



DT in a Nutshell



EYFS – Sparrows

Both Years	Autumn	Spring	Summer
EYFS	<ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Share their creations, explaining the process they have used. • Make use of props and materials when role playing characters in narratives and stories. 		
Never forgets Knowledge Substantive knowledge	<ul style="list-style-type: none"> • I know what healthy means • I know the names of common fruits and vegetables • I know where some ingredients come from 		
Never forgets Skills Disciplinary knowledge	<ul style="list-style-type: none"> • I can safely use and explore a variety of materials, tools and techniques. • I can experiment with colour, design, texture, form and function. • I can share my creations, explaining the process I have used 		
Recipe examples	Pasta salad, fruit kebabs, overnight oats, filled pittas		
Vocabulary	Healthy, vegetable names, fruit names, slice, layer, mix, combine, taste, hygiene, food safety, mix		



KS1 – Skylarks & Willows

Odd Year	Autumn 2		Spring 2	Summer 2	
Unit title	What does healthy mean? Mini tortilla quiches	How can a space rocket be supported on the launch pad? <i>Designer: Gustave Eiffel</i>	What's in your food? Proper pizza with yoghurt dough	Can street foods save us? Burritos <i>Chef: Andi Oliver</i>	How can you move a large animal cage?
Concept	Food	Structures (Space week)	Food	Food	Mechanisms
Never forgets	<ul style="list-style-type: none"> I know that quiches contain eggs I know which ingredients are healthy I know the bridge and claw cutting techniques I know it is important to store, prepare and cook food safely 	<ul style="list-style-type: none"> I know how to build structures making them stronger, stiffer and more stable I know what Gustave Eiffel has designed. 	<ul style="list-style-type: none"> I know the basic ingredients of a pizza I know where some of the ingredients come from I know how to modify a basic recipe I know it is important to store, prepare and cook food safely 	<ul style="list-style-type: none"> I know what street food is I know what burritos are and their origin I know what fillings are I know where some of the ingredients come from I know it is important to store, prepare and cook food safely 	<ul style="list-style-type: none"> I know the mechanisms; levers, sliders, wheels and axles I know how to use the mechanisms in my design
Never forgets	<ul style="list-style-type: none"> I can crack an egg I can whisk I can slice I can season food I can evaluate and suggest improvements I can wash my hands properly 	<ul style="list-style-type: none"> I can design based on design criteria I can select tools and equipment I can generate mock-ups I can evaluate existing products 	<ul style="list-style-type: none"> I can measure I can mix I can knead, shape and roll I can grate (with a rotary grater) I can flavour food I can evaluate I can wash my hands properly 	<ul style="list-style-type: none"> I can measure I can mix I can slice I can shape and fold I can evaluate and suggest improvements I can wash my hands properly 	<ul style="list-style-type: none"> I can design based on criteria I can model my ideas I can select and use a range of tools and equipment I can use mechanisms I can evaluate my ideas
Vocabulary	Tortilla, quiche, egg white, egg yolk, whisk, seasoning, ingredients, healthy, moderation, cook Bridge cutting technique, claw cutting technique, hygiene, food safety	Strength, stability, stiff, design, model, mock-up, evaluation, criteria	Dough, topping, grate, knead, flavour, recipe, baking, hygiene, food safety	Burritos, tortilla, wraps, fillings, measure, seasoning, grate, roll, fold, hygiene, food safety	Mechanisms, levers, sliders, wheels, axles, model, tools, equipment, evaluate



