



Amberley CE Primary School



St. James' CE Primary School,  
Coldwaltham



## Enabling every child to thrive and succeed

**At Arun Villages Federation, we care for EVERYONE. We embrace challenges and all opportunities to learn, recognising the value of education and persevering even when it feels difficult.**

**We are uncompromising in our aspirations, proud of our – and each other's - achievements and look forward to embracing the experiences the wider world offers.**

**Respect, Kindness, Honesty, Positivity and Teamwork**

# Design and Technology

## Intent

At Arun Villages Federation, we intend to build a Design and Technology curriculum which is inspiring, rigorous, and practical. We want our children to use creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. The subject also aims to promote a critical understanding of the impact of their own and others' design decisions and products on the environment and communities, both locally and in the wider world. We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum. It is our aim for our Design and Technology offer to prepare our children, to give them the opportunities, resourcefulness, responsibilities, and experiences they need to be successful in later life.

## Implementation

Design and Technology is a crucial part of school life and learning and it is for this reason that, as a federation, we are dedicated to the teaching and delivery of a high-quality Design and Technology curriculum. At Arun Villages Federation, our children will be taught termly projects from the research-based '*Projects on a Page*' planning guidance written by The Design & Technology Association as a sound basis for our planning.

Each project contains:

- Investigative and Evaluative Activities (IEAs) where children learn from a range of existing products and find out about D&T in the wider world;
- Focused Tasks (FTs) where they are taught specific technical knowledge, designing skills and making skills;
- Design, Make and Evaluate Assignment (DMEA) where children create functional products with users and purposes in mind.

This is implemented through:

- A well thought out, whole school, two-year cycle of the DT curriculum which allows for progression across the key stages in all areas of DT (textiles, mechanisms, structures, food and electrical systems);
- Well planned and resourced projects providing children with a hands-on and enriching experience;
- A range of skills being taught ensuring that children are aware of health and safety issues related to the tasks undertaken;
- Each project in each class, addressing the principles of designing, making, and evaluating and incorporating relevant technical knowledge and understanding in relevant contexts;
- Using the three S's definition, which is consistent with the National Curriculum purpose of study statement, children should design and make: **S**omething (the product); **S**omebody (the user); **S**ome purpose (the task or tasks that the product should perform);

- Pupils being introduced to specific designers, chefs, nutritionists, etc. helping to engender an appreciation of human creativity and achievement and increase the cultural capital from which they can draw in the future.

At AVF, we promote Design and Technology in the wider school through a Computing Club afterschool and the use of our Forest School and Nature Space. In the Nature Space, each class has a plot and is in charge of their own patch, to grow and harvest food.

### **Early Years Foundation Stage**

During the EYFS pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities. They have the opportunities to learn to:

- Use different media and materials to express their own ideas
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose
- Make plans and construct with a purpose in mind using a variety of resources
- Develop skills to use simple tools and techniques appropriately, effectively and safely
- Select appropriate resources for a product and adapt their work where necessary
- Cook and prepare food adhering to good health and hygiene routines

## **Impact**

Children will have clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum. Through carefully planned and implemented learning activities the children develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They gain a firm foundation of knowledge and skills to see them equipped to take on further learning in their next step of their education. Teachers will assess the children's key learning each term using knowledge organisers and the federation's D&T progression documentation. This informs the Design and Technology coordinator of any further areas for curriculum development, pupil support and/or training requirements for staff. EYFS pupils' progress and attainment tells us whether each individual child is below expected, at expected or above expected attainment for their age.

