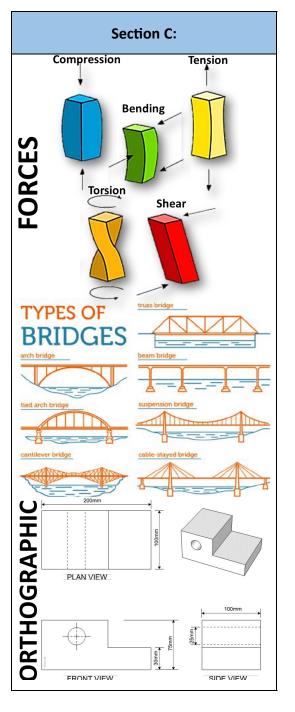
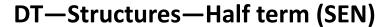
DT—Structures—Half term



Section A: Key vocabulary		
Tier 3 Vocabulary	Definition	
Orthographic	A 2D drawing of two or more sides of an object	
Tier 2 Vocabulary	Definition	
Forces	A physical action or movement	
Stresses	The point of pressure on an object	
Prototype	A model/ trial run of a design	
Scale	The ratio of the size of a model or drawing, to the actual size of the object	
Experiment	To test ideas to discover info	
Assess	Evaluate something	
Refine	To remove the unwanted and make something clearer	
Feasible	Ideas that are realistic	
Culminate	To use all your knowledge learnt to develop ideas	
Strengthen	To make something stronger or withstand more pressure	
Fortify	To add to something to make it stronger	

Section B:		
Forces	Whether you sit in a chair, or fall back into it, it will have an impact on the forces or stresses it has to withstand. Products are developed to withstand the maximum expected stresses to be safe and reliable (functional and don't break). • Compression: pushing at both ends • Tension: pulling at both ends • Bending: tension and compression happen either side • Torsion: twisting Shear: when a material is being	
Orthographic projection	An orthographic projection is used as part of the planning of the final product because it gives a good idea of what the product will look like from different sides (elevations). A good drawing will: Be drawn in pencil with a ruler Have construction lines to help accurate drawing Be drawn to a scale that is appropriate At least 2 elevations, preferably 3 Measurements added to the drawing	







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Scale	The ratio of the size of a model or drawing, to the actual size of the object	
Column	A vertical pillar used for support	
Resist	To withstand a force	
Fragile	Easy to break	
Solution	The answer to a problem	
Steady	Standing without easily falling	
Weak	Opposite of strong	
Strengthen	To make something stronger or withstand more pressure	

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