DT in a Nutshell



KS1 – Skylarks & Willows

Even Year	Autumn 1		Spring 1	Summer 1	
Unit title	Food Senses Vegetables Pitta pockets	Can you design a space suit? <i>Designer: Amy Ross</i>	How does food affect us? Popcorn including savoury seasoning	Why are our diets different? Smorrebrod (open sandwich) <i>Chef: Nadiya Hussain</i>	How can you transport livestock or crops around your farm?
Concept	Food	Textiles (Space week)	Food	Food	Mechanisms
Never forgets Knowledge Substantive knowledge	<ul style="list-style-type: none"> I know the bridge and claw cutting techniques I know some ingredients need to be cooked I know where some vegetables come from I know it is important to store, prepare and cook food safely 	<ul style="list-style-type: none"> I know the characteristics of some textiles I know what design criteria means I know what purposeful, functional and appealing means I know what Amy Ross designed 	<ul style="list-style-type: none"> I know how popcorn is made I know popcorn can be savoury and sweet I know types of snacks and the choices that can be made I know it is important to store, prepare and cook food safely 	<ul style="list-style-type: none"> I know the origin of smorrebrod I know the ingredients needed for smorrebrod I know where some of the ingredients come from I know it is important to store, prepare and cook food safely 	<ul style="list-style-type: none"> I know the mechanisms: levers, sliders, wheels and axles I know what design criteria means
Never forgets Skills Disciplinary knowledge	<ul style="list-style-type: none"> I can safely cut with a knife I can select fillings and ingredients I can wash my hands properly 	<ul style="list-style-type: none"> I can communicate my ideas in drawings I can model my ideas using mock-ups I can select from a range of textiles I can evaluate existing products 	<ul style="list-style-type: none"> I can season food I can label foods I can evaluate and suggest improvements I can wash my hands properly 	<ul style="list-style-type: none"> I can layer ingredients I can present food carefully I can suggest how to improve a recipe I can wash my hands properly 	<ul style="list-style-type: none"> I can communicate my ideas in drawings I can model my ideas using mock-ups I can select and use a range of equipment and components I can use mechanisms I can evaluate my ideas
Vocabulary	Ingredient, pitta, filling, bridge cutting technique, claw cutting technique, raw, hygiene, food safety	Characteristics, design criteria, purpose, function, appeal, mock-up, textile, existing product	Seasoning, flavouring, sweet, savoury, labelling, hob top, improvement, evaluate, hygiene, food safety	Smorrebrod, Danish, Denmark, layer, ingredient, presentation, attractive, hygiene, food safety	Mechanisms, levers, sliders, wheels, axles, design criteria, mock-ups, components, evaluation



DT in a Nutshell



Lower KS2 – Swifts & Sycamores

Odd Year	Autumn 2		Spring 2	Summer 2	
Unit title	What does healthy mean? Pitta bites & hummus <i>Chef: Paul Hollywood</i>	How can an animal enclosure be designed to suit the needs of the animal? <i>Zoo Enclosure Designers- Base Structures & Colchester Zoo website</i>	What's in your food? Soup	Can street foods save us? Samosas (oven cooked)	How could you design a toy using a mechanical system? <i>Inventors: Richard T. James and Betty James (Slinky)</i>
Concept	Food	Structures	Food	Food	Mechanical systems
Never forgets Knowledge Substantive knowledge	<ul style="list-style-type: none"> I know how to use yeast and make a dough I know which ingredients are considered healthy I know what a varied diet looks like 	<ul style="list-style-type: none"> I know that design criteria inform the design of innovative, functional and appealing products I know how to strengthen, stiffen and reinforce more complex structures 	<ul style="list-style-type: none"> I know ingredients are listed on food packaging I know about seasonal foods I know about food miles 	<ul style="list-style-type: none"> I know what street foods are I know some issues facing food production I know what a healthy and varied diet looks like 	<ul style="list-style-type: none"> I know how individuals in D&T have helped shape the world I know existing products can be analysed I know materials and components are used according to their functional properties and their aesthetic qualities
Never forgets Skills Disciplinary knowledge	<ul style="list-style-type: none"> I can use a blender I can season food I can select flavours I can knead and shape dough I can store, prepare and cook food safely I can evaluate my food and consider the views of others to improve it 	<ul style="list-style-type: none"> I can investigate and analyse existing products I can make annotated sketches I can make prototypes I can cut, shape, join accurately I can select materials and components according to their functional properties I can evaluate my ideas against my own design criteria 	<ul style="list-style-type: none"> I can use the bridge cutting technique I can use the claw cutting technique I can season foods I can investigate and analyse existing products (bought soup) I can make annotated sketches 	<ul style="list-style-type: none"> I can fold and shape filo pastry I can chop herbs (scissors in a mug) I can select ingredients I can investigate and analyse existing products (bought samosas) I can evaluate my food and consider the views of others to improve it 	<ul style="list-style-type: none"> I can use cams I can use levers I can use linkages I can make a prototype I can make annotated sketches I can consider the views of others to improve my work
Vocabulary	Pitta bread, yeast, dough, rest/prove, hummus, blitz/blend, hygiene, food safety, varied, diet	Design criteria, innovative, functional, appeal, analyse, investigate, annotation, prototype, accuracy	Seasonal, local, packaging, labelling, ingredients, blend/blitz, stock, seasoning, bridge, claw	Samosa, filo pastry, herbs, spices, ingredients, existing products, analyse, investigate, evaluate	Cams, levers, linkages, prototype, function, aesthetic quality



DT in a Nutshell



Lower KS2 – Swifts & Sycamores

Even Year	Autumn 1		Spring 1	Summer 1	
Unit title	Food senses vegetables Breaded vegetables	How could you transport a rocket to the launch pad? <i>Engineer: Sara Pastor (International Habitation Module)</i>	How does food affect us? Chips (air fryer) <i>Chef: Monica Galetti</i>	Why are our diets different? Summer rolls and dipping sauce	Can you make an alarm system? <i>Inventor- Maria van Brittan Brown</i>
Concept	Food	Mechanical systems and structures	Food	Food	Electrical systems
Never forgets Knowledge Substantive knowledge	<ul style="list-style-type: none"> I know the rules for basic food hygiene and safe practices I know a healthy diet consists of a variety and balance of foods and drinks I know that careful presentation makes food attractive 	<ul style="list-style-type: none"> I know how to stiffen, strengthen and reinforce complex structures I know how key events in D&T have helped shaped the world I know equipment and materials are used according to their functional properties 	<ul style="list-style-type: none"> I know different types of chips and the healthy options I know that ingredients can be fresh, pre-cooked or processed I know that food needs to be prepared hygienically and safely 	<ul style="list-style-type: none"> I know how to follow a recipe I know recipes can be adapted to change taste, texture and appearance I know that food needs to be prepared hygienically and safely I know the seasonality of some foods 	<ul style="list-style-type: none"> I know that computer programs can control products I know that electrical systems can be used in products I know that design criteria inform the design of innovative, functional and appealing products
Never forgets Skills Disciplinary knowledge	<ul style="list-style-type: none"> I can use the bridge and claw cutting techniques I can peel vegetables I can make suggestions about how I can improve a recipe 	<ul style="list-style-type: none"> I can use pulleys I can use gears I can use linkages I can use levers I can make a prototype I can draw a cross sectional drawing 	<ul style="list-style-type: none"> I can use the bridge and claw cutting technique I can season and flavour food I can make annotated sketches I can suggest how to make improvements 	<ul style="list-style-type: none"> I can select ingredients I can prepare foods safely I can season and flavour foods I can make annotated sketches I can use criteria to evaluate my food 	<ul style="list-style-type: none"> I can use a simple circuit in a product I can use different components in a product I can use research and develop design criteria I can communicate my ideas using computer-aided design
Vocabulary	Hygiene, safe practices, health, diet, balance, variety, presentation, evaluation	Reinforce, structure, mechanism, pulley, gear, lever, linkage, prototype, cross sectional drawing	Healthy option, pre-cooked, processed, annotated,	Texture, appearance, hygienically, safely, seasonality, season, flavour, criteria	Innovative, functional, appeal, components, circuit, computer-aided design (cad), electrical systems



Upper KS2 – Swallows & Oaks

Odd Year	Autumn 2		Spring 2	Summer 2	
Unit title	What does healthy mean? Quesadillas	Space week: How can a lunar module safely land on the moon?	What's in your food? Chickpea curry <i>Chef: Jamie Oliver</i>	Can street foods save us? Pot noodle	How can an end of school memento be made? <i>Designer: Ozwald Boateng</i>
Concept	Food	Mechanical systems (Space Week)	Food	Food	Textiles
Never forgets Knowledge Substantive knowledge	<ul style="list-style-type: none"> I know the spices used in curries I know the purpose of flavouring I know how the ingredients in a curry have been grown and processed I know that there are date marks on foods 	<ul style="list-style-type: none"> I know what a design specification is I know the purpose of springs I know that key events in D&T have helped shape the world 	<ul style="list-style-type: none"> I know what quesadillas are I know how to follow a recipe I know that processed food has an ingredient list I know about food miles <p>I know what a seasonal food is</p>	<ul style="list-style-type: none"> I know what street foods are I know what regional and seasonal foods are I know why quickly prepared foods are popular I know that food ingredients can be fresh, pre-cooked and processed. 	<ul style="list-style-type: none"> I know design criteria informs the design of innovative, functional and appealing products I know how to evaluate against my own design criteria I know how individuals in D&T have helped shape the world
Never forgets Skills Disciplinary knowledge	<ul style="list-style-type: none"> I can use the bridge and claw cutting techniques competently I can control heat when cooking I can make choices about flavouring I can suggest improvements after eating a prepared dish 	<ul style="list-style-type: none"> I can assemble components to make working models I can annotate sketches 	<ul style="list-style-type: none"> I can use the bridge and claw cutting techniques competently I can control heat when cooking I can select ingredients I can annotate sketches 	<ul style="list-style-type: none"> I can modify recipes by adding or substituting one or more ingredients I can use seasoning and flavouring I can suggest improvements after eating a prepared dish 	<ul style="list-style-type: none"> I can communicate my design using exploded diagrams I can develop my ideas using pattern pieces I can select and use a wide range of textiles according to their aesthetic qualities I can cut, shape, sew and stitch, accurately I can consider the views of others to improve my work
Vocabulary	Seasoning, flavouring, spice, heat (as in spicy), processed foods, use by, best before,	assemble, design specification, springs,	vegan, vegetarian, ultra processed, scratch cooking, origin,	Street food, regional, local, seasonal, immediate, produce, pre-cooked, processed	Design criteria, innovative, functional, appealing, aesthetic, exploded diagram, pattern piece, textile



