Meadowfield Primary DT Long Term Plan (June 22)

	Autumn	Spring	Summer	
Nursery	In nursery our children will be given the opportunity to freely explore how to join materials using pva glue, Sellotape and glue sticks. They will be able to construct using a range of reclaimed materials, plasticine, clay, building blocks and junk modelling materials. They will use these to make their own representations of real-life things and talk about what they are doing. Children will begin to learn how to hold scissors and cut safely with them. These opportunities are available across both the indoor and outdoor provision.			
Reception	Joining Materials Join, stick, glue stick, Sellotape, staple, holepunch I know that I need to use something to join my materials together I can safely use glue, Sellotape, a hole punch and a stapler I can use scissors safely to cut my materials	Food Healthy Choices – Fruit Salad Fruit, chop, slice, safely, knife, healthy, mix I know I need to wash my hands to work with food I know how to make healthy choices I know how to safely hold a knife I know how to chop and slice my fruit	Textiles Seaside Hand Puppets Needle, thread, material, stitch, running stitch, holes I can design what I want to make With help I can cut my pieces of material I know how to join two pieces of material together I can thread a needle I can use a running stitch	
Reception Materials and Tools.	Hole punch, scissors, pva glue, stick glue, Sellotape, stapler, staples, paper, card	Knife, chopping board, mixing bowl, juicer	Felt, fabric, plastic needle, thread, pin. scissors, templates.	
	Provision opportunities. Throughout Reception provision the children have the opportunity to explore using a hammer and screwdrivers to hit materials with and to take items apart safely. They explore joining different materials using a range of possibilities including Sellotape, glue sticks and pva. Building and construction materials are available at all times for children to construct their own designs and develop an understanding of what will balance on another object and how free-standing structures work.			
Year 1	Food My favourite healthy snack Cut, peel, grate, prepare, assemble, healthy, fruit, vegetables, hygienic I know how to safely cut, peel and grate ingredients safely I know that I need to eat five portions of fruit and veg a day I know I need to eat different types of food to be healthy I know how to prepare food hygienically I know how to assemble and cook a healthy meal without a heat source.	Mechanisms Sliders and Levers Wild things puppet Like, dislike, design, make, user, criteria, lever, slider, tools, measure, mark out, cut, shape, finish, improvement I know what I like/dislike about products I know what I am trying to design and make I know who my product is for I know how to use simple design criteria I know how to use simple levers and sliders. I can select tools for the job	Structures Free Standing London Cityscape Materials, design, make, develop, assemble, join, combine I know what materials products are made from I know what I am trying to design and make I know how to develop my ideas by talking and drawing I can choose the best materials for the job I can assemble, join and combine materials	

