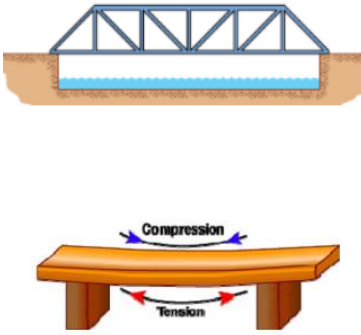


ALDER COPPICE PRIMARY SCHOOL UNIT INFORMATION

SUBJECT: DT		YEAR 5	FOCUS: Structures	AUTUMN TERM UNIT 1: Structures	
Knowledge Focus	Design	Make	Technical Knowledge	Evaluate	
National Curriculum Knowledge	<ul style="list-style-type: none"> • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 	<ul style="list-style-type: none"> • select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately. • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. 	<ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures. • understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages. 	<ul style="list-style-type: none"> • investigate and analyse a range of existing products. • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. • understand how key events and individuals in design and technology have helped shape the world 	
Year 5	What Pupils will Know: <ul style="list-style-type: none"> • To know the different types of bridges • To know that trusses and arches strengthen bridges • To know that pillars, beams and suspension are used to span large distance gaps • To know key facts about two famous bridge inventors 			 <p>The top diagram shows a cross-section of a truss bridge with a blue truss structure supported by two brown pillars over a body of water. The bottom diagram shows a cross-section of a beam bridge with a brown beam supported by two brown pillars. Blue arrows pointing outwards from the top of the beam are labeled 'Compression', and red arrows pointing inwards at the bottom of the beam are labeled 'Tension'.</p>	