Design and Technology



Communicate
Live Healthily
Accept and Respect
Understand the Wider World
Dream Big
Explore

WHINGATE'S CURRICULUM AIMS



VOCABULARY- Making and Evaluating

| FS / KS1 | y3 / 4 | Y5 / 6 |
|---|---|---|
| Year 1- planning, investigating design, evaluate, make, user, purpose, ideas, product, Year 2- investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function | Year 3- user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing Year 4- evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations | Year 5- design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype Year 6- function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype |
| slider, lever, pivot, slot, bridge/guide card, masking tape, paper fastener, join pull, push, up, down, straight, curve, forwards, backwards, design, make, evaluate, user, purpose, ideas, design criteria, product, function, 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, 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, | fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance, user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces, 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 diet, mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating, user, purpose, function, prototype, shell structure, three-dimensional (3-D) | 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, design specification, innovative, research, evaluate, design brief, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern piece, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper, frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent, design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, |

arranging, popular, names of existing products, joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish, vehicle, wheel, axle, axle holder, chassis, body, cab, assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism, names of tools, equipment and materials used

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, 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

control, program, flowchart, 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

| Area of subject | Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|-------------------|---------------|----------------|-------------------|--------------------|-----------------------|---------------------|--|-------------------------|
| AUTUMN | PEE | | Cooking | <u>Food</u> | Electrical Systems | Food - Healthy and | Mechanical Systems - Pulleys and | Textiles |
| Developing, | - Showing cu | riosity | - design | | | <u>Varied Diet</u> | Gears | |
| Planning and | - Exploring | | appealing | - design appealing | -Gather information | | | -Carry out research |
| communicating | - Using sense | | products | products | about needs and | -Generate and | -Carry out research into users needs | into users needs and |
| ideas. | - Engaged/fo | ocused | - generate ideas | - generate a | wants to develop | clarify ideas | and existing products using surveys, | existing products using |
| Working with | <u>ALM</u> | | through | range of ideas | a design criteria, to | through discussion | interviews and questionnaires. | surveys, interviews and |
| tools, equipment, | - Making cho | ices | investigation of | through | create a product for | with peers and | -Generate, develop and model | questionnaires. |
| materials and | - Perseverin | g | food. | investigation of | a specific audience. | target audience, | innovative ideas, through discussion, | -Generate, develop and |
| components to | - Attentive | | - communicate | food. | -Generate, develop | considering | drawing, templates, mock-ups and | model innovative ideas, |
| make quality | - Confident/ | I can | ideas | - | and communicate | appearance, taste, | sketches, using computer aided design | through |
| products | attitude | | - use utensils to | communicate and | ideas through | texture, and aroma, | where appropriate. | discussion, drawing, |
| (including food). | - Self-satis | faction | peel, slice, | justify their | discussion, sketches | whilst considering | -Competently select from and use | templates, mock- |
| Evaluating | /pride | | squeeze, grate | ideas. | and diagrams. | user and purpose. | tools to accurately measure, mark out, | ups and sketches, using |
| Products. | - Achieving | | and chop safely. | - use utensils to | -Order the stages of | -Communicate a | cut, shape and join materials to | computer aided design |
| | <u>C+CT</u> | | - choose a range | peel, slice, | making. | range of ideas with | make a accurately assembled | where appropriate. |
| | - Thinking of | | of foods. | squeeze, grate | -Select appropriate | justification | product. | -Competently |
| | | olving/logical | - evaluate food | and chop safely. | materials based | through annotated | -Compare the final product to the | select from and use |
| | - Adapting / | changing | using the | - choose a range | on functional and | sketches and use of | original design specification. | tools to accurately |
| | - Predicting | | senses. | of foods | aesthetic qualities. | ICT. | -Test products with intended user and | measure, mark out, cut, |
| | - Describing | | - evaluate ideas | according to their | -Investigate and | -Select and use | critically evaluate the quality of the | shape and join |
| | - Planning | | and finished | characteristics. | evaluate current | appropriate tools | design, manufacture, functionality and | materials to make a |
| | - Evaluating | | products. | - taste and | products. | and equipment from | fitness for purpose. | frame work. |
| | - Collaborati | ng | | evaluate a range | | a wide range to | | -Use finishing and |
| | | | | of fruit and | | prepare and | | decorative techniques. |
| | | | | vegetables to | | combine | | -Investigate and |
| | | | | determine their | | ingredients. | | analyse textile |
| | | | | preferences. | | -Select from a | | products link to their |
| | | | | - evaluate ideas | | range of | | final product. |

