Characteristics of effective learning.

Show curiosity about objects, events and people

Questions why things happen

Engage in open-ended activity

Thinking of ideas Find ways to solve problems / find new ways to do things / test their ideas Use senses to explore the world around them

Create simple representations of events, people and objects

Planning, making decisions about how to approach a task, solve a problem and reach a goal

Checking how well their activities are going

Changing strategy as needed Reviewing how well the approach worked

EYFS—DT Knowledge and skills

Early Learning Goals.

Choose the resources they need for their chosen activities

Handle equipment and tools effectively

Children know the importance for good health of a healthy diet

They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.

They represent their own ideas, thoughts and feelings through design and technology.

Suggested activities.

Textiles: Calendar, bookmark

Construction: Stacking blocks, making enclosures, design and make simple structures such as a castle out of lego or blocks.

Mechanical Systems—make vehicles using kinex or mobile

Food—KS1.

Knowledge.

- Understand where a range of fruit and vegetables come from. E.g. farmed or grown at home.
- Understand and use basic principles of healthy and varied diet to prepare dishes, including how fruit and vegetables are part of the Eatwell plate.
- Know and use technical and sensory vocabulary relevant to the project.

Vocabulary.

fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients,

Food—LKS2.

Knowledge.

- Know how to use appropriate equipment and utensils to prepare and combine food.
- Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.
- Know and use relevant technical and sensory vocabulary appropriately.

Vocabulary.

name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied die

Food—UKS2.

Knowledge.

- Know how to use utensils and equipment including heat sources to prepare and cook food.
- Understand about seasonality in relation to food products and the source of different food products.
- Know and use relevant technical and sensory vocabulary

Vocabulary.

Ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble

me of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied die

Textiles KS1.

Knowledge.

- Understand how simple 3-D textile products are made, using a template to create two identical shapes.
- Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.
- Explore different finishing techniques
- Know and use technical vocabulary relevant to the project.

Vocabulary.

joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish

Textiles LKS2.

Knowledge.

- Know how to strengthen, stiffen and reinforce existing fabrics.
- Understand how to securely join two pieces of fabric together.
- Understand the need for patterns and seam allowances.
- Know and use technical vocabulary relevant to the project.

Vocabulary.

fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance

Textiles UKS2.

Knowledge.

- Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics.
- Understand how fabrics can be strengthened, stiffened and reinforced where appropriate.
- Know and use technical vocabulary relevant to the project.

Vocabulary.

seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,

Construction KS1.

Knowledge.

- Know how to make freestanding structures stronger, stiffer and more stable.
- Know and use technical vocabulary relevant to the project.

Vocabulary.

cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder

Construction LKS2.

Knowledge.

- Develop and use knowledge of how to construct strong, stiff shell structures.
- Develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes.
- Know and use technical vocabulary relevant to the project.

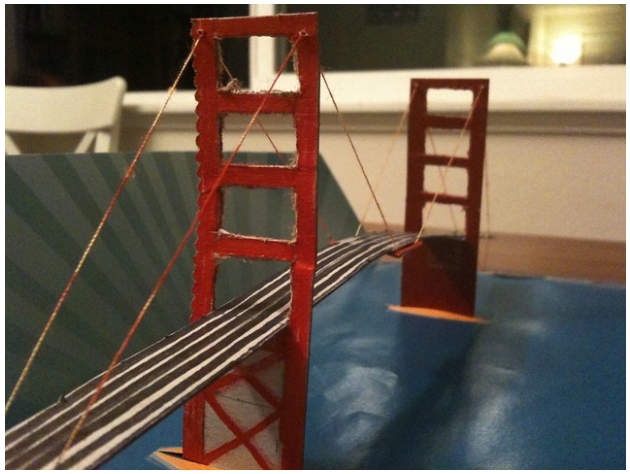
Vocabulary.

shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision,

Construction UKS2.

Knowledge.

- Understand how to strengthen, stiffen and reinforce 3-D frameworks.
- Know and use technical vocabulary relevant to the project.



Vocabulary.

frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent

Mechanical Systems KS1.

Knowledge.

- Explore and use sliders and levers.
- Understand that different mechanisms produce different types of movement.
- Know and use technical vocabulary relevant to the project.
- Explore and use wheels, axles and axle holders.
- Distinguish between fixed and freely moving axles.

Vocabulary.

slider, lever, pivot, slot, bridge/ guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards

vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used

Mechanical Systems

LKS2.

Knowledge.

- Understand and use lever and linkage mechanisms.
- Distinguish between fixed and loose pivots.
- Know and use technical vocabulary relevant to the project.

Vocabulary.

mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscil-lating, reciprocating

Mechanical Systems

UKS2.

Knowledge.

- Understand that mechanical and electrical systems have an input, process and an output.
- Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary relevant to the project.

Vocabulary.

pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output

Electrical Systems

LKS2.

Knowledge.

- Understand and use electrical systems in their products linked to science coverage.
- Apply their under-standing of computing to program and control their products.
- Know and use technical vocabulary relevant to the project.

Vocabulary.

series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device

Electrical Systems

UKS2.

Knowledge.

- Understand and use electrical systems in their products linked to science coverage.
- Apply their understanding of computing to program, monitor and control their products.
- Know and use technical vocabulary relevant to the project.

Vocabulary.

reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit