

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils 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. Pupils 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.

Aims

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- 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
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

PADSTOW SCHOOL - NATIONAL CURRICULUM PLANNING AND COVERAGE

SUBJECT: Design Technology CREATED BY: Simon Hill February 2014 REVIEW DATE: July 2014

YEAR GROUP: 1

Objectives

- Design purposeful, functional & appealing products
- Generate, model & communicate ideas
- Use range of tools & materials to complete practical tasks
- Evaluate existing products & own ideas
- Build and improve structure & mechanisms
- Understand where food comes from

PADSTOW SCHOOL - NATIONAL CURRICULUM PLANNING AND COVERAGE

SUBJECT: Design Technology CREATED BY: Simon Hill February 2014 REVIEW DATE: July 2014

YEAR GROUP: 2

Objectives

- Design purposeful, functional & appealing products
- Generate, model & communicate ideas
- Use range of tools & materials to complete practical tasks
- Evaluate existing products & own ideas
- Build and improve structures and mechanisms
- Understand where food comes from

PADSTOW SCHOOL - NATIONAL CURRICULUM PLANNING AND COVERAGE

SUBJECT: Design Technology CREATED BY: Simon Hill February 2014 REVIEW DATE: July 2014

YEAR GROUP: 3

Objectives

- Use research & criteria to develop products which are fit for purpose
- Use annotated sketches and prototypes to explain ideas
- Evaluate existing products and improve own work
- Use mechanical systems in own work
- Understand seasonality; prepare & cook mainly savoury dishes

PADSTOW SCHOOL - NATIONAL CURRICULUM PLANNING AND COVERAGE

SUBJECT: Design Technology CREATED BY: Simon Hill February 2014 REVIEW DATE: July 2014

YEAR GROUP: 4

Objectives

- Use research & criteria to develop products which are fit for purpose
- Use annotated sketches and prototypes to explain ideas
- Evaluate existing products and improve own work
- Use mechanical systems in own work
- Understand seasonality; prepare & cook mainly savoury dishes

PADSTOW SCHOOL - NATIONAL CURRICULUM PLANNING AND COVERAGE

SUBJECT: Design Technology CREATED BY: Simon Hill February 2014 REVIEW DATE: July 2014

YEAR GROUP: 5

Objectives

- Use research & criteria to develop products which are fit for purpose and aimed at specific groups
- Use annotated sketches, cross-section diagrams & computer-aided design
- Analyse & evaluate existing products and improve own work
- Use mechanical & electrical systems in own products, including programming
- Cook savoury dishes for a healthy & varied diet

PADSTOW SCHOOL - NATIONAL CURRICULUM PLANNING AND COVERAGE

SUBJECT: Design Technology CREATED BY: Simon Hill February 2014 REVIEW DATE: July 2014

YEAR GROUP: 6

Objectives

- Use research & criteria to develop products which are fit for purpose and aimed at specific groups
- Use annotated sketches, cross-section diagrams & computer-aided design
- Analyse & evaluate existing products and improve own work
- Use mechanical & electrical systems in own products, including programming
- Cook savoury dishes for a healthy & varied diet