Clock
A home furnishing company wants to extend its range to include clocks. Design and make a clock for a company of your choice based on an Art movements…


Key learning
- Learn to develop a base of research for inspiration and identify needs/wants of intended users
- Describe in detail how their design meets the design criteria
- Develop a basic design criterion to work with
- Generate innovative ideas using knowledge of a range of existing product/styles as inspiration
- Model, develop and communicate ideas
- How to analyse products and how existing products
- How mechanical systems and gears create movement (clock internal workings)
- Sketch out ideas and select
- Cut out clock and assemble/finish
- Be able to evaluate their solution against the original specification
- Know about designers and link with their own designing
- How to combine materials and shapes to create more useful characteristics

DA4, DA5, DA6, DA7, DA8, DA9, DA10, DB5, DB6, DB7, DB9, DB10, DB11, MA3, MA6, MA7, MA8, MB7, MB8, MB9, MB10, MB11, EA3, EA5, EB3, EC1, TK17, TK16, TK18, TK20, TK8, TK15

Curriculum Sequencing Overview

inspired by Bauhaus style, Kandinsky, or Pop Art.

Unit 1									
Week	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Big Ideas (key concepts)	H&S in workshop	Use of Artist for inspiration, how to use influences to design	Using measuring and marking tools with accuracy	Use of different saws for different purposes	Use of different saws for different purposes	Assembling structure with a range of joining techniques	Assembling structure with a range of joining techniques	Applying a range of finishing techniques Working with a	Evaluating products against their design criteria

		own product					Using a wider range of tools and materials in products, based on properties	wider range of materials Using a wider range of tools with increasing control and accuracy	
Lesson Topics Sequence	Introduce Working in the workshop and cover the H&S of working in that environment, use of machines and tools. Q&A Health and Safety of working in that space, identify key rules and areas of risk. Spot the hazard activity Demonstrate use of machines and safety processes, emergency stops. Pupils can choose one key area/rule and create a H&S poster for that rule to be displayed in the room. Review, recap and Qs	Introduce the project and pupils can look at example Clocks online, Pupils use inspiration sheets of Art movement (or research their own) (or other artist) to inspire 3 of their own designs. They should apply colour and shading to their designs and choose the best one to make. Review, recap and Qs.	Pupils draw out the templates/pattern pieces they will need to cut for their finial clock design Intro lesson objects which is to mark and measure the pieces needed for the back of the clock forms the main base Dem use of tri-square to draw right angles and use of steel rule for accuracy when measuring. Use MM in measurements	.Intro lesson objects which is to cut and sand the lengths for the base of the clock Demonstrate use of junior hacksaw for straight edges, coping saw for curved edges, explaining the direction of teeth and safe use with a bench hook and vice. Dem use of sanding blocks to sand and finish the edge of the pieces. Review, recap and Qs Students work on their individual clocks		Intro lesson objective and recap last lesson, recap use of coping saw to cut out curves with control (avoid breakages) Dem assembling the clock using glue, tape Demo use of pillar-drill for center hole for clock mechanism Review, recap and Qs		Intro lesson objective and recap last lesson Recap painting with block paints Pupils fill in their finial evaluation for their finished product.	Pupils fill in their finial evaluation for their finished product.

Key Resources	Ppt Booklets Paper Pens/[pencils	Booklets Pens/pencils ICT ROOM or Art movement inspiration sheets	Booklet Pencils rulers Paper	Acrylic pieces MDF Junior hacksaws Coping saws Files Sand paper Pencils Tri squares MDF 3mm	Coping saws Spare blades Glue Tape Pillar drill 8mm drill bit Plastics glue (capillary action) Clock mechanisms	All above plus Sand paper Paints Paint brushes	All above plus Hand-drill 4-5mm drill bit Scrap wood Sand paper Block paints Paint brushes	Hand-drill 4-5mm drill bit Scrap wood Sand paper Block paints Paint brushes	Evaluation writing frames
Key learning and skills	How to work safely in the workshop0 keeping self and others safe in a practical environment How to risk assess hazards and report How to emergency stop a range of machines Safe working spaces and distances	How to use inspiration from wider sources How to use the work of others to inform design decision How to critically evaluate products How to product 3D designs and annotate design ideas	How to work safely in a practical lesson How to use a range of marking, measuring and cutting tools How to select materials based on their properties for their intended use How to create 2D templates that will be used to produce a 3D product How to use measuring and marking tools with increasing levels of accuracy	How to work safely in a practical lesson How to use a range of marking, measuring and cutting tools How to select materials based on their properties for their intended use	How to work safely in a practical lesson How to use a range of marking, measuring and cutting tools with an increasing level of control and accuracy How to select from a wider range of materials based on their properties for their intended use	How to work safely in a practical lesson How to use a range of cutting and joining tools How to apply and evaluate finishing processes How to select materials based on their properties for their intended use	How to work safely in a practical lesson How to use a range of cutting and joining tools with increasing levels of control and accuracy How to apply and evaluate finishing processes How to select materials based on their properties for their intended use	How to select from a wider range of specialist materials based on their properties for their intended use How to accurately apply and evaluate a wider range of joining and finishing techniques How to evaluate their work against their design criteria	How to evaluate their work against their design criteria