

KS4Project Scheme of Work 2018-19

Subject	Topic	Year Group	Length
WJEC Product Design	Games and puzzles.	10	10-12 weeks

<u>Target Grade</u> A-C

<p style="text-align: center;">Investigating the design context</p> <p style="text-align: center;">Research using existing products. Questionnaire to get feedback on products. Specification writing</p>	<p style="text-align: center;">Development of the design proposal</p> <p style="text-align: center;">Generate three different ideas. Develop one into a final design. Use CAD and 3D drawing to refine the design.</p>	<p style="text-align: center;">Testing and evaluation</p> <p style="text-align: center;">Test the product on class mates and form a way of getting feedback for the design. Suggest ways that the product could be improved.</p>	<p style="text-align: center;">Communication</p> <p style="text-align: center;">Present a folder of work which is of GCSE standard.</p>
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ICT SKILLS
<p>Research</p> <p>CAD</p> <p>Publisher to present work</p> <p>Digi Pictures</p>

Making
<p>Model the chosen idea in card/ non expensive materials. Make a puzzle or game using wood, metal or plastic.</p>

HEALTH AND SAFETY
<p>Various H&S risks will be addressed in accordance with the risk assessment. Demonstration and supervision at all times.</p>

EXTENTION WORK
<p>Re design product to take into account the findings of the evaluative feedback.</p>

Learning ACTIVITY
<p>Designing and Making a game or a puzzle for a designated user group.</p>

SKILLS AND KNOWLEDGE
<p>Final practise run at setting out a GCSE style folder and practical piece.</p>

TECHNICAL LANGUAGE
<p>Design Brief Situation Research Specification Generation of ideas Final design Evaluation.</p>

Lesson No	Learning Objective We are Learning to (WALTS)	Specification Focus	Teaching Activity	Outcomes Plenary (WILFs) Assessment	Health and Safety	Resources
1	Make and investigate an existing game.	Investigation and making	Intro to task. Look at Steps to success. Take part in making FPT Game.	Understanding of Success criteria. Understanding of box construction techniques.	Supervised at all time . Demos given.	Fully stocked workshop with wood/ plastic and metal tools and machinery.
2	Researching a task	Investigation And Communication	Introduce Design Brief. Pupils to produce folder layout on ICT. Collect existing products Hwk– Add annotation to Ex Products.	Neatly presented work. An understanding of Design task.		
3	Researching a task	Investigation Communication	Guide pupils to write a questionnaire. Hwk– Ask people from home to fill in the questionnaire. Summarise the feedback. Guide class to writing specification.	High level annotation Understanding of how to write a concise questionnaire		
4	Generating ideas using guidance of research	Development of Design proposals Communication	Pupils to produce Generation of ideas. Develop ideas to produce a final design. Modelling . Hwk– Finish Gen of ideas.	A detailed specification A range of feasible and original ideas, well presented and annotated.		
5	Generating ideas and modelling ideas.	Development and Modelling Communication	Modelling Produce detailed final design.	An accurate scale model.		
6	Calculating material sizes	Making	Fill in cutting list and begin to make the product. Making	An understanding of sizes and the need for accuracy.		
7-9	Making accurately.	Making	Making	Safe and effective use of all tools and machinery.		
10	Making accurately	Making	Making	Safe and effective use of all tools and machinery.		
11	Making accurately	Making	Making	Safe and effective use of all tools and machinery.		
12	Evaluation of products by peer testing.	Evaluation Communication	Guide pupils to evaluate their product by asking peers to try it out and get feedback for improvement.	An understanding of how to process feedback to improve the product further.		
13	Evaluation of products by peer testing.	Evaluation Communication	Guide pupils to evaluate their product by asking peers to try it out and get feedback for improvement.			

Assessment

Grade	Investigating the design context	Development of the design proposal	Making	Testing and evaluation	Communication
A	Well presented and annotated existing products, questionnaire and a detailed specification.	Well presented design ideas with annotation showing how they would be made. Model to scale and neatly produced.	Use of a range of tools and equipment correctly, safely and accurately.	A detailed testing strategy which leads to the formulation of relevant improvements which could be made on the product.	High quality presentation. Use of a range of communication techniques.
C	Presented with some care. Labelling to a basic level of understanding. Specification which mentions most points.	Three ideas at least. Presented to show some material/ making details. Modelling neatly produced with some accuracy in scale.	Use of a range of tools and equipment with the need for help. Safely and correctly used.	Some basic testing which allows the designer to see and make notes on improvement.	Good presentation with different techniques used.
E	Presented with little care. Few notes written about existing products. A very simple specification.	Few designs, with limited inclusion of meaningful labelling. Presented poorly. Modelling of very little use.	Some tools and equipment used at a basic level. Help needed often.	Little useful testing with no evidence of findings.	Low level presentation. Limited range of techniques used.

Addition all assessment