



Pierrepont Gamston Primary School DT Policy

Introduction

At Pierrepont Gamston, our design technology curriculum aims to be an inspiring, rigorous and practical subject. Using creativity and imagination, children design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Children learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. (Adapted from the National Curriculum)

Values

Our school curriculum is underpinned by the values that we hold dear. In our school, everyone is equally valued and treated with respect. We believe that everyone is made in the image of God, which means that everyone has an equal opportunity to achieve and will be challenged and supported to ensure that they continue to grow and learn within all areas of the curriculum.

Intent

- DT aims to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- DT aims to build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- In DT, children are given the opportunity to critique, evaluate and test their ideas and products and the work of others.
- In DT, children are given the opportunity to understand and apply the principles of nutrition and learn how to cook.
- The children will engage with a variety of resources that will provide them with different opportunities to express their creative skills.
 (Adapted from the National Curriculum)
- Children will use topic specific vocabulary (appendix 2) to support their researching, planning, making and evaluating.
- We follow the curriculum set out of by DATA (the design and technology association). Further
 details of which can be found here www.data.org.uk/for-education/primary/

Implementation

- In the foundation stage, design technology skills are introduced through the specific areas of Expressive Art and Design and Physical Development. Children are encouraged to use simple tools and techniques competently and appropriately, select appropriate resources and adapt work where necessary. Children are also encouraged to shape, assemble and join materials they are using. This learning is delivered through adult lead carpet sessions and also during continuous provision, enhanced provision and challenges, where children develop their own lines of enquiry. Adults 'Look, Listen, Note' children's comments and then plan accordingly, using the Development Matters objectives, to further develop their knowledge and understanding.
- In key stage 1, children design purposeful, functional, appealing products for themselves and other users based on design criteria. They select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Children also evaluate their ideas and products against design criteria
- In key stage 2, children are taught to generate, develop, model and communicate their ideas
 through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes,
 pattern pieces and computer-aided design. Children select from and use a wider range of
 materials and components, including construction materials, textiles and ingredients, according
 to their functional properties and aesthetic qualities. They also evaluate their ideas and
 products against their own design criteria and consider the views of others to improve their
 work.
- The yearly overview, for each pod, ensures that design technology skills are taught throughout each topic with it sometimes being the lead subject.

Children with Special Educational Needs and Disabilities

We make appropriate provision to overcome all barriers to learning and ensure pupils with SEN have full access to the National Curriculum, as stated in our SEN policy. We always provide additional resources or support for children with special needs. This may be in the form of adaptions, differentiation by outcome, intervention, adult support or a personalised curriculum.

Assessment

Children's work in DT is assessed through teacher observations of the children working during lessons. Teachers record the progress made by children against the learning objective and success criteria for a lesson. At the end of a unit of work, teachers make a judgement as to whether a child has met or is working towards the expectations. This data is recorded twice a year and then a data report is produced by the subject leader. This is also reported annually to parents on the school reports.

Subject leader role

The role of a subject leader is to:

- Provide strategic lead and direction for a specific subject
- Support and offer advice to colleagues on issues related to the subject
- Monitor pupil progress in that subject area
- Provide efficient resources management for the subject

It is the role of each subject leader to keep up to date with developments in their subject, at both national and local level. They review the way the subject is taught in school and plan for improvement. This development planning links to whole school objectives. Each subject leader reviews the curriculum plans for their subject, ensures that there is full coverage of the National Curriculum and that progression is planned into programmes of study.

Monitoring and Review

- Class teachers are responsible for the day to day planning, organisation and delivery of the curriculum subject.
- Subject leaders monitor the way their subject is taught throughout school and feedback to SLT and whole school where appropriate.
- The allocated Governor is responsible for liaising with subject leaders to closely monitor the way the school teaches each subject.

Date: February 2022

Review date: Autumn 2023

Appendix 1 Overview – Two year cycle

| Term | Year 1 and 2 Cycle A | Year 1 and 2 Cycle B | Year 3/4 Cycle A | Year 3/4 Cycle B | Year 5/6 Cycle A | Year 5/6 Cycle B |
|----------|--|--|--|---------------------------------------|--|--|
| Autumn 1 | Food: Preparing fruits and vegetables | Freestanding structures | Shell Structures: Gift Boxes | Structures Stone Age Houses | Victorian Food (comparing savoury snacks) | Food: Soup |
| Autumn 2 | | Sliders and Levers Christmas cards | Circuits and simple switches: Noise making toys. | Pop up Christmas cards | Cams: Pop up santas | Textiles: Sewing pouches |
| Spring 1 | Textiles: Templates and joining techinques | Food: Preparing fruits and vegetables | Food: Healthy and varied diet Toasties | Cooking dips | Pulleys and gears: Motorised cars | Food: Smoothies |
| Spring 2 | Freestanding structures | Textiles: Templates and joining techinques | Textiles: Aprons | Textiles: Purses | Pulleys and gears: Motorised cars | Cams: A toy with oscillating, rotating or reciprocating movement |
| Summer 1 | Mechanisms- wheels and axles | Mechanisms- wheels and axles | Mechanisms: Moving toys | Food: Break making | Using computer aided design in textiles: bag for life | Frame structures: playground equipment design |
| Summer 2 | Sliders and levers | | Food: Super Salads | Simple programming: Torch/Lamps | Using computer aided design in textiles: bag for life | Frame structures: playground equipment design |

Appendix 2

Design and Technology Vocabulary Progression

| | Designing, making and evaluating | Food | Structures | Textiles | Mechanisms/ Mechanical systems/Electrical Systems |
|------|--|--|---|--|--|
| EYFS | Investigate, test, design, make, ideas, plan. | Fruit and vegetable names, names of some equipment and utensils, stir, cut, chop, bake, cook, fry. | Cut, fold, join, fix, tower, wall, strong, top, bottom, side, straight, circle, triangle, square, rectangle, wood, metal, plastic. | Material, fabric. | Work. |
| KS1 | Investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function. | 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. | structure, 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, length, width. | Joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish. | Slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards. |
| LKS2 | Design brief, innovative, prototype, appealing annotated sketch, sensory evaluations. | name of products, techniques and ingredients texture, taste, sweet, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet. | shell structure, three-dimensional (3-D) shape, net, prism, vertex, face, 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. | Names of fabrics, fastening, compartment, zip, button, structure, strength, weakness, stiffening, templates, stitch, seam. | Vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating. |
| UKS2 | Innovative, prototype, innovation, research, functional, mock-up. | Gluten, allergy, intolerance, source. | Triangulation, stability, Computer Aided Design, Computer Aided Manufacturing. | Seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces. | Pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit diagram, exploded diagrams, mechanical system, electrical system. |