick pic in book and label/write brief notes. **Lesson 1b: Research (45 mins)** • What is agriculture? • What is agricultural engineering? • How has design/engineering changed the way the world produces food, and changed the things we can eat? - link to definition of 'technology' - using science to make useful things. **Lesson 1c: Research (90 mins)** • Children will investigate how to make a frame structure, using straws/wooden dowels and various joining methods. • Which shapes are the strongest/most stable? Introduce triangulation. • Demonstrate/practice sawing wood. **Lesson 2: Design (90 mins)** • Discuss and reflect on findings from research on case study and materials. • Model how to draw design in 3D – use squared/graph paper. • Model labelling design with measurements (use	What is its purpose? Who is our user? • Look at photos/videos of existing fairground carousel rides and discuss features/appeal. What might a funfair company be looking for in a new design? • Look at protoype carousel model and discuss how it is controlled by a computer program. Look at both software and hardware used. • Discuss what computer programming is and its purpose, and learn briefly about Ada Lovelace and her impact on the field. **Lesson 1b: Research (90 min)** • Explore Crumble software/hardware - possibly done in/alongside Computing lessons **Lesson 2: Design (90 mins)** • Reflect on findings of research - design brief, needs of user, use of computer programming to control model carousel. • Look again at prototype carousel and discuss parts/ construction. Demonstrate how hardware is put together. Discuss the output of the programming, eg how it turns, how the lights flash etc. • Model drawing design, including all electrical hardware components. Add labels and list of tools/materials. • Model writing a simple plan for the outputs, which will help to inform the coding. • Children work in groups of three to design their

		• Demonstrate process of making, either whole class or in groups: - Measuring wood to form a rectangle (cut one long side then use it to measure out another, then cut a short side and use it to measure out another) - Using PVA glue and card triangles to join the pieces. A building block could be used to give a 90 degree corner. - Drawing round the frame and cutting out a paper back piece, then sticking this onto the frame. • Children to make their frames with adult support as required. • Once dry, frames can be decorated and components added, such as a hook/loop to hang with or a cardboard flap to make it stand up. • A photo/picture can be added later. **4. Evaluate** • Children to evaluate verbally using evaluation template.	- keep sharp knives safely stored when not using - do nut cut towards your body - do not walk around holding a sharp knife • Good food hygiene is important to ensure no one becomes ill from eating the food we prepare. • Safe working is important to ensure no one gets hurt in the kitchen. • Children will complete a quiz (and gain their 'Food Safety Certificate') to demonstrate understanding. **Lesson 2: Design (90 mins)** • Recap design brief and discuss/reflect on findings from taste test research. • Model how to create a simple design, choosing if you will make a scotch pancake or crepe, and which toppings you will use. These could be drawn and labelled using a word bank. • Model how to write a simple list of ingredients (ie milk, eggs, flour) and tools needed, again using a word bank. •Children to create their design, choosing which type of pancake they will make and what toppings they will add. Labels/lists to be added dependent upon writing ability - some could stick words on or ask adult to scribe. **Lesson 3: Make (180 mins)**	• Model drawing design onto flag template. Remind that they will have to sew it so it needs to be simple – ideally 3 shapes, eg:  • Model adding labels to show flag, mast, applique shapes, stitches etc. • What materials will we need in order to make it? (fabric, thread, glue, stick/straw etc) • What tools will we need in order to make it? (pencil, scissors, needle etc) • Model writing lists of these on design sheet • Children to create their design. **Lesson 3a: Make (45 mins)** • Introduce what a pattern piece is. Demonstrate how to draw and cut out of paper, then draw round on felt and cut out. • Children to all make pattern pieces and cut out fabric shapes. **Lesson 3b: Make (135 mins)** • Children to sew felt shapes onto flag. • Children struggling could sew one and glue the rest. • Children can attach their flag to a flagpole (wooden dowel/straw) **Lesson 5: Evaluate (45 mins)**	• Demonstrate again how to create lever/ linkage systems. • Demonstrate how to draw shape of monster and cut out, first in white, then draw round in order to add coloured paper. • Children to make their puppets and mechanism. Can add features eg hair, eyes. **Lesson 4: Evaluate (45 mins)** • Children evaluate using template.	which would go together. **Lesson 1c: Research (45 mins)** • Cover the basic principles of food hygiene: - wash hands before starting - ensure equipment (e.g. chopping board, knives) is clean - ensure surfaces are wiped clean before using to prepare food - ensure chilled foods are kept in a fridge - clean area/equipment properly after finishing • Cover basic principles of safe use of sharp knives: - grim knife firmly - keep fingers out of way - keep sharp knives safely stored when not using - do nut cut towards your body - do not walk around holding a sharp knife • Children will complete a quiz (and gain their 'Food Safety Certificate') to demonstrate understanding. **Lesson 2: Design (90 mins)** • Recap design brief and prior learning about Italian cuisine. • Children to use the results from their taste test to inform decision of what toppings to put on their pizza. • Look at the recipe for pizza dough (JB will provide) and watch a	ruler/tape measure for reference) • Model listing materials (including joining materials) /tools needed to make it. (Show/remind of available materials). • Children to create their design. **Lesson 3: Make (135 mins)** • Children to make their greenhouses, creating the structure first, then covering in cellophane. • Recap method/safety of using a saw. **Lesson 4: Evaluate (45 mins)** • Use evaluation template. (Could repeat once greenhouse has been used in summer)	product (each child must produce own copy of the design). **Lesson 3: Make (135 mins - more may be required, in Computing time if possible)** • Children to work in groups to create their products, building the model carousel and adding the electrical components, and writing the code to control it. • Children should test their products as they go. **Lesson 4: Evaluate (45 mins)** • Children evaluate using template.

			• Recap food hygiene and safety. • Ensure children have their designs out. • Children to work in small groups with an adult to make batter and fry their pancake, with support. Children to chop and add their toppings, trying to present their food nicely on the plate. **Lesson 4: Evaluate (45 mins)** • Children to taste their pancake straight away and evaluate using template.	• Use evaluation template.		video of how to make pizza. • Children should write a simple recipe for their pizza, listing all ingredients, equipment needed, how to make the dough, how to shape the pizza and add toppings, how to cook the pizza. • They could think of a name for their pizza (e.g. Vesuvius Pizza). • Their design should also include details of how they will work safely and hygienically. **Lesson 3/4: Make and Evaluate (180 mins)** • Recap pizza making method (how to make dough, knead, shape and add toppings). • Recap food hygiene and safety. • Children to make their pizzas. Can be done in groups, as not all will be able to use oven at once – will need timetabling carefully. Six pizzas should fit in oven at once and will take 10-15 minutes to cook. May work best if half class do it in one session and half in second session.. • Children will evaluate their pizza straight away, when they taste it, using evaluation template.		