

# Home-School Learning Collaboration – D & T (PD)



<b>Topics in this cycle:</b> 1. Origin, uses of wood & plastic. 2. Research Anthropometric and Ergonomics. 3. Create a factsheet on Hoodrich founder. 4. Design and make a model of a Hoodrich eyeglasses 5. Evaluate the strengths and weaknesses of a product		<b>Taught:</b> Spring 2 2026	<b>Year Group:</b> 7
<b>Key knowledge/concepts to be learnt ('Tell me about...')</b>		<b>Websites/blogs/YouTube links and further reading to deepen and consolidate learning</b>	
<ul style="list-style-type: none"> <li>○ <b>What are the different types of wood and plastics their origin and uses?</b> Identify what is deforestation and its effects.</li> <li>○ <b>Identify, spell and define Design and Technology specialist key terms e.g.</b> ACCESS-FMM, Thermoplastic, Acrylic, Adhesive etc...</li> <li>○ <b>Conduct a product analysis of a glasses using ACCESS FMM keywords.</b> Analyse existing products to find out more about their appearance, materials, size etc.</li> <li>○ <b>How to draw ideas and develop them in 2D.</b> Know how to add colour and clear annotation of materials and methods/processes to be used.</li> <li>○ <b>Knowing how to work with card to produce a Hoodrich eyeglasses model.</b> <a href="https://youtu.be/7zz9z7gkbg">https://youtu.be/7zz9z7gkbg</a> Use the correct tools and equipment safely and skilfully to make a Hoodrich eyeglasses.</li> <li>○ <b>Use (SWOM) analysis to identify strengths, weaknesses, client opinion and suggest modifications or a novelty product.</b></li> </ul>		<p><a href="http://www.technologystudent.com">www.technologystudent.com</a>  <a href="http://www.bitesize.co.uk">www.bitesize.co.uk</a></p> <p>Scroll saw use  <a href="https://youtu.be/-nEACcG-ZtQ">https://youtu.be/-nEACcG-ZtQ</a>            drill use  <a href="https://youtu.be/fGbnim4GcAE">https://youtu.be/fGbnim4GcAE</a></p> <p>How to make an eyeglasses  <a href="https://youtu.be/azXBLgXlI34">https://youtu.be/azXBLgXlI34</a></p>	
<b>Key vocabulary and definitions to be learnt</b>		<b>What will the assessment look like?</b>	
Investigate/Research	Carry out research or study into, study of materials and sources to establish facts and reach new conclusions.	<b>Project Booklet: HOODRICH eyeglasses</b> Assessed on investigation, design, make and evaluate. <b>BASE test in the Autumn and Summer : 50 minutes</b> <ul style="list-style-type: none"> <li>• Multiple choice</li> <li>• Short answer questions</li> </ul>	
Design	A plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is made.		
Manufacture	To build or make		
Evaluate	To evaluate is defined as to judge the value or worth of someone or something.		

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Recycling	It means to break down an item and to make something new from the materials.	<ul style="list-style-type: none"> <li>Extended writing/design task</li> </ul>
Aesthetics	How well a product appeals to the sense as it relates to (colour, texture & form/geometry)	<p><b>Family Learning Opportunities</b></p> <ul style="list-style-type: none"> <li>Make a Hoodrich eyeglasses model from corrugated card or cereal box.</li> <li>Practice drawing/sketching in 2D &amp; 3D, eyeglasses, and furniture.</li> </ul> <p><a href="https://youtu.be/PK3dOkzby0s">https://youtu.be/PK3dOkzby0s</a></p> <p><a href="https://youtu.be/xnR9g9cx0jE">https://youtu.be/xnR9g9cx0jE</a></p> <ul style="list-style-type: none"> <li>Visit an eyeglasses store for e.g. Spec Savers or Vision Express for inspiration.</li> </ul> <p>Furniture  <a href="https://youtu.be/O4cK9G4q0mE">https://youtu.be/O4cK9G4q0mE</a>            Visit the zoo, Ikea, Design Museum or galleries.</p>
Consumer	Who uses the product.	
Function	The use or purpose of a product	
Cardboard	A material made from cellulose fibre (such as wood pulp) like paper but usually thicker.	
Environment	The impact will the product have on the natural environment	
Design Specification	A list of criteria the product must meet to be successful	
Adhesive	Also known as glue, cement, mucilage, or paste, is any non-metallic substance applied to one or both surfaces of two separate items that binds them together and resists their separation.	
Screw	A short, slender, sharp-pointed metal pin with a raised helical thread running round it and a slotted head, used to join things together by being rotated so that it pierces wood or other material and is held tightly in place	
Rivet	A short metal pin or bolt for holding together two plates of metal, its headless end being beaten out or pressed down when in place.	
Net	It is a flat two-dimensional shape, which contains score lines and when is folded and glued together forms a three-dimensional shape.	
Thermoplastic	Is a plastic that gets soft when heated and rehardening on cooling without appreciable change of properties.	
Acrylic	Acrylic plastic is a strong, clear polymer used in a host of industries including, but not limited to automobiles, lighting fixtures and optical applications.	
Wasting process	One that produces waste or unusable material either by cutting bits out or cutting bits off. Name the most common wasting processes. - Drilling. - Sawing. - Filing. - Sanding.	