

DT forms part of the learning within Understanding the World as well as Expressive Arts & Design ELG: Creating with Materials.

Design and technology in EYFS enables learners to make sense of the 'made world' in which they live (UTW). By making, changing and modifying (or designing) things for themselves, learners come not simply to a greater understanding of their world, but to a sense of agency - of being able to change and modify their environment (UTW/PSED). DT enables learners to gain knowledge and understanding of their world (UTW/PSED). Design is not just about drawing, but about thinking, involving some experience, some imagination and a willingness to change and modify ideas (C&L/EAD). Technology, on the other hand, is about doing - making something for a purpose, involving putting ideas into practice and having an awareness of the possibilities and limitations of different materials, including making mistakes (PD/PSED). Within the Foundation Stage (Nursery and Reception), the Early Years Foundation Stage Framework is followed. The 'Art' aspect of the curriculum is followed through the area 'Expressive Arts and Design'.

Early Learning Goal

Expressive Arts & Design: Creating with Materials • Safely use & explore a variety of materials, tools & techniques, experimenting with colour, design, texture, form & function • Share their creations, explaining the process they used Communication & Language: Speaking • Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary • Offer explanations for why things might happen PSSED: Managing Self • Be confident to try new activities and show independence, resilience and perseverance in the face of challenge PSSED: Building Relationships • Work and play cooperatively and take turns with others Physical Development: Fine Motor • Use a range of small tools, including scissors, paint brushes and cutlery • Begin to show accuracy and care when drawing UW: The Natural World • Understand some important processes and changes in the natural world around them

By the End of EYFS

• I know how to use scissors safely • I can cut along a straight line • I can cut along a wavy line • I can cut around corners • I can join two items using tape • I can use glue to fix items together • With support I can draw a plan • I know I can adapt & change something I have made • I can work with a friend & share ideas • I know that some materials are better for building than others • I can talk about what I have made & say why Explore, use and refine a variety of artistic effects to express his/her ideas and feelings

	Autumn	Spring	Summer
	Here I am	Once upon a time	Our wonderful world
Nursery	Focus Join different materials and explore different textures. Making rockets and torches.	Focus Develop their own ideas and then decide which materials to use to express them. Designing and making Easter baskets. Explore mechanical equipment (wind up toys).	Focus Develop their own ideas and then decide which materials to use to express them. Using fruit and salad to make faces. Using knives to chop bananas.

Reception	Focus	Focus	Focus
	Use different techniques for joining materials such as how to use adhesive tape and different sorts of glue. Designing and making a shelter for the reindeer.	Safely use and explore a variety of tools and techniques experimenting with colour, design, texture, form and function. Lift the flap books. Use different textures and materials to make homes for the 3 pigs and bridges for the billy goats.	Create collaboratively, sharing ideas, resources and skills. Share their creations explaining the processes they have used. Designing and making fairy houses with natural materials in the Nature Area.

Curriculum Design Principles: At CSL, we utilise the Projects on a Page DT planning tool to support our DT curriculum planning.

KS1

All D.T lessons comprise of a process including design, make and evaluate (this can be verbal or written accounts). Technical knowledge is inbuilt into lessons and projects.

- Design purposeful, functional and appealing products for a range of users based on design criteria.
- Create designs and mock ups before the final piece is produced.
- Use a range of tools and equipment to cut, shape, join and finish an item.
- Use different materials, textiles and ingredients.
- Explore and evaluate existing products.
- Build structures and investigate how they can be made stronger, stiffer and more stable.
- Investigate levers, sliders, wheels, axels, and other mechanisms in products.
- Make and enjoy a range of simple food products looking at where the ingredients come from and important hygiene skills.

KS2

- Use research to develop designs based on innovative, functionality and appeal of a product for a target audience
- Share design ideas through annotated drawings, prototypes, pattern pieces and computer designs where available
- Use a greater range of tools and equipment both with more independence and accuracy
- Explore and evaluate existing products in comparison to their own ideas
- Investigate gears, pulleys, cams and levers
- Understand electrical systems in relation to their products
- Prepare and taste a range of dishes both savoury and sweet using a range of cooking techniques.