| 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, | 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 | 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 | ingredients to make appropriate food products, considering their sourceEvaluate throughout the processCarry out sensory evaluations. 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 diet | 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 | -Compare the final product to the original design specification. 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, |
|-----------------------------|------------------------------------|---|--|--|--|--|---|
| SPRING | PEE | <u>Textiles</u> | Free Standing | Structures (Plastic | Mechanical Systems | <u>Electrical Systems</u> | Cooking (Seasonal food |
| Developing, Planning and | - Showing curiosity - Exploring | - design a functional, | Structures and Wheels and | Junk Modelling) -Work collaboratively | including levers and linkages (Pop-up | -Use research to develop a design | <u>choices).</u> - generate innovate |
| communicating | - Using senses | appealing and | Axels | through discussion to | books) | specification for a functional product | ideas through research |
| ideas. | - Engaged/focused | purposeful | | create design ideas. | -Generate realistic | that responds to changes in the | and discussion with |
| Working with | ALM | product. | - generate initial | -Select and use | design ideas, | environment. | peers and adults to |
| tools, equipment, | - Making choices | - generate, | ideas through | appropriate tools to | focusing on the | -Generate and develop innovative | develop a design brief. |
| materials and | - Persevering | model and | talking and using | measure, mark out, | needs to the user. | ideas, share and clarify these through | - explore a range of |
| components to | - Attentive/focused | communicate | own experiences. | cut, score, shape and | -Use annotated | discussion. | initial ideas, making |
| make quality | - Confident/I can | ideas through | - develop mock- | assemble. | sketches to | Communicate ideas through an at the | design decisions linked |
| products | attitude | talking, drawing, | ups. | | communicate | Communicate ideas through annotated | to user and purpose. |
| (including food). | | templates | | | ideas. | sketches, pictorial representations of | |

