

Medium Term Plan – Design Technology – Mechanical posters



Lesson	National Curriculum links	Objective	Substantive knowledge	Disciplinary knowledge	Specific Vocabulary	Activities and resources
4/1	TWO DAY WEEK					
8/1	Investigate and analyse existing products	To investigate mechanical systems	Mechanical systems Levers and linkages Moving parts	Explain which part moves Input and output	Mechanism, lever, linkage, pivot	Existing products Make a moving mechanism out of paper
15/1	Understand and use mechanical systems in their products (levers and linkages)	To make mechanical systems which use levers and linkages	Identify levers and linkages Follow instructions to make levers and linkages	Be able to make simple levers and linkages	Loose/fixed pivot, guide/bridge, design brief	Levers and linkages Identify and make levers and linkages
22/1	Understand and use mechanical systems in their products (levers and linkages)	To make mechanical systems which use levers and linkages	Identify levers and linkages Follow instructions to make levers and linkages	Be able to make simple levers and linkages	Loose/fixed pivot, guide/bridge, design brief	Identify and make levers and linkages
29/1	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups	To design a moving poster	Discuss ideas Sketch and annotate Adapt	Use sketches to communicate ideas	Annotated sketch, design criteria, adapt	Designing Use design brief to sketch and annotate own design
5/2	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups	To design a moving poster	Discuss ideas Sketch and annotate Adapt	Use sketches to communicate ideas	Annotated sketch, design criteria, adapt	Use design brief to sketch and annotate own design
12/2	HALF TERM					

19/2	Generate, develop, model and communicate their ideas through discussion, annotated sketches, prototypes, pattern pieces	To use a prototype to test their design	What is a prototype? Make and use prototype Evaluate	Understand what a prototype is and it's importance	Prototype, evaluate, mock up	Prototypes Make a prototype and evaluate it ready for next session
26/2	Generate, develop, model and communicate their ideas through discussion, annotated sketches, prototypes, pattern pieces	To use a prototype to test their design	What is a prototype? Make and use prototype Evaluate	Understand what a prototype is and it's importance	Prototype, evaluate, mock up	Continue with prototype and evaluate it ready for next session
4/3	Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	To select and use the correct tools accurately	Use a design Choose appropriate materials Use tools accurately	How to follow a sketch and evaluate the finished product	Finish, techniques, accuracy, replicate	Finishing a product Make their poster following design
11/3	Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	To select and use the correct tools accurately	Use a design Choose appropriate materials Use tools accurately	How to follow a sketch and evaluate the finished product	Finish, techniques, accuracy, replicate	Complete their poster following design
18/3	Evaluate their ideas against design criteria in the context of evaluating a moving poster	To be able to suggest changes or improvements	Use design criteria to evaluate their product	How to critically evaluate own work	Evaluate improve	Evaluate their finished product and discuss possible changes/improvements