DT curriculum development – Cotford St. Luke – Summer 2024

	Autumn	Spring	Summer
Year 1	Wheels and Axles	Levers and Sliders	Preparing Fruit and Vegetables
Year 2	Free Standing structures	Templates and Joining	Preparing Fruit and Vegetables

	Autumn	Spring	Summer
Year 3/4 – Year A	Textiles	Simple circuits and switches	Art/DT Project focus – drawing/making: Healthy and varied diet
Year 3/4 – Year B	Levers and linkages	Shell Structures	Healthy & Varied Diet
Year 5/6 – Year A	Structures	Celebrating culture and seasonality	Electrical Systems
Year 5/6 – Year B			
	Combining different fabric shapes	Mechanical systems- pulleys and gears and frame structures	Frame structures

KS1 – Summer 1: Year1/2 Preparing fruit and vegetables: Y1: fruit smoothies/kebabs Y2: Vegetable kebabs/smoothies/salads		
	Generic lesson focus	Teaching should always refer to the following:
Session 1	Investigative and Evaluative - Children examine a range of fruit/vegetables. Use questions to develop children's understanding e.g. What is this called? Who has eaten this fruit/vegetable before? Where is it grown? When can it be harvested? What are its taste, smell, texture and appearance? What will it look like if we peel it or cut it in half? What are the different parts called? - Provide opportunities for children to handle, smell and taste fruit and vegetables in order to describe them through talking and drawing. e.g. What words can we use to describe the shape, colour, feel, taste? - Evaluate existing products to determine what the children like best; provide opportunities for the children to investigate preferences of their intended users/suitability for intended purposes e.g. What do you prefer and why? What might we want to include in our product to meet our user's preferences? Which fruit/vegetables might be the best for our product to match the occasion/purpose?	Across KS1: Chn understand that food comes from plants or animals Understand that food has to be farmed, caught, or grown
Session 2	Focused Tasks - Discuss basic food hygiene practices when handling food including the importance of following instructions to control risk e.g. What should we do before we work with food? Why is following instructions important? - Demonstrate how to use simple utensils and provide opportunities for the children to practise food-processing skills such as washing, grating, peeling, slicing, squeezing e.g. Do we eat the whole fruit? Why or why not? Which parts do we eat? What might we have to do before eating this? Why do we cut, grate, peel and slice in this way? Discuss different effects achieved by different processes.	Across KS1: Chn understand how to prepare simple dishes hygienically and safely without a heat source Use cooking techniques such as: cutting, peeling and grating
Session 3	Discuss healthy eating advice, including eating more fruit and vegetables; using The eat well plate model talk about the importance of fruit and vegetables in our balanced diet e.g. Why is it good to eat fruit and vegetables? How many pieces of fruit/vegetables do you eat per day? Why is it important to wash fruit/vegetables before we eat them?	Across KS1: Chn understand how to sort foods into the 5 groups using The Eat well Plate Identify that people should eat at least 5 portions of fruit and vegetables a day
Session 4	Set a context for designing and making which is authentic and meaningful. - Discuss with the children the possible products that they might want to design, make and evaluate and who the products will be for. Agree on design criteria that can be used to guide the development and evaluation of children's products e.g. <i>Who/what is the product for? What will make our product unique/different? How will we know that we designed and made a successful product?</i> - Use talk and drawings when planning for a product; ask the children to develop, model and communicate their ideas e.g. <i>What will you need? What fruit/vegetable will you need? How much will you need? How will you present the product?</i> - Talk to the children about the main stages in making, considering appropriate utensils and food processes they learnt about through IEAs and FTs. Make some initial evaluations for our final session.	
Session 5	Making our selected product/s: smoothie/kebab/sandwich/salad Evaluate verbally recording our ideas for next week.	Work safely and hygienically, using tools, equipment, techniques and ingredients appropriate to the task. Taste and evaluate a range of fruit and vegetables used within project.

Session 6	Evaluate our project and the final products against the intended purpose and with the intended user, drawing on the design criteria previously agreed. Children will draw on opinions/photos recorded last week and evaluate the benefits of the vegetables/fruits used and how they could improve on their choices made.			Evaluate ideas and finished products against design criteria, including intended user and purpose.
Key Learning in Design and Technology				
Prior learning - Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. - Experience of cutting soft fruit and vegetables using appropriate utensils.	Designing - Design appealing products for a particular user based on simple design criteria. - Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. - Communicate these ideas through talk and drawings.	Making - Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. - Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product.	Evaluating - Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences. - Evaluate ideas and finished products against design criteria, including intended user and purpose.	Technical knowledge and understanding - Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. - Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of <i>The eat well plate</i>. - Know and use technical and sensory vocabulary relevant to the project.

Autumn term, DT focus units in KS1 should have a focus on the design process. Children should be able to explore prior learning experiences by exploring and using wheels, axles and axle holders.

They should be able to distinguish between fixed and freely moving axles. There should be a developing awareness of how to know and use technical vocabulary relevant to the project. Spring and summer term KS1 units should build on the children's knowledge of wheels and axles. Year 1 will explore levers and sliders understanding that different mechanisms produce different types of movement. Year 2 will focus on templates and joining. Children should be able to understand how simple 3-D textile products are made using a template to create two identical shapes. They will explore different fabrics and how to join them using stitching and glue. They will explore different finishing techniques. All children will learn to use technical vocabulary relevant to the project.

KS2 units should always make links to prior learning experiences and the projects explored in KS1/LKS2