

Look at our Fabulous Work

Design and Technology at St. Mary's

Reception

Reception made shakers to take out their Bear Hunt! They tested out the different sounds effects they could make with their shakers!



"I'm sticking on paper and a bottle. I have beads inside ." – Ruby

"I used glue." – Max

Design

- To select appropriate resources.

Making

- Construct with a purpose, using a variety of resources
- Use simple tools and techniques
- Select tools & techniques to shape, assemble and join

Evaluate

- Practice some appropriate safety measures independently
- Talk about how things work
- Look at similarities and differences between existing objects / materials / tools
- Describe textures

"I am decorating and making" – William



"I am making a sandwich and then sticking it on" (layering the paper before sticking it on) – Maya



"I can't use a pen because it is shiny (bottle)." – Jessica



Year 1

Textiles

Year 1 recreated Victorian Peg Dolls and Sock Dolls. The children started with looking at modern toys in the 21st Century and then compared them to Victorian toys and what class of children would have had Peg and Sock Dolls. The children then decided what they would like to make after looking at Victorian Peg and Sock Dolls.



Design

- have own ideas
- explain what I want to do
- explain what my product is for, and how it will work
- use pictures and words to plan
- design a product for myself following design criteria
- research similar existing products

Making

- explain what I'm making and why
- consider what I need to do next
- select tools/equipment to cut, shape, join, finish and explain choices
- measure, mark out, cut and shape, with support choose suitable materials and explain choices
- try to use finishing techniques to make product look good
- work in a safe and hygienic manner

Evaluate

- talk about my work, linking it to what I was asked to do
- talk about existing products considering: use, materials, how they work, audience, where they might be used
- talk about things that other people have made
- begin to talk about what could make product better

Textiles

- measure textiles
- join textiles together to make a product, and explain how I did it
- carefully cut textiles to produce accurate pieces
- explain choices of textile

Year 2

Cooking

Year 2 have been making bread after looking at the Great Fire of London in 1666. They started with product research and analysis and then moved on to making and evaluating.



Design

- plan what to do next
- explain what I want to do and describe how I may do it
- explain purpose of product, how it will work and how it will be suitable for the user
- describe design using pictures, words, models, diagrams
- design products for myself and others following design criteria
- choose best tools and materials, and explain choices
- use knowledge of existing products to produce ideas

Making

- explain what I am making and why it fits the purpose
- make suggestions as to what I need to do next.
- work safely and hygienically

Evaluate

- describe what went well, thinking about design criteria
- evaluate how good existing products are
- talk about what I would do differently if I were to do it again and why

Cooking

- explain hygiene and keep a hygienic kitchen
- describe property of ingredients
- say where food comes from (animal, underground etc.)
- mixing, kneading and baking with increasing confidence

Year 3

Year 3 designed canopic jars in the style of famous designers: Clarice Cliff, Picasso and Joan Miro. They used paper mache to create their jars and painted them. Finally, they evaluated their canopic jars to see whether their jar was fit for a Pharaoh!



Design

- describe purpose of product
- follow a given design criteria
- have at least one idea about how to create a product
- create a plan which shows order, equipment and tools
- describe design using an accurately labelled sketch and words
- make design decisions

Making

- select suitable tools/equipment, explain choices; begin to use them accurately
- select appropriate materials, fit for purpose.
- work through plan in order
- consider how good product will be
- begin to measure, mark out, cut and shape materials/components with some accuracy
- begin to assemble, join and combine materials and components with some accuracy
- begin to apply a range of finishing techniques with some accuracy

Evaluate

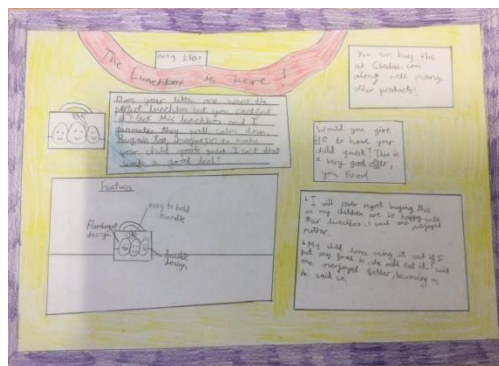
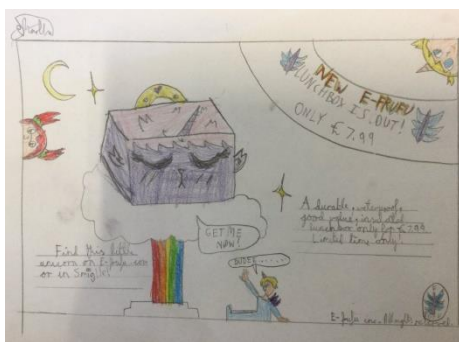
- look at design criteria while designing and making
- use design criteria to evaluate finished product
- say what I would change to make design better
- begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose
- begin to understand by whom, when and where products were designed
- learn about some inventors/designers/engineers/chefs/manufacturers of ground-breaking products

Structure

- use appropriate materials
- work accurately to make cuts and holes
- join materials
- begin to make strong structures.