## Design and Technology Overview – Whole School Cycle A Amberley CE Primary School

	Autumn	Spring	Summer
<b>EYFS (Willow)</b>	<b>Mechanisms</b> Sliders and Levers: A moving picture card	<b>Structures</b> Freestanding structures: Model playground equipment	<b>Food</b> Preparing fruit and vegetables: Handa's Surprise - Fruit smoothie
<b>Key Stage 1 (Maple)</b>	<b>Electrical Systems</b> Simple circuits and switches: reading/Night Light	<b>Textiles</b> 2D-Shape to 3-D product: Purses and Wallets	<b>Food</b> Healthy and varied diet
<b>Key Stage 2 (Oak)</b>	<b>Food</b> Celebrating culture and seasonality: Celebratory bread – religious focus	<b>Structures</b> Frame structures: model market stall	<b>Mechanical systems</b> Pulleys or Gears: controllable toy vehicle marketed towards the younger children in school

## St. James CE Primary School

	Autumn	Spring	Summer
<b>EYFS (Penguins)</b>	<b>Textiles</b> Designing and making a hat/piece of clothing for marvellous me!	<b>Structures</b> Chairs for three bears!	<b>Food</b> Fantastic fruit and veg, where do we get our food from?
<b>Key Stage 1 (Rhinos)</b>	<b>Mechanisms</b> Sliders and Levers: A moving picture card	<b>Structures</b> Freestanding structures: Model playground equipment	<b>Food</b> Preparing fruit and vegetables: Handa's Surprise – Fruit smoothie
<b>Lower Key Stage 2 (Elephants)</b>	<b>Electrical Systems</b> Simple circuits and switches: Reading/Night light	<b>Textiles</b> 2D-Shape to 3-D product: Purses and Wallets	<b>Food</b> Healthy and varied diet
<b>Upper Key Stage 2 (Jaguars)</b>	<b>Food</b> Celebrating culture and seasonality: Celebratory bread – religious focus	<b>Structures</b> Frame structures: model market stall	<b>Mechanical systems</b> Pulleys or Gears: controllable toy vehicle marketed towards the younger children in school

## Design and Technology Overview – Whole School Cycle B Amberley CE Primary School

	Autumn	Spring	Summer
<b>EYFS (Willow)</b>	<b>Mechanisms</b> Wheels and Axles: pull/push toy emergency vehicle	<b>Food</b> Preparing fruit and vegetables: Vegetable salads/kebabs	<b>Textiles</b> Templates and joining techniques: Glove puppets
<b>Key Stage 1 (Maple)</b>	<b>Mechanical Systems</b> Levers and Linkages: information book Or Pneumatics: Jack-in-the-box, moving toy	<b>Electrical</b> Simple programming and control: model traffic lights/illuminated signs for school roads	<b>Shell Structures</b> Computer Aided: Gift or party boxes
<b>Key Stage 2 (Oak)</b>	<b>Electrical Systems</b> More Complex Switches: alarm for precious artefact or an electronic boardgame	<b>Textiles</b> Combing different fabric shapes: shopping bags or slippers	<b>Mechanical Systems</b> Cams: a shop display with moving parts e.g. lifting or rotating images of items for sale

## St. James CE Primary School

	Autumn	Spring	Summer
<b>EYFS (Penguins)</b>	<b>Structure</b> Let's celebrate with a Christmas decoration!	<b>Food</b> Feast for a beast – looking and making food products	<b>Mechanisms</b> Wheels - let's look at vehicles. Can we make a moving machine?
<b>Key Stage 1 (Rhinos)</b>	<b>Mechanisms</b> Wheels and Axles: pull/push toy emergency vehicle	<b>Food</b> Preparing fruit and vegetables: Vegetable salads/kebabs	<b>Textiles</b> Templates and joining techniques: Glove puppets
<b>Lower Key Stage 2 (Elephants)</b>	<b>Mechanical Systems</b> Levers and Linkages: information book Or Pneumatics: Jack-in-the-box, moving toy	<b>Electrical</b> Simple programming and control: model traffic lights/illuminated signs for school roads	<b>Shell Structures</b> Computer Aided: Gift or party boxes

<b>Upper Key Stage 2 (Jaguars)</b>	<b>Electrical Systems</b> More Complex Switches: alarm for precious artefact or an electronic boardgame	<b>Textiles</b> Combing different fabric shapes: slippers or sandals	<b>Mechanical Systems</b> Cams: a shop display with moving parts e.g. lifting or rotating images of items for sale
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