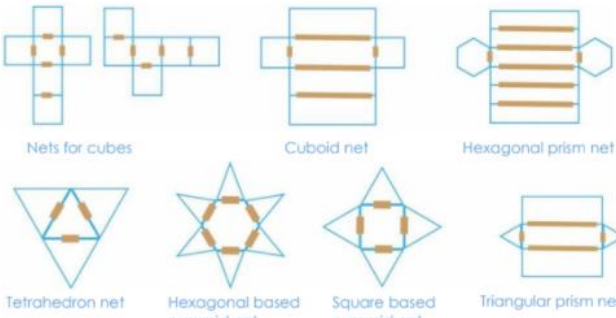
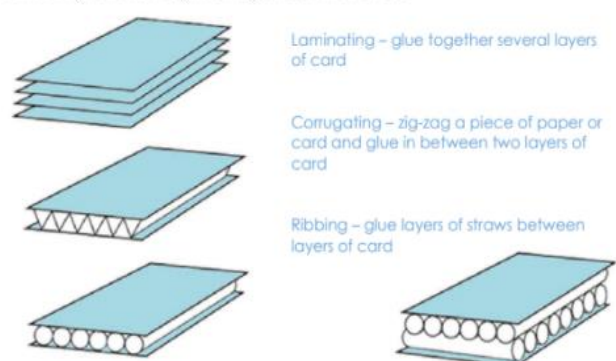


Year 3: Shell Structures Knowledge Mat

Subject Specific Vocabulary		Nets	Important knowledge about shell structures		
investigate	To look carefully and closely to learn the facts through examining.	 <p>Nets for cubes</p> <p>Cuboid net</p> <p>Hexagonal prism net</p> <p>Tetrahedron net</p> <p>Hexagonal based pyramid net</p> <p>Square based pyramid net</p> <p>Triangular prism net</p>	<input type="checkbox"/> I know how 3D nets are made. <input type="checkbox"/> I know how multiple shapes (2D and 3D) are combined to form a strong and stable structure.		
strengthen	To make stronger.		<h2 style="text-align: center; background-color: green; color: white; padding: 5px;">Strengthening and stiffening sheet materials</h2> <p>Stiffening and strengthening sheet materials:</p>  <p>Laminating – glue together several layers of card</p> <p>Corrugating – zig-zag a piece of paper or card and glue in between two layers of card</p> <p>Ribbing – glue layers of straws between layers of card</p>	<input type="checkbox"/> I know how to score materials. <input type="checkbox"/> I know how to make a crisp fold. <input type="checkbox"/> I can select and use tools with accuracy.	
finish	Finishing touches added to a product's surface to improve its functionality.			<input type="checkbox"/> I can use my knowledge to design a shell structure; I know the finishing techniques I am going to use. <input type="checkbox"/> I know how to strengthen and stiffen materials by laminating, corrugating and ribbing.	
adapt	To change or adjust for a particular use.				<input type="checkbox"/> I know how well my shell structure meets the design criteria. <input type="checkbox"/> I know how to improve my product.
three-dimensional (3d)	Appearing in three dimensions; having depth as well as height and width.				
adhesive	A sticky substance or a material such as glue.				
net	A flat shape which can be folded up into a three-dimensional solid.				
score/scoring	Cutting a line or mark into sheet material to make it easier to fold.				
stiffen /stiffened	How the material is supported so that it is sturdy.				
shell structure	Has a hollow, curved shape which are strong and rigid.				