UKS2 Structures- Birdhouses

Key Vocabulary

Strong	A structure that can support itself and hold its contents.
Stable	A structure that sits level to the ground.
Durable	A structure that is resistant to different forms of weather.
Watertight	A structure that water will hold water.
Accurate	Measurements that are the same as those in a design.

Design

Exploded Diagram	An exploded view drawing is a diagram, picture, or technical drawing of an object, that shows the relationship or order of assembly of various parts. It is important when drawing an exploded view that all the parts line up with each other when disassembled. The vertical guidelines clearly show how the various parts are in line with each other. If an exploded drawing is constructed properly anyone looking at the drawing should be able to see how the various parts go together to form the finished design/object.

The Project

Introduction	This project will help you consolidate all of your learning on building structures including further practice with hand drills.
Purpose for Project	To design and make a bird box that will be suitable for birds to nest in around the Gamlingay area as well as forest school

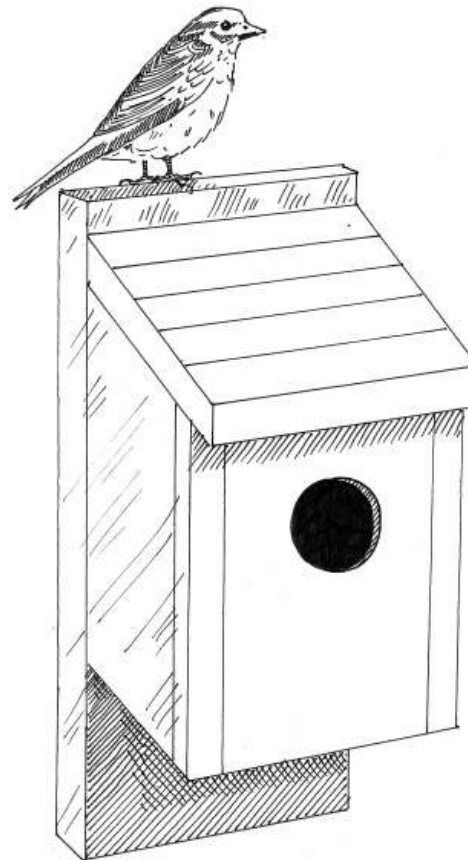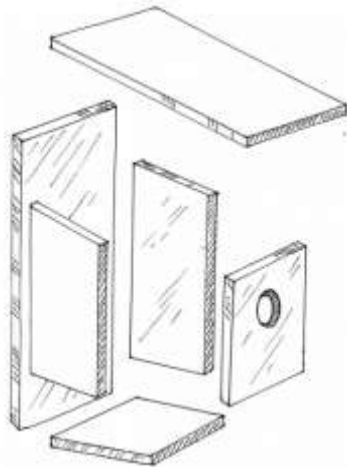
Research

Bird Nests	Birds use a wide range of nests designs to ensure they suit their young, for example the Starling, which lives in England, prefers a nest cavity or small hole. Many starlings decorate their house entrances with twigs.

Research Questions	What creates an **effective** birdhouse? How have they been made in the wild? What do I need to ensure I **replicate** with my design?

Make	
Operating a hand drill	You will be using a hand drill to drill your hole for the entrance of the bird box. . Sw, To safely use a hand drill, loosen the chuck and insert the appropriate drill bit, then tighten the chuck. Place the bit's tip where you want to cut a hole, making sure the bit is at the same angle as the desired hole. Turn the cranking handle to rotate the bit and drill the hole. With smaller drill bits, be careful not to apply excess pressure on the handle or the bit may bend or break.

Evaluate	
You will learn to	- Think critically about your project against the design criteria. - Ask a peer to give their reflection of the successes of your project, outlining one area to work on. - Reflect on the problems you encountered and how you over came them. - Test the product with the intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.