

Year 2 Design Technology – Construction: Great Fire of London Houses

Vocabulary

beams	A long, thick piece of wood, metal, or concrete, used to support weight in a building or other structures	
flammable	Something which burns easily	
Design Specification	A description of how something should be done, made, etc	
cuboid	A solid object with six rectangular sides	
bench hook	A device with a hooklike part fitting over the front edge of a workbench to stop a an object from slipping	
hacksaw	A small saw used especially for cutting metal	
blade	The flat part on a knife or similar tool or weapon, with a very thin edge used for cutting	
handle	Part of an object designed for holding, moving, or carrying the object easily:	
evaluation	The process of judging the quality of something	
measure	To discover the exact size or amount of something	
brace	Something that is used to support or connect things, or to make something stronger	

Year 2 Design Technology: Wheels and Axles

Knowledge

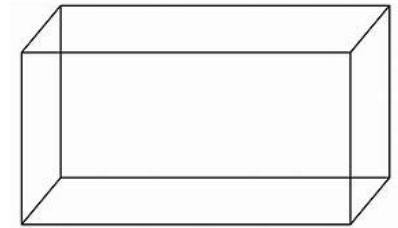
- Know that key features and materials of buildings in London during the Great Fire of London was: wooden framework, beams, and a thatched roof
- Know that this made the buildings:
 - flammable;
 - old as the heat would be lost easily;
 - weak as they were held together with nails;
 - wet as wood was not waterproof
- Know that modern buildings are built with materials specifically chosen for the purpose they are used for including: brick, slate, and cement. This means buildings are stronger, stay warmer and are waterproof.
- Know that a **design specification** is a list of things that we need to do to solve a task successfully
- Know the size of a cm (approx. the length of a staple)
- Know that the frame of the model house will be made from a **cuboid**

How to Measure Using a Ruler

- Know that we use a ruler to measure the exact size we want our piece of wood to be
- Know that we can **measure** in centimetres (cm)
- Know that when using a ruler, we **measure** from 0 and not from the edge of the ruler
- Know that when using a ruler, we count on until we have found the measurement that we want.
- Know that once I've done this do I draw a line by holding the ruler firmly (so as not to get a non-straight line)

How to be Safe When using a Hacksaw

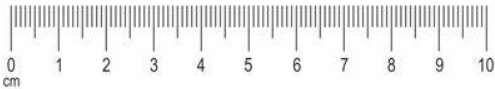


- Hair must be tied back
- Shoe laces must be tied up
- Children make sure there is 'sawing space' between them (1m)
- **Hacksaws** are only picked up when instructed
- **Hacksaws** on put down when instructed
- Know that the **blade** is very sharp and we only hold the **hacksaw** by the **handle**
- Know that a **cuboid** requires a length, height and width (3 dimensions)





How to saw Using a Hacksaw

- Know that we place our thumb at the top of the **handle**
- Know that you need to start with a slow cut
- Know that the whole length of the saw (**blade**) must be used to cut the wood
- Know that in order to strengthen structures, we can **brace** corners of the wooden beams with triangles.
- Know that a **brace** is a triangular shape that makes the structure stronger, stiffer and more stable (piece of card)



Quizzing		Quiz at home
<i>Ask your partner the questions below. Can they find the correct answer on the right-hand side?</i>		<i>Ask your adult to look at the KO.</i>
What is the name of the sharp part of a hacksaw?	Evaluation	<i>Quiz them using the vocabulary and knowledge section or the quiz questions.</i> <ul style="list-style-type: none"> • Can they beat your score? • Can they score more than 5? 10? • Compete with your adult in the elimination quiz. Take it in turn to ask each other questions. The first person to get a question wrong is out.
What is the name of the tool used to help you keep a piece of wood still whilst you saw it?	0	
What a material can easily catch fire it is called this?	cm	
Where do we start measuring from when using a ruler?	Blade	
What shape do we use to strengthen corner joins?	Bench hook	
What is it called when come up with a list of things that you want your project to include?	Flammable	
What is it called when you work out what went well and how you might improve your project if you were to do it again?	Attach triangular corner braces	
What units did we measure in when measuring our wood?	Triangular	
	Design specification	 
	The edge of the ruler	
Big Questions	Beat Your Adult	
<ol style="list-style-type: none"> 1. What materials were houses made from during the Great Fire of London? 2. What materials are houses made from now? 3. Why are different materials used now? What effect does this have on the house? 4. How can you make a join of two pieces of wood stronger? 5. What are 5 things you need to do to make sure that you are safe whenever you use a hacksaw? 	<p>How many types of buildings can you name in 1 minute?</p> <p>How many London landmarks can you name in 1 minute?</p>	

Word scramble		Tasks	Creative Task
Unscramble the key vocabulary from this topic below. You can create your own at the bottom		<p>1. Use a blank copy of the KO to fill in the missing information.</p> 	<p>1. Draw 5 lines using a ruler:</p> <ul style="list-style-type: none"> • 5cm • 10cm • 25cm • 13cm • 21cm <p>2. Draw 3 squares inside each other. The length of the squares need to be:</p> <ul style="list-style-type: none"> • 20cm • 10cm • 5cm <p>Now colour them in different colours and cut the biggest one out carefully</p> <p>3. Imagine you owned a shop during the Great Fire of London. Write up to three diary entries detailing what you can see and what is happening?</p> <p>4. Create some artwork inspired by the Great Fire of London</p> 
bmmflfaale			
adebl			
oiducb			
ndelah			
aeuresm			
awcksah			
caerb			
luonitevaa			

Tell a partner / an adult the definition for the missing spaces below

Vocabulary

beams		
	Something which burns easily	
Design Specification		
cuboid		
	A device with a hooklike part fitting over the front edge of a workbench to stop a an object from slipping	
	A small saw used especially for cutting metal	
blade		
	Part of an object designed for holding, moving, or carrying the object easily:	
evaluation		
	To discover the exact size or amount of something	
brace		