

### **Key Facts**

## Map/Timeline/Diagram

Frame structures come in many forms, both portable and permanent e.g. tents, bus shelters, bird hides.

Constructed with external and internal frameworks.

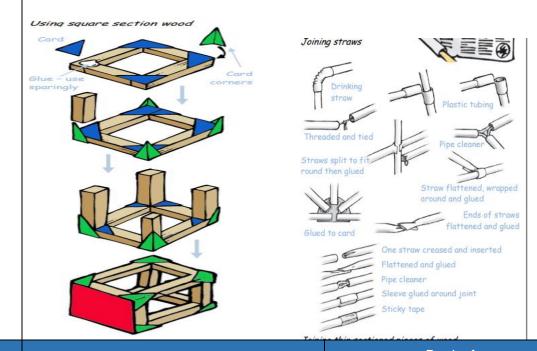
Record the process of investigating frame structures using photographs and annotated drawings.

Frame structures for large scale shelters can be made from broom sticks, garden canes or rolls of newspaper.

Ensure children are familiar with all the materials they are likely to use and that these are made easily available and accessible.

Ensure children use simple tests to evaluate the functionality and strength of their products.

Encourage the children to evaluate each other's work positively



## Key Learning:

Discussing ideas, drawing annotated sketches Generating a simple design specification

Discussing, modelling and evaluating different options

Investigating and testing possible materials Discussing, exploring and evaluating prototypes

Discussing, exploring and evaluating different fabric and rigid covering options

Negotiating, developing and agreeing a step-by-step-plan

Discussing, testing and modifying the design

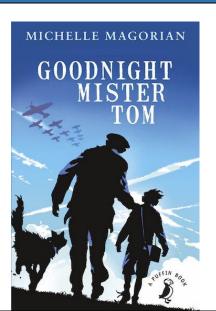
Evaluating the product with the intended user and against the original design specification

# Prior Learning:

Experience of using measuring, marking out, cutting, joining, shaping and finishing techniques with construction materials.

Basic understanding of what structures are and how they can be made stronger, stiffer and more stable.

#### Books for support/ Enrichment Opportunities:



Subject Specific Vocabulary			
Key word	Definition		
Stiffen	make or become <u>stiff</u> or rigid.		
Stability	the state of being stable.		
Triangulation	Formation of or division into triangles.		
Prototype	a first or preliminary version of a device or vehicle from which other forms are developed.		
Specification	an act of identifying something precisely or of stating a precise requirement.		
Reinforce	strengthen or support (an object or substance), especially with additional material.		
Innovation	the action or process of innovating.		
Functional	of or having a special activity, purpose, or task.		