



Year 5 and 6

Raiders, Invaders & Settlers—Design and Technology

Knowledge Organiser Spring 1



Knowledge

Skills

Vocabulary

Knowledge Progression

Look at an existing product. What ideas can we generate from this? Research the product online.

Begin to generate a range of design ideas for final product through brainstorming.

Generate a range of design ideas (also using ICT).

Evaluate designs and share ideas with class.

Begin to make mock-up of chosen design, making changes as you build.

Evaluate mock-up of design and begin final piece.

Continue with making final piece check again criteria.

Verbally evaluate final piece and share ideas with class.

Make changes to improve final piece—can it be stronger? Use more mechanisms?

Check product against design criteria and complete final evaluation.

Design Criteria and Evaluation

Design and then make an Anglo Saxon Brooch. The criteria for this design are to replicate an original historical design.

Does the product function as it needs to? Does the product look nice? What improvements could be made to the product?

Curriculum Coverage

Design: use research and develop design criteria to inform the design of products. Generate, develop, model and communicate their ideas through discussion and annotated sketches.

Make: select from and use a wide range of tools and equipment to perform practical tasks. Select materials and components according to their function and aesthetic qualities.

Evaluate: investigate and analyse a range of existing products, evaluate idea and product against criteria and consider the views of others.

Technical Knowledge: apply understanding of how to make product stronger/ reinforced.

Skills Progression

Year 5

Generate ideas through brainstorming, identify purpose for product being designed. Draw up a specification for the design, plan how materials, processes and tools will be used.

Use a range of sources when developing a design, including ICT.

Select appropriate tools and resources, accurately using them safely and accurately.

Evaluate against original design both personally and from others.

Year 6

Communicate design ideas through detailed labelled drawings. Plan the order of the work, choosing appropriate materials, tools and techniques.

Construct products using permanent joining techniques and make modifications as the product develops.

Evaluate the product, identify strengths and weaknesses. Record evaluations and suggest ways it could be improved.

Design and Technology vocabulary

Function, design, purpose, material, tool, equipment, template, develop, mock-up, finish, evaluate, build, structure, aesthetic, sketches, diagram, Investigate

Design and Technology enquiry

What is design? Why it is important? What does criteria mean? How does a design become a product? Why is it important to evaluate a design?

