Design and Technology Curriculum Sequence- Year 2

Honesty	Love	Forgiveness	Respect	Cultural Capital Opportunities
Learning to communicate with confidence
Asking for help when necessary
    Giving criticism kindly | Offering to help

Giving praise to self and others | Being able to accept kind criticism
Learn to be patient when sharing | Appreciating the efforts of others
Looking after equipment, materials, the classroom environment and each other's work | Investigating products in the school environment, the locality and at home
Learning about the impact of nutrition on health
Learning where food comes from
Learning to use unfamiliar equipment and materials |

A Love Of Language	Aspirations	Bringing Learning To Life	Emotional Well-Being	Resilience	Valuing Our Diversity	Respect and Responsibility
Reading:
-reading technical and other key vocabulary
-reading instructions
-reading age appropriate information about designers and products
-reading peers' writing

Listening:
-listening to instructions
-listening to video clips
-listening to partners and team members

Speaking:
-using technical and other key vocabulary
-communicating with partners and team members
-asking questions
-describing and explaining ideas, decisions and opinions

Writing:
-labelling drawings
-writing technical and other key vocabulary
-writing instructions
-writing product evaluations
-writing reports on designers and products
-persuasive writing adverts | Identify the ways a product will meet the design criteria

Identify the positive effect the product will have on the intended user

Self-evaluate their use of equipment and skills and set their own targets for improvement | Evaluating a variety of existing products

Visits to the locality to investigate products

Practical use of a range of techniques and materials

Making products that function and are appealing | Learning to be supportive and cooperative

Being proud of what they have accomplished | Being willing to take risks

Persevering with new techniques and equipment

Know that practise brings improvement | Learning about foods from around the world

Finding out about and valuing people's preferences | Listening to safety instructions and using equipment with care

Looking after equipment, materials, the classroom / local environment and each other's work

Giving praise (to self as well as others)

Giving criticism kindly

Accept kind criticism

Asking for help when necessary

Offer to help

Learn to be patient when sharing |

What will they learn?		In what order?			End points
Key Concepts	**Key Skills**	**Autumn 1**	**Spring 1**	**Summer 1**	
Design products that are: -purposeful -functional -appealing -designed for themselves or other identified users -based on design criteria. Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). Demonstrate a range of joining techniques (such as gluing, hinges or combining	Designing • Generate initial ideas and simple design criteria through talking and using own experiences. • Design a functional and appealing product for a chosen user and purpose based on simple design criteria. • Develop and communicate ideas through drawings and mock-ups. • Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology. • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. • Communicate these ideas through talk and drawings. Making • Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. • Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. • Select from and use textiles according to their characteristics. • Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics. • Use simple utensils and equipment to e.g. peel, cut,	**Preparing Fruits and Vegetables** <u>Technical Knowledge and Understanding</u> • Know and use technical and sensory vocabulary relevant to the project: 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, planning, investigating tasting, arranging, popular, design, evaluate, criteria <u>Technical Knowledge and Understanding</u> • Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of *The Eatwell Plate*. <u>Technical Knowledge and Understanding</u> • Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. <u>Evaluating</u> • Taste and evaluate a	**Mechanisms: Wheels and Axles** <u>Technical Knowledge and Understanding</u> • Know and use technical vocabulary relevant to the project: vehicle, wheel, axle, axle holder, chassis, body, cab, assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism, names of tools, equipment and materials used, design, make, evaluate, purpose, user, criteria, function <u>Evaluating</u> • Explore and evaluate a range of products with wheels and axles. <u>Designing</u> • Design a functional and appealing product for a chosen user and purpose based on simple design criteria <u>Technical Knowledge and Understanding</u> • Explore and use wheels, axles and axle holders. <u>Technical Knowledge and Understanding</u> • Distinguish between fixed and freely moving axles. <u>Designing</u> • Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and	**TEXTILES: Puppets** <u>Technical Knowledge and Understanding</u> • Know and use technical vocabulary relevant to the project: names of existing products, joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish, features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function <u>Evaluating</u> • Explore and evaluate a range of existing textile products relevant to the project. <u>Designing</u> • Generate initial ideas and simple design criteria through talking and using own experiences. <u>Technical Knowledge and Understanding</u> • Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling. <u>Technical Knowledge and Understanding</u> • Explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins,	**Autumn** • Understand and use basic principles of a healthy and varied diet to prepare dishes • Understands where a range of fruit and vegetables come from e.g. farmed or grown at home. • Tastes and evaluates a range of fruit and vegetables to determine the intended user's preferences. • Generates initial ideas and design criteria through investigating a variety of fruit and vegetables. • Designs appealing products for a particular user based on design criteria. • Communicates these ideas through talk, diagrams and ICT (Paint) • Selects from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product. • Uses simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. • Evaluate ideas and finished products against design criteria, including intended user and purpose. • Know and use technical and sensory vocabulary relevant to the project **Spring** • Evaluates mechanisms in a range of model vehicles. • Evaluates real vehicles in relation to their user, function and purpose. • Draws on their investigation of vehicles to inform their own design ideas •Makes labelled drawings of their product, including CAD (2Paint). • develop ideas for making a model vehicle which has a purpose, and which reflects their original idea • Suggest how they might make the vehicle they have designed. • Joins wheels and axles effectively and explain how they work • Applies rules which reduce risk whilst constructing their design • Constructs a functioning vehicle which fulfils the chosen purpose. • Finishes the vehicle with a label or logo. • Evaluates their finished vehicle, recording how it works and matches the original ideas. **Summer**

materials to strengthen). Create 3D products from two 2D textile pieces. Join textiles in a range of ways. Create products that use levers, wheels and winding mechanisms. Cut, peel or grate ingredients safely and hygienically.	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 • Explore and evaluate a range of existing textile products relevant to the project being undertaken. • Evaluate their ideas throughout and their final products against original design criteria. • Evaluate their ideas throughout and their products against original criteria. • 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 • Know and use technical vocabulary relevant to the project. • Explore and use wheels, axles and axle holders. • Distinguish between fixed and freely moving axles. • 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 e.g. using painting,	range of fruit and vegetables to determine the intended user's preferences. Designing • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. Designing • Generate initial ideas and simple design criteria through talking and using own experiences. Designing • Communicate these ideas through talk and drawings. Making • Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product. Making • Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. Evaluating • Evaluate ideas and finished products against design criteria, including intended user and purpose.	communication technology. Making • Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics. Making • Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. Evaluating • Evaluate their ideas throughout and their products against original criteria.	buttons and ribbons. Technical Knowledge and Understanding • Understand how simple 3-D textile products are made, using a template to create two identical shapes. Designing • Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology. Making • Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. Making • Select from and use textiles according to their characteristics. Evaluating • Evaluate their ideas throughout and their final products against original design criteria.	• Explores and evaluates a range of existing textile products. • Designs a functional and appealing product for a chosen user and purpose based on simple design criteria. • Generates, develops, models and communicates their ideas as appropriate through talking, drawing, templates, mock-ups and ICT (Paint). • Understands how to join fabrics using different techniques including running stitch, glue, over stitch or stapling. • Understands how simple 3-D textile products are made, using a template to create two identical shapes. • Selects and uses textiles according to their characteristics. • Selects and uses a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. • Explores different finishing techniques using added fabric pieces, painting, fabric crayons, stitching, sequins, buttons and ribbons. • Evaluate their ideas throughout and their final products against original design criteria. • Knows and uses technical vocabulary relevant to the project.

	fabric crayons, stitching, sequins, buttons and ribbons. • 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 *The Eatwell Plate*.				