Upper KS2 – Swallows & Oaks

Even Year	Autumn 1		Spring 1	Summer 1	
Unit title	Food Senses Vegetables Rainbow wraps	How can you design a moon lander? (Use Tinkercad) <i>Inventor: Olga Gonzalez-Sanabria</i>	How does food affect us? Roasted aubergines <i>Chef: Ottolenghi</i>	Why are our diets different? Bombay potatoes	How can we travel across water? <i>Designer: Maria Beasley</i>
Concept	Food	Electrical systems	Food	Food	Structures and mechanical systems
Never forgets Knowledge Substantive knowledge	<ul style="list-style-type: none"> I know a wide range of vegetables and salads I know how the ingredients are grown and processed I know what seasonality is and apply it to some of my ingredients 	<ul style="list-style-type: none"> I know how key events and individuals in D&T have helped shape the world I know that electrical systems are circuits and can incorporate switches, bulbs, motors, I know that the functional properties and aesthetic qualities are important in design I know patterns are used when fabrics are cut out I know that a 3D textiles product can be made from a combination of fabric shapes 	<ul style="list-style-type: none"> I know what ingredients can be used to add flavour and texture I know how to prepare a pepper I know what seasonality is and apply it to some of my ingredients 	<ul style="list-style-type: none"> I know the origin of Bombay potatoes I know some spices I know how the ingredients are grown and processed 	<ul style="list-style-type: none"> I know how to reinforce and strengthen a 3D framework I know how to use mechanical systems I know how sustainable the materials in products are I know what impact products have beyond their intended purpose I know how individuals in D&T have helped shape the world
Never forgets Skills Disciplinary knowledge	<ul style="list-style-type: none"> I can use bridge and claw cutting techniques competently I can communicate my ideas through annotated sketches I can consider the views of others to improve my work 	<ul style="list-style-type: none"> I can investigate and analyse existing products (torches) I can use computer-aided design to generate and communicate my ideas I can research and develop design criteria I can make prototypes I can use electrical systems in my products I can pin, stitch and sew materials together 	<ul style="list-style-type: none"> I can use bridge and claw cutting techniques competently I can control heat on a hob top and an oven I can communicate my ideas through annotated sketches 	<ul style="list-style-type: none"> I can use a peeler safely I can flavour food I can control heat on a hob top I can communicate my ideas through annotated sketches 	<ul style="list-style-type: none"> I can communicate my ideas using cross-sectional and exploded diagrams I can use pulleys, levers, gears, cams and linkages I can combine materials to create more useful characteristics I can critically evaluate the quality of my design
Vocabulary	Bridge and claw cutting technique, tortilla wrap, seasoning, flavouring, seasonality, processed	Tinkercad, computer-aided design, prototype, electrical system, research, design criteria Fabric, textiles, patterns (as in a paper shape/outline)	Bridge and claw cutting techniques, healthy choices, diet, mood, health, seasonality	Peeler, flavour, seasoning, spices, hot/mild, diets, culture, boil, annotate	Designer, inventor, cross-sectional diagram, exploded diagram, pulleys, levers, gears, cams, linkage, critical valuation, quality, 3D framework, sustainable, purpose



DT in a Nutshell

