

PEMBRIDGE CE PRIMARY SCHOOL LEARNING JOURNEY ITINERARY

Pembridge is a school where we encourage everyone to be inspired through faith in God and to live by Christian values so that our teaching and learning is of the highest quality, our whole community flourishes and we reflect all that is worthy of praise.

SUBJECT: Design and Technology

YEAR GROUPS: UKS2

PREVIOUS KNOWLEDGE We would expect most children to already be able to:

- Apply objectives from LKS2

End of Unit Objectives

Developing, planning and communicating ideas.

- Come up with a range of ideas after they have collected information
- take a user's view into account when designing
- produce a detailed step-by-step plan
- suggest some alternative plans and say what the good points and drawbacks are about each
- use a range of information to inform their design
- use market research to inform plans
- work within constraints
- follow and refine their plan if necessary
- justify their plan to someone else
- consider culture and society in their designs

Working with tools, equipment, materials and components to make quality products.

- Explain why their finished product is going to be of good quality.
- explain how their product will appeal to the audience
- use a range of tools and equipment expertly
- use tools and materials precisely
- change the way they are working if needed

Evaluating processes and products.

- Keep checking that their design is the best it can be
- Check whether anything could be improved.
- Evaluate appearance and function against the original criteria
- Able to test and evaluate their final product
- Identify what would improve it
- Identify different resources that have improved their product
- Identify whether more or different information to make it even better

Knowledge and Skills

Cooking & Nutrition

- describe what they do to be both hygienic and safe
- Present their product well
- explain how their product should be stored with reasons
- set out to grow their own products with a view to making a salad, taking account of time required to grow different foods

Textiles

- think what the user would want when choosing textiles
- make their product attractive and strong
- make up a prototype first
- use a range of joining techniques
- think about how their product could be sold
- give considered thought about what would improve their product even more

Electrical and Mechanical

- incorporate a switch into their product
- refine their product after testing it
- incorporate hydraulics and pneumatics
- use different kinds of circuit in their product
- think of ways in which adding a circuit would improve their product

Use of Materials

- Ensure measurements are accurate enough to ensure that everything is precise
- ensured that their product is strong and fit for purpose
- justify why they selected specific materials
- work within a budget
- detail how work is precise and accurate

Mouldable Materials

- Ensure motivation to refine and improve their product
- persevere through different stages of the making process
- consider the use of the product when selecting materials
- Ensure product meets all design criteria

ASSESSMENT OPPORTUNITIES Children will be able to demonstrate their learning through:

Year	COOKING	TEXTILES	CONSTRUCTION
A	How can I design and make the ultimate burger?	How can I design and make a decorative wall hanging?	How can we use our knowledge of electrical circuits to design and make a moving vehicle?
B	How can I produce a nutritious meal using the ingredients available in war time Britain?	How can I sew a cushion cover and add a design which may have either decorative or practical aspects?	How can I use cams to make a model to illustrate a Greek myth?

ENRICHMENT OPPORTUNITIES

We will endeavour to include:

- Preparing and making different foods
- Making different products using a range of materials.
- Selling products at school fetes
- Visits from local craftspeople and makers.

SUBJECT-SPECIFIC VOCABULARY

We will expect children to use these words and phrases:

cook, prepare, hygiene, safety, healthy, peel, cut, grate, weigh, measure, design, ingredients, flavour, lever, wheel, cut, sew, stitch, decorate, material, glue, attach, embroider, applique, strengthen, circuit, electrical, mechanical, seasonality, hygiene, appealing, product, prototype, cams, gears, textile, pattern, template

CROSS-CURRICULAR LINKS

This itinerary fits with our other learning through:

- Science – electrical circuits.
- English – non-fiction writing such as: instructions, explanations and recounts.
- Maths – measurement.
- Topic – choices to relate to current themes in history/geography/etc.
- Art – use of clay, decorative techniques with threads/ beads.

LEARNING BEHAVIOURS Children will be expected to:

Tries new things	Explore different healthy foods and materials and accommodate particular dietary requirements,
Works hard	Design products based on research – and be prepared to change initial ideas.
Concentrates	Focus on work to complete tasks.
Self-motivates	Use research and own ideas to create products, making suggestions about appropriate amendments.
Imagines	Visualises final product based on research, sketches, prototypes.
Improves	Make changes to original plans in order to produce a popular and/or practical product.
Understands others	Listen to others in order to produce a product which reflect the consumer.
Doesn't give up	Changes designs when given feedback.