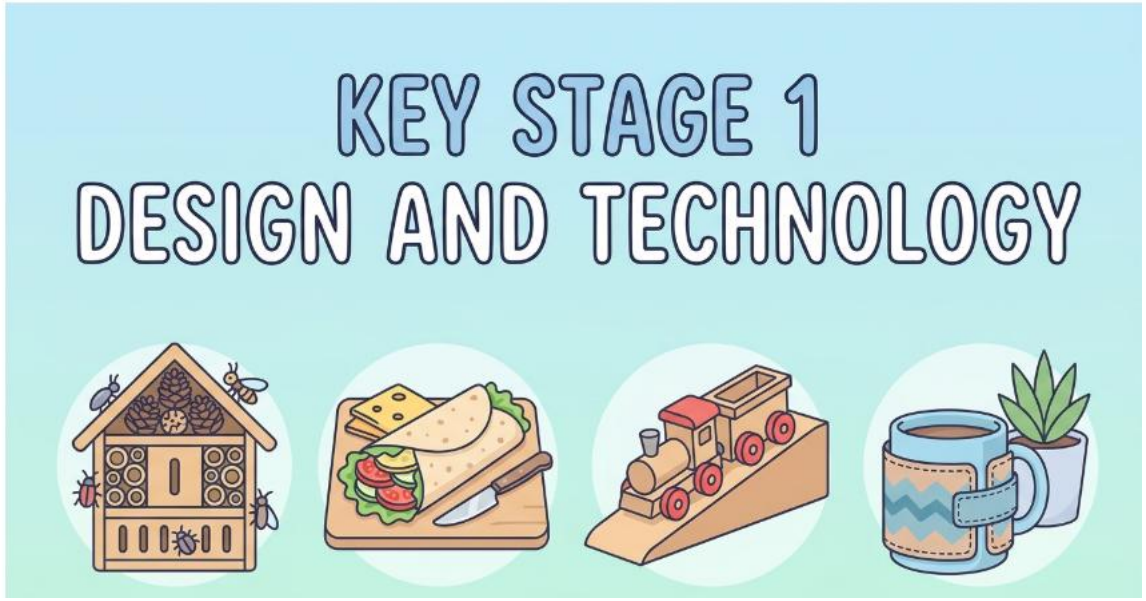
BUDE PRIMARY ACADEMY INFANT SCHOOL

Design & Technology Curriculum Coverage & Progression of Skills and Knowledge

A Framework for EYFS Reception Foundations & Mixed-Age Key Stage 1 (Years 1 & 2) 2-Year Rolling Programme



CURRICULUM MAPPING NOTICE: Bude Primary Academy Infant School is currently mapping our new Nursery curriculum onto our progression of skills and knowledge for each area of the curriculum. This document outlines the Design and Technology curriculum progression across EYFS Reception and our 2-Year Mixed-Age Key Stage 1 Rolling Programme (Year A and Year B).

1. Key Stage 1 & EYFS Design & Technology 2-Year Rolling Programme Overview

Half Term	Year B (Current Rolling Cycle)	Year A (Alternate Rolling Cycle)
Autumn 1		

Half Term	Year B (Current Rolling Cycle)	Year A (Alternate Rolling Cycle)
Autumn 2	**Textiles: Santa's Cup Warmer (Insulated Sleeves)** • Disassembling 3D takeaway cup sleeves to create 2D flat templates. • Testing reusable fasteners (sticky Velcro dots). • Designing, cutting & joining felt to assemble a thermal cup warmer.	**Structures & Mechanics: Woodland Minibeast Hotel** • Client Research: Discovering the '5 Stars' for a winter den (Dry, Strong, Tiny Gaps, Different Sizes, Location). • User-Centred Design: Guest Fact Sheets & annotated designs with reasons ('because'). • Prototyping: Mock-ups testing stability, packing tight & wedging.
Spring 1		*[*
Spring 2		
Summer 1	**Cooking & Nutrition: Farm to Fork & Healthy Seasonal Dish** • Food origins: farming, animal rearing, harvesting, processing. • Preparing a healthy seasonal British dish applying hygiene & safe cutting/peeling skills.	**Cooking & Nutrition: Pirate Ship Healthy Wraps** • Market Research & Sensory Evaluation: 'Taste, Decide, Record' strategy testing healthy ingredients. • Functional Design: 'Find and Transfer' method, annotating 2-3 ingredients + 1 treat rule. • Assembly & Hygiene: 'Wash & Ready' 3-step checklist, 'Spread the Glue', 'Layer', 'Tuck & Roll'.
Summer 2	**Mechanisms: Moving Railway Vehicles (Wheels & Axles)** • Exploring wheels and axles: fixed axles vs free axles. • Designing, assembling & testing rolling railway carriages with wooden dowels, card chassis, and wheel hubs. • Rolling ramp tests for stability and friction.	*[*

