Home-School Learning Collaboration – Engineering

ERDINGTON ACADEMY

Topics in this cycle: Clock Design	**Taught:** SUMMER 1	**Year Group:** 8

Key knowledge/concepts to be learnt ('Tell me about….')	**Websites/blogs/YouTube links and further reading to deepen and consolidate learning**
What is 3D Design Find out what 3D Design? What is 3D Design used for? Look at the difference between 3D Design and 3D modelling. **Research clocks** Look at the range of clocks available to buy. What types are there? What do you feel makes a successful clock? How old are clocks? What are the oldest clocks still in use today? **What is CAD? How it is used in engineering.** What does CAD stand for in Design? Learn how computers are used in 3D Design. What are the advantages / disadvantages of CAD. What software's are used to create 3D Design. **The four stages of Design** The four stages of design are, planning and researching. Thumbnails- generating design ideas based on research. Rough design- Practicing one of the thumbnail designs you see as a possible final piece. Final design- The final outcome, this would also be the final product. **2 Point Perspective Drawing** Watch the following video on 2 Point Perspective and follow the steps. https://www.youtube.com/watch?v=M6MOIP_mLsc Here is a harder one to try https://www.youtube.com/watch?v=Sqy4davrMJc	Weird clocks https://www.youtube.com/watch?v=WYpkvkD0aHM What is engineering? https://www.youtube.com/watch?v=btGYcizV0iI What makes a brand? https://blog.hubspot.com/agency/develop-brand-identity CAD https://www.techtarget.com/whatis/definition/CAD-computer-aided-design Pintrest https://www.pinterest.co.uk/annemahnken/clocks/ GCSE Design and Technology - BBC Bitesize Free Design Tool: Presentations, Video, Social Media | Canva

Key Vocabulary and Definitions To Be Learnt	**What Will the Assessment Look Like?**

Investigate/research	Carry out research or study into, study of materials and sources to establish facts and reach new conclusions.	**End of Unit test:** 30 minutes • Short answer questions • Multiple choice • Extended writing/design task
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.	
CAD	Computer Aided Design. The use of computer software to make a 2D or 3D design.	**Family Learning Opportunities**
2 Point Perspective	A drawing technique that helps draw objects at 3D angles.	Look for the most unique clock design you can find. Ask your friends and family which type of clock they prefer: analogue or digital? Why do they prefer that type? Draw your own clock design. What shape is it going to be? Will it have numbers, roman numerals or shapes to tell the time. What shapes are the hands going to be?
Brand	A brand is a company's identity. This includes logos, slogans and imagery.	
3D Design	The planning, designing and creation of a 3D design. The 3D design is usually done in CAD.	
Evaluate	To evaluate is defined as to judge the value or worth of someone or something.	
Consumer	A consumer is a person who buys a product or uses a service in the public or private sector.	