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Year 4 DT Making Mini Greenhouses- Knowledge Organiser

Design a purposeful product based on a design criteria

Generate develop their ideas through drawing and templates

★ Star Vocabulary

Greenhouse

Frame

Stability

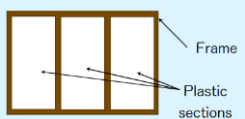
Design

Transparent

Sunlight

Warmth

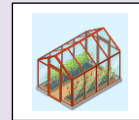
Ventilate



Overview

Greenhouses are building used in gardens, mainly made of glass or plastic windows to help plants grow.

Mini greenhouses



Mini greenhouses are used to grow seeds or to keep small plants.

Mini greenhouses work in the same way as big greenhouses – allowing sunlight to enter and be trapped within the structure, heating up the air and the plants, to help them grow.



The Eden Project in Cornwall is a massive greenhouse containing millions of plants!

Key Skills - Designing

Purpose -What it is for? User - Who will use it?

Suitable materials.

Different materials have different properties which make them good for different purposes. Some are hard whilst others can be lightweight and flexible.



Materials suitable for the frame:

Lolly sticks, dowelling, straws, pipe cleaners, plastic bottles, picture frames, chicken wire.

Materials suitable for the covering:

Plastic wallets, cling film, CD cases

Making

- How can I make the structure stable?
- Which materials are most suitable?
- How can I create an airtight seal?
- How can the plants be access for watering?
- How can the greenhouse be ventilated?

Making and Evaluating



Evaluating

- How stable was the structure?
- Could you improve it?
- Does it perform its purpose?
- Are materials joined securely?

Research different joining techniques

Choose suitable materials

Design your greenhouse

Make your greenhouse

Evaluate your greenhouse

Timeline