| Continuation | - Self-satisfaction | and and former | and and france | Turkifo allations of | On day the attention | The captured interesting and attacked | - use words, annotated |
|----------------------|---------------------------|-------------------|----------------------------|------------------------|-----------------------|---------------------------------------|--------------------------|
| Evaluating Products. | | - select from a | - select from a | -Justify choices of | -Order the stages | electrical circuits and circuit | · · |
| Products. | /pride | range of tools | range of tools and | materials according | of making. | diagrams. | sketches and ICT to |
| | - Achieving | for cutting, | skills to perform | to functionality. | -Produce | -Competently select and accurately | communicate ideas, |
| | <u>C+CT</u> | joining and | practical tasks. | -Test their own | prototypes. | assemble materials, and securely | providing reasoning. |
| | - Thinking of ideas | finishing. | - use a range | products against | -Select and use | connect electrical components to | - write step by step |
| | - Problem solving/logical | - use textiles | of new and re- | their criteria and | appropriate tools | produce a reliable, functional | recipes including a list |
| | - Adapting /changing | according to | claimed materials | intended purpose. | with accuracy. | product. | of ingredients, |
| | - Predicting | characteristics. | and components | | -Select from and | -Create and modify a computer | equipment and utensils |
| | - Describing | - evaluate a | according to their | | use finishing | control program to enable electrical | - use appropriate |
| | - Planning | range of | characteristics. | | techniques. | an electrical product to work | utensils accurately to |
| | - Evaluating | products as well | - plan by | | -Investigate and | automatically. | measure and combine |
| | - Collaborating | as their own | suggesting what | | evaluate current | -Continually evaluate and modify | ingredients. |
| | | against criteria. | to do next. | | products, use this | the working features of the product | - make and decorate |
| | | | - evaluate their | | to generate | to match the initial design | and present their food |
| | | | product in | | a suitable design | specification. | product appropriately. |
| | | | relation to | | criteria to work | -Test the system to demonstrate its | - carry out sensory |
| | | | effectiveness. | | towards. | effectiveness for intended user and | evaluations of a range |
| | | | | | | purpose. | of relevant |
| | | | | | | | products. Competently |
| | | | | | | | record using |
| | | | | | | | graphs/tables/ charts |
| | | | | | | | - evaluate the final |
| | | | | | | | product with reference |
| | | | | | | | back to the design |
| | | | | | | | specification, taking |
| | | | | | | | into account the views |
| | | | | | | | of others and |
| | | | | | | | identifying |
| | | | | | | | improvements. |
| | | | | | | | - understand how key |
| | | | | | | | chefs have influenced |
| | | | | | | | eating habits to |
| | | | | | | | promote varied diets. |
| Vocabulary | | joining and | cut, fold, join, fix | shell structure, | mechanism, lever, | reed switch, toggle switch, push-to- | ingredients, yeast, |
| v ocabulary | | finishing | structure, wall, | three-dimensional (3- | linkage, pivot, slot, | make switch, push-to-break switch, | dough, bran, flour, |
| | | techniques, | | D) shape, net, cube, | | light dependent resistor (LDR), tilt | wholemeal, unleavened, |
| | | techniques, | tower, framework, weak, | cuboid, prism, vertex, | bridge, guide | switch, light emitting diode (LED), | baking soda, spice, |
| | | 1 | | | system, input, | | - |
| | | and components, | strong, base, top, | edge, face, length, | process, output | bulb, bulb holder, battery, battery | herbs fat, sugar, |
| | | template, | underneath, side, | width, breadth, | linear, rotary, | holder, USB cable, wire, insulator, | carbohydrate, protein, |
| | <u> </u> | pattern pieces, | edge, surface, | capacity, marking out, | | conductor, crocodile clip control, | vitamins, nutrients, |

