



Design and Technology

Portfolio



Design and Technology at Hove Junior School



Through the teaching of Design and Technology at Hove Juniors, we provide children with opportunities to show critical and imaginative thinking; skills which can be transferred across the curriculum. By planning a range of real life projects with clear design briefs and precise specifications, we offer children the chance to work creatively, while thinking about the function, appeal and purpose of the product they have been asked to make.

Through the evaluation of past and present designs, they develop a critical understanding of the impact that these products have on daily life and the wider world, allowing them to consider such aspects in their own design process.

We want our children to have a clear understanding of the process that is involved in designing and making, with the needs of a consumer in mind. In turn, children are then confident in selecting appropriate tools for the building and creating of their own product, whether this be alone or within a larger group.

Curriculum

Our curriculum aims to teach children the process of designing and making for a purpose. Children will start each project with a brief and will learn to analyse the specifications and create designs in accordance with these. Most importantly, they will learn the process of reviewing their designs in order to evaluate their success.



DT – Spring 2019/2020 Year 5

Drawstring bag for Worry Dolls

Overview

Skills to be covered:

- I can design and use my own template (taking inspiration and looking at other designs) independently (Y5&6)
- I can construct with a purpose in mind, using a variety of resources (Y3&4)
- I can use simple tools and techniques competently and appropriately (Y3&4)
- I can select tools and techniques needed to shape, assemble and join materials I am using (Y3&4)
- I can join textiles using appropriate stitches, glue, over sewing, tape (Y3&4)

Design Brief:

We have been asked by a local business who make Mayan worry dolls to design and create a drawstring bag, which customers can use to store their dolls, so that they don't get lost. The design should appeal to children but should also be functional. The purpose of the bag is to keep a set of worry dolls safe. The worry dolls are around 3-4cm tall, so the bag should be big enough to fit these inside securely.

Design Specifications:

- The Drawstring bag should be suitable for children (both boys and girls)
- The design on the bag should be eye catching
- The design on the bag should be related to the Mayan legends
- The bag should be flexible, so that several worry dolls can fit in securely
- The bag should be able to close securely, so that the worry dolls cannot fall out

An example Design and Technology project starting point.

Curriculum Overview

Hove Junior D&T Curriculum Map Overview 2019 – 2020



Year 3	Topic Term	Cooking	Textiles	Electronics	Construction	Mechanics	Computing
	Autumn Portal into the Past (Stone Age to Iron Age)	Making Stone Soup – stunning start <ul style="list-style-type: none"> I can develop a food vocabulary using taste, smell texture and feel I can use the basic principles of a healthy and varied diet to prepare dishes I can understand where food comes from I can cut, peel or grate ingredients safely and hygienically I can measure or weigh using measuring cups or electronic scales I can assemble or cook ingredients I can understand where food comes from around the world (link to science) I can prepare ingredients hygienically using appropriate utensils I can follow a recipe I can measure ingredients (to the nearest gram/ml) I can understand the need for a variety of foods in a diet I can group familiar food products. I can develop a food vocabulary using taste, smell texture and feel 					
	Spring Trash to Treasure				Make a Treasure Box This will also allow links with maths and shape as well as learning to use nets (not on the Y3 curriculum but still a valuable pre-cursor to future learning) <ul style="list-style-type: none"> I can use materials (card or plywood) to practice drilling, screwing, gluing and nailing materials to make and strengthen products 	<ul style="list-style-type: none"> I can use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears) Mechanism (hinge) for treasure box lid. 	Design Treasure Box using CAD? <ul style="list-style-type: none"> I can control and monitor models using software designed for this purpose
	Summer Japan		Enterprise Project Summer Fair <ul style="list-style-type: none"> I can manipulate materials to achieve a planned effect. I can construct with a purpose in mind, using a variety of resources. I can use simple tools and techniques competently and appropriately. I can select appropriate resources and adapts work where necessary. I can select tools and techniques needed to shape, assemble and join materials they are using. I can shape textiles using templates I can join textiles using appropriate stitches, glue, over sewing, tape I can colour and decorate textiles/fabrics using a number of techniques (such as dyeing, adding sequins or printing), beads, braids, ribbons I can design and use my own template (taking inspiration and looking at other designs) independently I can understand the need for a seam allowance 				

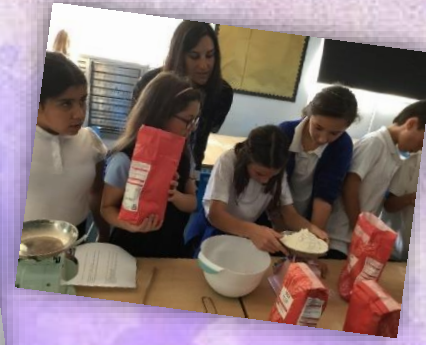
Our Curriculum Overview for Design Technology ensures all children are taught the skills and knowledge outlined in the National Curriculum for DT through creative and memorable projects. These projects are designed to link to topics and bring key elements of the term's learning journey to life in a practical, hands on way.

The process of a Design and Technology project



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|------------|---|--|---|
| Lesson 1 | { | 1. Receive the brief
2. Analyse the specifications
3. Look at and evaluate existing products (pros and cons) | } |
| Lesson 2 | { | 4. Begin to design against the brief | } |
| Lesson 3 | { | 5. Explore a range of techniques for making (e.g. sewing, cutting etc.) | } |
| Lesson 4/5 | { | 6. Create the product in stages | } |
| Lesson 6 | { | 7. Evaluate the product – Does it meet the brief? | } |

Design and Technology projects at Hove Juniors

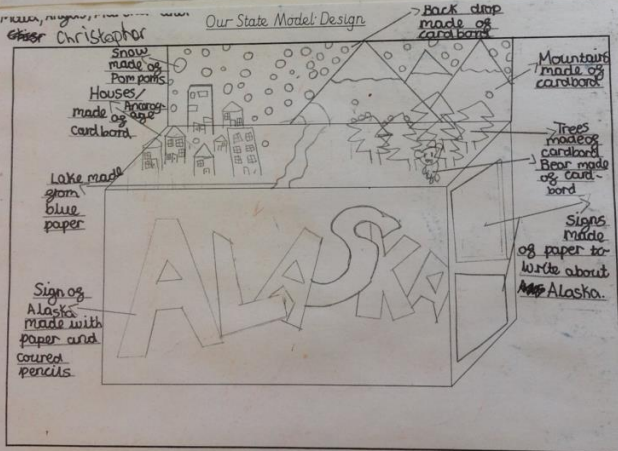


November 2019

As part of our learning journey to North America, we worked in a group - each taking on different roles - to design a model to represent the physical and human geographical features of a state of our choice, in the United States of America:

Together, we selected from a wider range of materials and components, including construction materials looking at functional and aesthetic qualities. Collaboratively, we narrowed our ideas and made decisions.

We were so proud of our finished piece of work!



Alaska



California