2. Vertical Design & Technology Skills Progression: EYFS Reception to Key Stage 1 Stretch

D&T Strand	EYFS Reception (Foundations)	Year 1 Expectation	Year 2 Cognitive Stretch
Design (User, Purpose & Criteria)	• Constructs with a purpose in mind using available resources. • Selects tools & materials for a specific idea. • Draws simple ideas and articulates what they are making to an adult. • Uses props and materials to create costumes and models.	• Identifies the 'User' and 'Purpose' for a design brief. • Uses research data (e.g. Tasting Logs, 5-Star Criteria) to select ingredients/materials. • Draws functional designs and adds simple labels. • Uses 'Find and Transfer' methods to plan products.	• Generates functional design criteria based on client needs (e.g. Guest Fact Sheets). • Annotates drawings with explanatory reasons using 'because'. • Cross-references research charts to justify design choices. • Explains how a 2D template wraps a 3D structure.
Make (Tools, Materials & Safety)	• Safely explores a wide range of media, tools, and techniques. • Joins, shapes, assembles, and combines materials using glue, tape, split pins, string. • Uses scissors, paintbrushes, spreaders, and rollers with growing control. • Follows basic hygiene routines (handwashing).	• Selects from a range of materials/components according to properties. • Cuts, shapes, folds, and joins felt, card, paper, and food safely. • Follows 3-step hygiene checklists ('Wash & Ready'). • Uses pre-cut chassis, dowels, and templates with support.	• Measures, marks out, cuts, and joins materials with increasing accuracy. • Uses 'wedging' and 'packing tight' techniques to create stable structures. • Assembles mechanisms (wheels, axles, dowels, chassis) ensuring free movement. • Applies safe food preparation techniques (spreading, layering, rolling).
Evaluate (Testing & Reflection)	• Shares creations with others and explains processes used. • Begins to self-correct mistakes during the building process. • Reviews own work and describes simple likes/dislikes. • Demonstrates pride in creative achievements.	• Tests products against simple criteria (e.g. Does the wrap hold together? Is it dry?). • Uses visual rating scales (1-3 stars, Happy/Sad faces). • Compares finished product to initial drawing. • Identifies one thing that went well in the build.	• Evaluates functionality against explicit criteria (e.g. 5-Star Bug Hotel rules). • Performs tilt tests, rolling ramp tests, and insulation tests. • Explains why a product succeeded or failed (e.g. 'needed more glue'). • Suggests specific improvements for future iterations.
Technical Knowledge (Structures, Mechanisms, Textiles, Food)	• Explores structure and stability through block play and junk modelling. • Uses fabrics, boxes, tubes, and fasteners to build props. • Explores textures (soft, hard, crunchy, smooth) and primary/secondary colours. • Understands basic origin of food (plants, garden).	• Structures: Explores how 3D hollow shapes hold materials. • Mechanisms: Recognises moving parts in everyday objects. • Textiles: Deconstructs 3D shapes to make 2D flat templates. • Food & Nutrition: Distinguishes healthy foods; understands food comes from farming/rearing.	• Structures: Understands stability, friction, and wedging in load-bearing frames. • Mechanisms: Differentiates fixed axles vs free axles in wheel systems. • Textiles: Uses reusable fasteners (Velcro) and insulating layers. • Food & Nutrition: Prepares balanced dishes following statutory hygiene rules.