| | | 1 . | T | | T | | |
|-------------------|---------------------------|------------------------------------|-------------------------------------|-------------------------|----------------------|--|----------------------------|
| | | mark out, join, | thinner, thicker, | scoring, shaping, tabs, | oscillating, | program, system, input device, output | nutrition, healthy, |
| | | decorate, finish | corner, point, | adhesives, joining, | reciprocating | device, series circuit, parallel circuit | varied, gluten, dairy, |
| | | | straight, curved, | assemble, accuracy, | | | allergy, intolerance, |
| | | | metal, wood, | material, stiff, | | | savoury, source, |
| | | | plastic circle, | strong, reduce, reuse, | | | seasonality utensils, |
| | | | triangle, square, | recycle, corrugating, | | | combine, fold, knead, |
| | | | rectangle, cuboid, | ribbing, laminating, | | | stir, pour, mix, rubbing |
| | | | cube, cylinder | font, lettering, text, | | | in, whisk, beat, roll out, |
| | | | | graphics, decision, | | | shape, sprinkle, crumble |
| SUMMER | <u>PEE</u> | <u>Mechanisms</u> | <u>Mechanisms</u> | Food - Healthy and | <u>Textiles</u> | Cooking (Celebrating Culture). | <u>Structures</u> |
| Developing, | - Showing curiosity | including Levers | including Levers | <u>Varied Diet</u> | -Generate design | | -Carry out research |
| Planning and | - Exploring | and Sliders | and Sliders | -Generate and clarify | ideas that fit the | - generate innovate ideas through | into users needs and |
| communicating | - Using senses | | | ideas through | purpose and appeal | research and discussion with | existing products using |
| ideas. | - Engaged/focused | - generate ideas | Explore and use | discussion with | to the user. | peers and adults to develop a design | surveys, interviews and |
| Working with | <u>ALM</u> | based on simple | wheels, axles and | peers, considering | - Produce annotated | brief. | questionnaires. |
| tools, equipment, | - Making choices | design criteria. | axle holders. • | appearance, taste, | sketches | - explore a range of initial ideas, | -Develop a simple |
| materials and | - Persevering | develop, model | Distinguish | texture, and aroma, | and patterns . | making design decisions linked to user | design specification. |
| components to | - Attentive/focused | and communicate | between fixed | whilst considering | -Select and use | and purpose. | -Generate, develop and |
| make quality | - Confident/I can | their ideas. | and freely moving | user and purpose. | appropriate fabrics | - use words, annotated sketches and | model innovative ideas, |
| products | attitude | - plan by | axles. • Know and | -Communicate ideas | and materials to | ICT to communicate ideas. | through discussion, |
| (including food). | - Self-satisfaction | suggesting what | use technical | through annotated | ensure the product | - write step by step recipes including a | prototypes and |
| Evaluating | /pride | to do next. | vocabulary | sketches and use of | fits the purpose. | list of ingredients, equipment and | sketches. |
| Products. | - Achieving | - select and use | relevant to the | ICT. | -Investigate and | utensils | -Formulate a clear plan |
| | <u>C+CT</u> | tools, explaining | project. | -Select and use | evaluate current | - use appropriate utensils accurately | for production, |
| | - Thinking of ideas | their choices. | | appropriate tools and | products, use this | to measure and combine ingredients. | considering order of |
| | - Problem solving/logical | - use simple | | equipment to prepare | to generate | - make and decorate and present their | tasks and list of |
| | - Adapting /changing | finishing | | and | a suitable design | food product appropriately. | resources. |
| | - Predicting | techniques. | | combine ingredients. | criteria to work | - carry out sensory evaluations of a | -Competently |
| | - Describing | - explore | | -Select from a range | towards. | range of relevant products. Record | select from and use |
| | - Planning | a range of | | of ingredients to | -Select fabrics and | using graphs/tables/ charts | tools to accurately |
| | - Evaluating | everyday | | make appropriate | fasteners based on | - evaluate the final product with | measure, mark out, cut, |
| | - Collaborating | products | | food products. | their functionality. | reference back to the design | shape and join |
| | | - evaluate their | | -Evaluate throughout | · · | specification/ | materials to make |
| | | product in | | the process. | | | a frame work. |
| | | relation to | | -Carry out sensory | | | -Use finishing and |
| | | effectiveness. | | evaluations. | | | decorative techniques. |
| | | | | | | | -Critically evaluate own |
| | | | | | | | product. |
| Vocabulary | | slider, lever, | vehicle, wheel, | name of products, | fabric, names of | name of products, names of equipment, | frame structure, |
| · · | | pivot, slot, | axle, axle holder, | names of equipment, | fabrics, fastening, | utensils, techniques and ingredients | stiffen, strengthen, |

| bridge/guide, | chassis, body, cab | utensils, techniques | compartment, zip, | texture, taste, sweet, sour, hot, spicy, | reinforce, triangulation, |
|-----------------|---------------------|------------------------|----------------------|--|---------------------------|
| card, masking | assembling, | and ingredients | button, structure, | appearance, smell, preference, greasy, | stability, shape, join, |
| tape, paper | cutting, joining, | texture, taste, sweet, | finishing technique, | moist, cook, fresh, savoury, hygienic, | temporary, permanent |
| fastener, join, | shaping, finishing, | sour, hot, spicy, | strength, weakness, | edible, grown, reared, caught, frozen, | |
| pull, push, up, | fixed, free, | appearance, smell, | stiffening, | tinned, processed, seasonal, harvested | |
| down, straight, | moving, | preference, greasy, | templates, stitch, | healthy/varied die | |
| curve, forwards | , mechanism names | moist, cook, fresh, | seam, seam | · | |
| backwards | of tools, | savoury, hygienic, | allowance | | |
| | equipment and | edible, grown, reared, | | | |
| | materials used | caught, frozen, | | | |
| | | tinned, processed, | | | |
| | | seasonal, harvested | | | |
| | | healthy/varied diet | | | |