



What should I already know?

- Structures are made to support or contain something.
- Different materials have different properties and purposes.
- Wood, card, plastic and metal can be used to make structures.
- Simple joins and fixings can connect materials together.
- A design should meet a purpose and suit a user.
- Designs can be improved through testing and evaluation.
- Measurements must be accurate when making products.
- Tools must be used safely and correctly.
- Shapes such as triangles can strengthen a structure.
- Nets and templates can help plan 3D products.
- Designers often sketch and label ideas before making.

What will I know by the end of this term?

- How to design a birdhouse for a specific bird or environment.
- Which materials are most suitable for outdoor structures.
- How to measure, mark and cut wood accurately.
- How to join wood securely using glue, nails or screws.
- How to strengthen and stabilise a structure.
- How to use tools safely and effectively.
- How to evaluate and improve a finished product.
- How design choices affect appearance and function.

Cross Curricular links

Science: Habitats, birds, materials

Maths: Measuring, angles, dimensions

Computing/Art & Design: Pic Collage for advertising their finished product

English: Evaluating and explaining designs



Vocabulary

Structure	Something built from parts joined together
Stable	Able to stay balanced and not fall over
Strong	Able to withstand force or weight
Reinforce	To strengthen a structure
Framework	The supporting structure of a product
Measure	To find the size or length accurately
Mark out	To draw guidelines before cutting
Template	A shape used as a guide
Prototype	A first model used for testing ideas
Evaluate	To judge how successful something is
Design Criteria	The rules or goals a product should meet
Function	The purpose of a product
User	The person or thing the product is designed for
Waterproof	Able to resist water
Ventilation	Allowing air to flow through
Drainage	Allowing water to escape
Entrance Hole	The opening birds use to enter
Join	To connect materials together
Fixing	Something used to hold materials in place
Adhesive	A substance used for sticking materials
Saw	A tool used for cutting wood
Sandpaper	Paper used to smooth surfaces
Clamp	A tool used to hold materials tightly
Accurate	Correct and precise