## Year 7 Design and Technology

**1.** Tools and equipment Bench hook Vice Coping saw Tenon saw Marking gauge Try square Glue gun Drill bit File

Pillar drill

Belt sander

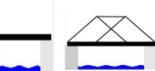
Safety glasses

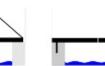
## 2. Spelling list

These words are commonly misspelt in lessons					
Met <mark>al</mark>	Vi <mark>c</mark> e	Desi <mark>gn</mark>	Te <mark>no</mark> n saw	Stru <mark>ctu</mark> re	
Plast <mark>ic</mark>	Tr <mark>y</mark> square	Saf <mark>et</mark> y	Gl <mark>ue</mark>	Bri <mark>dge</mark>	

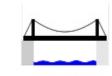
https://www.youtube.com/watch?v=oVOnRPefcno

#### 3. Types of bridge









Suspension bridge

Beam bridge Truss bridge Cantilever Bridge Arch bridge

## 4. Forces

Name of force	Definition	Example
Compression	A pushing or squashing force	Mattress springs
Tension	A pulling or stretching force	Tug of war rope
Torsion	A twisting force	Turning a screw
Shear	A cutting force caused by two forces in opposite directions very close together	Scissors
Bending	When two forces act in opposite directions	Beam bridge

How can I remember this information?

1. Get someone to quiz you

2. Write out 5 questions using this sheet and then

answer them next day to see if you can remember them

3. Cover the keyword and guess the picture or definition

## Year 7 Design and Technology

## 5. Classification of woods



# Softwoods

- Coniferous trees
- Have needles
- Fast growing so cheaper
- Grow berries or fruits

#### Pine, cedar and spruce



# Hardwoods

- Deciduous trees
- Have broad leaves
- Slow growing so expensive
- Grow nuts or seeds

Oak, beech, mahogany



# Manmade boards

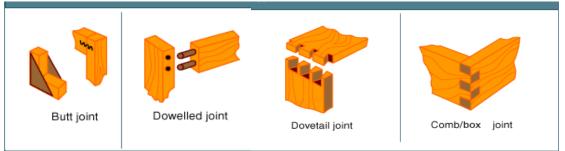
- Made in a factory
- Binds wood with a resin
- Comes in large sheets not planks

MDF, plywood, chip board

#### 6. Wood words

Keyword	Definition			
Grain	The lines along wood that can create a decorative look			
Annual rings	Circular rings that indicate the age of tree			
Knot	Small dark circles where a branch once grew			
Warping	When wood has twisted in different directions			
Splitting	When ends of wood have dried too quick and split			
Cupping	When a plank of wood curves towards the centre			

## 7. Traditional wood joints



## 8. Design movements

Design	Style	Design	Style
Art nouveau	Nature, whiplash	Modernism	Form follows function, minimalism, chrome
1890-1910	curves, female form	1920-30	
Art Deco	Geometric shapes,	Pop	Popular culture, comics, vibrant, colourful
1920s	Egypt, symmetry	1950-60s	
De StijlLinear, primary1917-31colours, black, white		Memphis 1980s	Unusual, patterns, bright colours