Year 1 –	Fruit and vegetables, grater, vegetable peeler, shopping board, knives, skewers	Cardboard, scissors, masking tape, paper fasteners, stick glue, pva glue, felt tips, colouring pencils.	Paper, card, art straws, cardboard, reclaimed boxes, masking tape, pva glue, glue sticks, string, hole punch,
Materials	Dualu, Nilves, skewers	giue, pva giue, reit tips, colouring pericits.	scissors
and Tools			
Year 2	Textiles	Food	Mechanisms
	Victorian Doll/Toy/Teddy Design, make, user, materials, assemble, join, combine, improvements I know what I am trying to design and make I know who my product is for I can select the best materials for the job I can assemble, join and combine materials I can suggest how my product could be improved I can use the running stitch and back stitch	African Dish Measure, weigh, assemble, healthy, cook, heat source, food groups, Eatwell plate I know that meat and fish come from animals I know where vegetables and fruit come from I know how to assemble and cook a healthy meal with a heat source I know how to measure or weigh ingredients accurately I know what the 'Eatwell plate' is and can explain it	Wheels and Axles Fire Truck – Great Fire of London Criteria, develop, design, measure, mark out, cut, shape, assemble, wheels, axels, strong, stiff, stable, finish I know how to use a simple design criteria I know how to talk to others to explain my design and develop it I can measure, mark out, cut and shape materials using a saw and bench hook. I can assemble, join and combine materials using glue guns I can explore and use wheels and axels in my products I can use a range of finishing techniques I can say how I could make my structure stronger, stiffer or more stable
Year 2 – Materials	Thread, pins, needles, template, scissors (sharp textile), felt, buttons, sequins, wool	Weighing scales, knives, chopping board, grater, vegetable peeler	Wooden dowel, wooden and cardboard wheels, bench hook, saw, glue gun, wood glue, drill, drill bit, plasticine
and Tools			
Year 3	Food One Pot Recipe Eatwell plate, grown, reared caught, prepare, cook, savoury, peel, slice, grate, mix I know what the 'Eatwell plate' is and can explain it I know that food is grown, reared and caught in the UK, Europe and the wider world. I know how to prepare and cook a variety of savoury dishes safely and hygienically I know how to use a range of techniques including peeling, slicing, grating and mixing.	Structures Shell Structures Roman Housing Tools, stages, measure, cut, shape, materials, assemble, join, combine, strong, stiff, shell, structure, reinforce, strengthen I know how to select appropriate tools for the task I can plan and order the stages of making I can measure, cut and shape materials with some accuracy I can assemble, join and combine materials I know how to make a strong, stiff shell structure. I know how to reinforce and strengthen a 3d framework.	Textiles Carnival Costumes/ Headdress Textile, user, ideas, measure, mark out, cut, shape, assemble, join, combine, finish, thread, needle, material I know how to gather information about the needs and wants of individuals. I can generate realistic ideas, focusing on the needs of the user. I can measure, mark out, cut and shape materials with some accuracy. I can assemble, join and combine materials. I can apply a range of finishing techniques. I know how to evaluate the strengths and areas for development in my ideas and products.

Year 3 –	Grater, vegetable peeler, knives, chopping board, pan	Card, squared paper, scissors, pva glue, masking tape, glue guns, Stanley knives, metal ruler, cutting mat.	Tailors chalk, pins, needles, thread, felt, glue gun, feathers, mask blank, material, running stitch, back stitch, blanket
Materials			stitch.
and Tools			
Year 3		Antoni Gaudi	Clary Salandy/ Bethany WIlliams
Designers			
Year 4	Mechanical Systems	Food	Electrical Systems
	Levers and Linkages Viking Longships mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, join, cross section I can explain how particular parts of my product work. I can use cross sectional drawings to develop and communicate my ideas. I can assemble, join and combine materials with some accuracy. I can apply a range of finishing techniques.	Food around the world Active, healthy, recipe, adapt, appearance, texture, taste, aroma, grate, bake, slice, mix, chop I know that to be active and healthy food and drink are needed. I know that recipes can be adapted to change the appearance, taste, texture and aroma. I know how to use a range of techniques – grating, mixing, baking, chopping, slicing.	Circuits and Switches Torches for map skills Circuit, functionality, aesthetics, materials, process, Cell, wire, bulb, circuit, break, switch, join, attach, fix I can select materials and components suitable for the task. I can evaluate my design against its design criteria. I know how my learning across the curriculum can help me in this design process. I know how to create a simple electrical circuit to use in my product.
Year 4 Materials and Tools	Cardboard, paper fasteners, dowel, fabric, saw, string, glue gun, bench hook, Stanley knives, cutting mats, metal rulers.	Oven, grater, knives, chopping board, measuring jug, weighing scales, tablespoon, teaspoon, oven gloves	Wire, bulb, cell, switch, cardboard, glue gun, pva glue, hole punch, string, screwdriver, Stanley knife, cutting mat, metal ruler.
Year 4	Charles and Ray Eames		Trevor Bayliss
Designers			
Year 5	Mechanical Systems Cams Egyptian Gods Cam, follower, axle, shaft, crank, handle, housing, framework, annotate, join, combine, design specification I can use annotated sketches to communicate my ideas. I know how to use cams to generate movement in my product. I know how to accurately assemble join and combine materials.	Food South American Dish Season, process, ingredients, peel, spread, knead I know that seasons may impact on the food that is available. I understand how food is processed into ingredients that can be eaten and used in cooking. I know how to use a range of techniques – peeling, spreading and kneading.	Textiles Whitby Cushions seam, seam allowance, wadding, right side, wrong side, template, pattern pieces, fastening, thread I can use pattern pieces to develop my ideas. I can accurately measure, mark out, cut and shape materials and components. I can join materials accurately to give a good finish. I can generate ideas drawing on research.