Year 4

Year 4 made adverts for their lunchboxes. The children tested their insulated lunchboxes to see which thermal insulator was the most effective. They then turned their data into graphs in Maths!



Design

- use research for design ideas
- show design meets a range of requirements and is fit for purpose
- have at least one idea about how to create product and suggest improvements for design.
- produce a plan and explain it to others
- say how realistic plan is.
- include an annotated sketch
- make and explain design decisions considering availability of resources
- explain how product will work
- make a prototype

Making

- select suitable tools and equipment, explain choices in relation to required techniques and use accurately
- select appropriate materials, fit for purpose; explain choices
- work through plan in order.
- realise if product is going to be good quality
- measure, mark out, cut and shape materials/components with some accuracy
- assemble, join and combine materials and components with some accuracy
- apply a range of finishing techniques with some accuracy

Evaluate

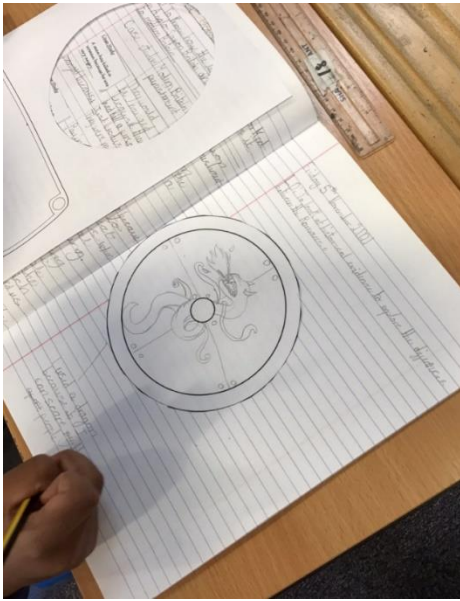
- refer to design criteria while designing and making
- use criteria to evaluate product
- begin to explain how I could improve original design
- evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose

Textiles

- think about user's wants/needs and aesthetics when choosing textiles
- make product attractive and strong
- make a prototype
- think about how product might be sold
- think carefully about what would improve product

Year 5

Year 5 started by studying the similarities and differences between Romans and Anglo-Saxons. They then designed and created their own shields!



"We made Roman shield. We tested the cardboard first of all to see if it was strong enough. Then I drew out the shield and cut it out. We looked at images to see what was similar and what was different about the Anglo-Saxon and Roman shields. We then used their designs to make our own. We used cello tape and glut to stick the cardboard together. We evaluated after we had made them. I was not happy with my design and next time I know what I could do better."

"Yes I enjoy DT alot because of the making part"





Design

- take a user's view into account when designing
- begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose
- have a range of ideas
- produce a logical, realistic plan and explain it to others
- use cross-sectional planning and annotated sketches
- make design decisions considering time and resources.
- clearly explain how parts of product will work.
- model and refine design ideas by making prototypes and using pattern pieces.

Making

- use selected tools/equipment with good level of precision
- produce suitable lists of tools, equipment/materials needed
- select appropriate materials, fit for purpose; explain choices, considering functionality
- create and follow detailed step by-step plan
- explain how product will appeal to an audience
- mainly accurately measure, mark out, cut and shape materials/components
- mainly accurately assemble, join and combine materials/components
- mainly accurately apply a range of finishing techniques
- begin to be resourceful with practical problems

Evaluate

- evaluate quality of design while designing and making
- evaluate ideas and finished product against specification, considering purpose and appearance
- test and evaluate final product
- evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose

Structure

- select materials carefully, considering intended use of product and appearance
- explain how product meets design criteria
- measure accurately enough to ensure precision
- ensure product is strong and fit for purpose
- begin to reinforce and strengthen a 3D frame

Year 6

Year 6 created volcanos which they then tested for science.



Design

- follow and refine a logical plan.

Making

- use selected tools and equipment precisely
- produce suitable lists of tools, equipment, materials needed, considering constraints
- select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics
- create, follow, and adapt detailed step-by-step plans
- accurately measure, mark out, cut and shape materials/components
- accurately assemble, join and combine materials/components
- accurately apply a range of finishing techniques
- be resourceful with practical problems

Evaluate

- evaluate quality of design while designing and making; is it fit for purpose?
- keep checking design is best it can be.
- evaluate ideas and finished product against specification, stating if it's fit for purpose
- test and evaluate final product; explain what would improve it and the effect different resources may have had

Structure

- select materials carefully, considering intended use of the product, the aesthetics and functionality.
- explain how product meets design criteria
- reinforce and strengthen a 3D frame