3. Substantive Technical Knowledge, Practical Tasks & Metacognitive Strategies Matrix

Unit Focus & Topic	D&T Domain	Substantive Technical Knowledge	Classroom Investigation & Practical Task	Metacognitive Strategy & Key Vocab
EYFS Reception: Creating with Materials	**Foundations (EAD / DT)**	• Materials can be joined using tape, glue, string, split pins. • 3D models require sturdy bases (boxes, tubes). • Props support narrative role-play. • Process is valued over finished product.	• Junk modelling structures, vehicle building, costume/mask making. • Free choice creation with fabrics, ribbons, fur, boxes. • Tactile playdough & clay shaping. • Shared 'talk time' to explain processes.	**Strategy: Plan -> Build -> Talk** **Vocab: Join, Shape, Combine, Tape, Glue, Scissors, Structure, Fabric, Model, Share.**
Year B Autumn 2: Santa's Cup Warmer	**Textiles & Fasteners**	• 2D flat templates can be wrapped around 3D tapering cylinders. • Felt provides thermal insulation to trap heat. • Reusable fasteners (Velcro dots) hold fabrics under tension without tearing.	• Deconstructing takeaway coffee cup sleeves into flat 2D templates. • Testing Velcro dot strength vs paper clips/bands. • Tracing, cutting felt templates, attaching Velcro & testing insulation with warm cocoa.	**Strategy: Deconstruct -> Template -> Join** **Vocab: Template, Sleeve, Fastener, Velcro, Felt, Insulate, Wrap, Join, Evaluate.**
Year B Summer 1: Farm to Fork & Healthy Dish	**Cooking & Nutrition**	• All food comes from plants or animals (farming, rearing, harvesting). • Healthy diets require a balance of food groups. • Hygiene rules prevent spreading germs to food.	• Investigating seasonal British produce journeys from field to plate. • Hygiene routine: aprons, sleeves up, 20s handwashing. • Safe slicing, peeling, and assembling a seasonal salad/dish.	**Strategy: Wash & Ready -> Prepare -> Serve** **Vocab: Farming, Harvest, Produce, Hygiene, Peel, Slice, Nutrient, Balanced, Prepare.**
Year B Summer 2: Moving Railway Vehicles	**Mechanisms (Wheels & Axles)**	• Wheels must turn freely on or with an axle to allow movement. • Fixed axles turn with wheels; free axles spin inside axle holders/tubes. • Friction slows vehicle motion on ramps.	• Building Victorian steam train carriages/chassis with card boxes, wooden dowels, and wheel hubs. • Running rolling tests on inclined wooden ramps. • Measuring distance rolled & adjusting axle friction.	**Strategy: Chassis -> Axle -> Wheel -> Test** **Vocab: Wheel, Axle, Dowel, Chassis, Friction, Fixed, Free, Rotate, Stability, Ramp.**
Year A Autumn 2: Woodland Bug Hotel	**Structures & Mechanisms**	• Functional design serves specific user needs (hibernation = 'Pause Button'). • 5 Stars of Bug Hotel: Dry, Strong, Tiny Gaps, Different Sizes, Location. • Wedging and tight packing prevent structural collapse.	• Lesson 1: Client Research finding 5 stars. • Lesson 2: Guest Fact Sheets (Bee, Ladybird, Woodlouse) & annotated designs ('because'). • Lesson 3: Cardboard/playdough mock-up & stability tilt test. • Lesson 4: Final build & evaluation against 5 stars.	**Strategy: Check Sheet -> Touch Stuff -> Pack Tight -> Tilt Test** **Vocab: User, Purpose, Hibernation, Functional, Annotation, Mock-Up, Wedge, Stability, Criteria.**

Unit Focus & Topic	D&T Domain	Substantive Technical Knowledge	Classroom Investigation & Practical Task	Metacognitive Strategy & Key Vocab
Year A Summer 1: Pirate Healthy Wraps	**Cooking & Nutrition**	• Ingredients have distinct sensory properties (texture, taste, smell). • Scurvy prevention requires fresh vitamin C. • A healthy meal balances nutritious foods with 1 small treat.	• Lesson 1: Sensory tasting log ('Taste, Decide, Record' strategy). • Lesson 2: Designing wrap ('Find & Transfer' method, 1 treat box rule). • Lesson 3: Assembly following 'Wash & Ready', 'Spread Glue', 'Layer', 'Tuck & Roll'. • Lesson 4: Evaluation star scale & improvement stickers.	**Strategy: Taste, Decide, Record -> Find & Transfer -> Tuck & Roll** **Vocab: Ingredient, Sensory, Texture, Functional, Annotation, Hygiene, Spread, Layer, Roll, Evaluate.**