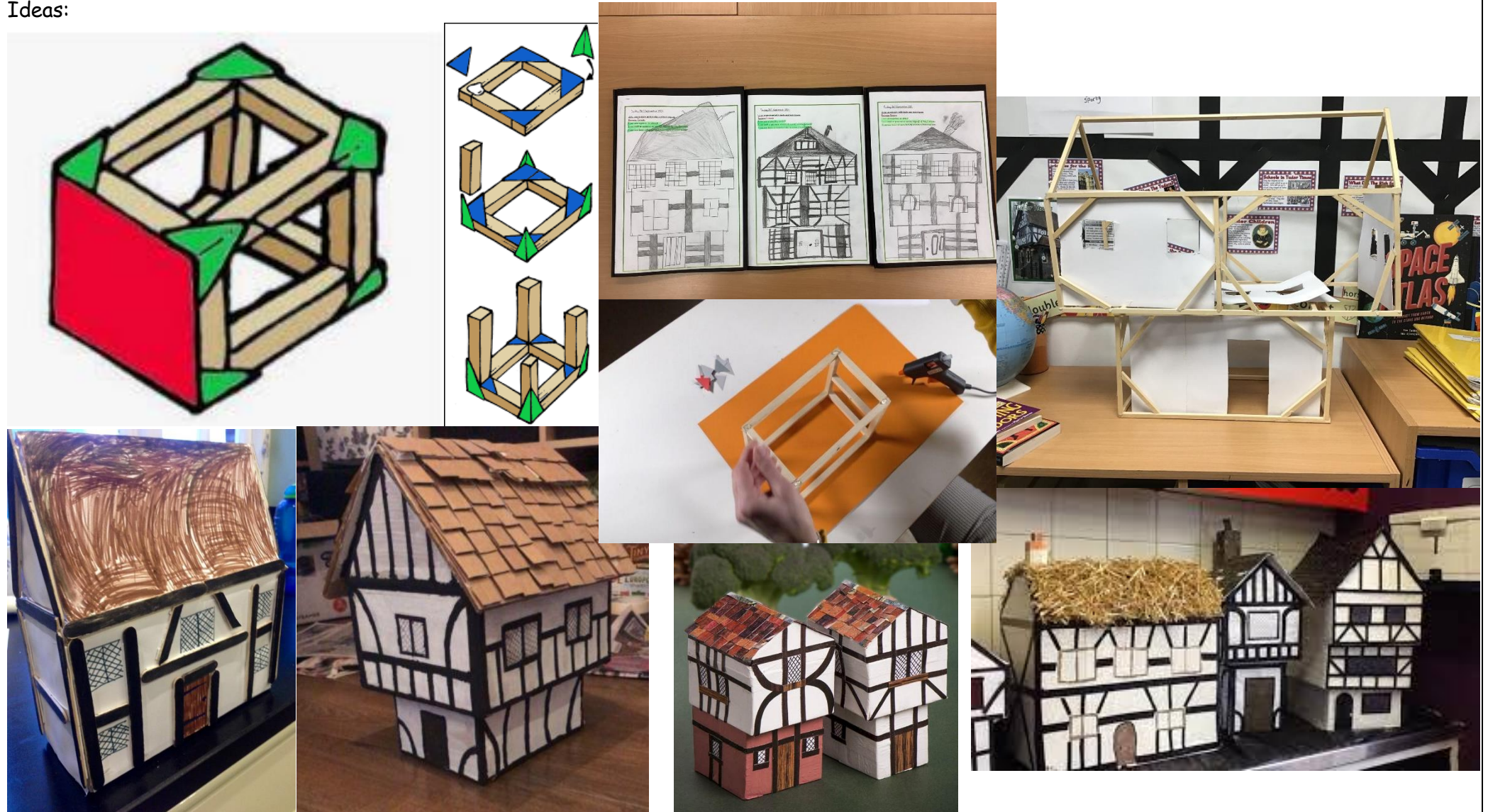


# Alderman's Green Design Technology – Autumn Term 2022

Upper Key Stage 2	Year 5	
	Practical skills, techniques and technical knowledge	Context
Tools and Joining	Cut accurately with scissors and saws safely to a marked line.  Use a glue gun with close supervision (1:1)  Join appropriately using different glues (stick, PVA) and tape	Linked to Tudors: <ul style="list-style-type: none"><li>- Design and make a Tudor House - children could be given a person they have learnt about in their history topic for it to be for i.e Lady Jane Grey Mary Queen of Scots</li><li>- Design and make a bridge to cross the River Thames.</li><li>- Could link to the Coronation of a monarch from that period - Henry VIII, Elizabeth I...Maybe it needs to be able to hold a certain weight?</li></ul> <b>Design, Make, Evaluate:</b> To design and make a _____ for _____.
Mechanisms	N/A	
Structures	Create a framed structure using diagonal struts to strengthen	
Vocabulary	frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent, design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional	
Questions to support with planning and assessment	<b>Developing, planning and communicating ideas:</b> <ul style="list-style-type: none"><li>• Can they come up with a range of ideas after they have collected information?</li><li>• Do they take a user's view or design criteria into account when designing?</li><li>• Can they produce a detailed step-by-step plan?</li><li>• Can they suggest some alternative plans and say what the good points and drawbacks are about each?</li></ul> <b>Working with tools, equipment, materials and components to make quality products:</b> <ul style="list-style-type: none"><li>• Can they explain why their finished product is going to be of good quality?</li><li>• Can they explain how their product will appeal to the audience?</li><li>• Can they use a range of tools and equipment expertly?</li><li>• Do they persevere through different stages of the making process?</li></ul> <b>Evaluating processes and products:</b> <ul style="list-style-type: none"><li>• Do they keep checking that their design is the best it can be?</li><li>• Do they check whether anything could be improved?</li><li>• Can they evaluate appearance and function against the original criteria?</li></ul> <b>Frame Structure:</b> <ul style="list-style-type: none"><li>• Do they know how to stiffen strengthen and reinforce a range of 3-D frameworks?</li><li>• Do they know which materials are best suited to stiffen and reinforce by selecting them due to their properties?</li><li>• Are their measurements accurate enough to ensure that everything is precise?</li><li>• Do they know which shapes are the strongest and will support the most weight in a structure?</li><li>• Can they use skills in using different tools and equipment safely and accurately? E.G. junior hacksaw, G-clamps, bench hooks, hand drills</li></ul>	

## Ideas:



## Useful Links:

- [https://www.alecreedacademy.co.uk/\\_site/data/files/primary/curriculum/knowledge-organisers/autumn-1/C2E2C649D63A1D1FF10349C03640B6CD.pdf](https://www.alecreedacademy.co.uk/_site/data/files/primary/curriculum/knowledge-organisers/autumn-1/C2E2C649D63A1D1FF10349C03640B6CD.pdf) (Knowledge Organiser - talks about bridges but does cover frame structures)
- [http://wiki.dtonline.org/index.php/Modelling\\_Frames](http://wiki.dtonline.org/index.php/Modelling_Frames) (Good to look at to get idea - children will make a more simple structure and then surround this use cardboard with the their house design)