Year 5 – Materials	Saw, bench hook, drill, drill bits, glue gun, nails, hammer	Grater, vegetables peeler, pan, wooden spoon, knives, chopping board, whisk	Blanket stitch, running stitch, back stitch, tailor's chalk, pins, scissors(sharp), felt, fabric, stuffing, needle, thread, paper – template, scissors.
and Tools			
Year 5	Isambard Kingdom Brunel		William Morris
Designers			
Year 6	Structures Frame Structures Anderson Shelters frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent I can explain my choice my choice of materials according to their functional properties and aesthetic properties. I can use exploded diagrams to communicate my design ideas. I know how to make strong, stiff structures.	CAD Textiles Computer aided design frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent I can use computer aided design to develop and communicate my ideas. I know how to program a computer to control my product. I can evaluate the quality of my design and its fitness for purpose.	Food Greek Food Nutrient, water, fibre, adapt, appearance, texture, taste, aroma I know how to prepare and cook a variety of savoury dishes using a heat source. I know that recipes can be adapted to change the appearance, taste, texture and aroma. I know that different food and drink contains different substances – nutrient, water, fibre – that are all needed for health.
Year 6 – Materials and Tools	Square cut timber, corrugated card, nails, saw, bench hook, hammer, Stanley knife, cutting mat, glue gun, metal ruler	Paper template, computer, computer program (still under review), fabric, felt, needle, thread, running stitch, back stitch, blanket stitch, pins, tailor's chalk	Knives, grater, vegetable peeler, pan, oven, oven gloves, garlic press, juicer, mixing bowl, wooden spoon.
Year 6 Designers	Alvar Aalto	Charles Rennie Mackintosh	

Food Sensory

In 2016 Flavour School was founded. Flavour School is a charity who have a passion to improve the diet and relationships that children have with food. Their mission is to bring food sensory to all schools to increase children's curiosity and confidence with food and to improve a child's willingness to try new foods. The programme looks at the five senses in a particular order and has two main rules to follow.

- 1. No one has to try anything if they don't want to
- 2. No one has to like anything

Each class will have a food sensory lesson once a term for a full afternoon. The lesson must follow the plan below and include all the steps in this order.

<u>Sense</u>	Learning and Teaching Process		
Sight	Ask the children to tell you how the fruit/veg looks. The shape, colour, texture – build a word bank.		
	Examine them with a magnifying glass. Cut them open. Do they look any different on the inside? Describe and add to the word bank.		
Touch	Feely bag – describe what you can feel without naming it. Can other children guess what it is? Take turns.		
	Once complete cut the fruit open. Does it feel the same on the inside? Does it feel the same inside your mouth as it does in your		
	hands?		
	Build a touch word bank.		
Smell	Using the smelling jars have ¾ strong smelling foods in the shaker jars. What do you think it is? Have some of the original product in		
	jars/plants etc but with labels covered up. Can the children match the smell to the jar/plant? What is it? Can you describe the smell		
	and add these words to a word bank.		
	Choose one or two items. Hold your nose, put the food into your mouth and chew. Then let go of your nose, what can you taste. This is		
	called back smell. Discuss how this happens.		
Hearing	Cut food into bite sized pieces. How does it sound when you bite it? Close your eyes and try to focus on the sound.		
	Describe the sound – add to the word bank.		
Taste	Introduce the 5 tastes – salty (salt), sweet (honey), bitter (cocoa powder), unami/savoury (tomato puree), sour (lemon).		
	Children to try all of the tastes. Can they describe them and compare and contrast what they taste?		
	Have a taste buffet. Can the children match each food to the correct taste? Which do they enjoy the most and the least?		

When selecting the fruit/veg/foods choose a range of colours, shapes, sizes, textures.

Use the symbols that are laminated in the food sensory box.

Have a look at the lists in the box to see what a class has already looked at to ensure we are trying a range of foods across school.