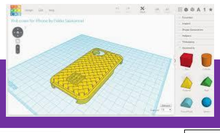
Learn more, remember more, apply more

Design Technology Learning Journey Secondary

Golden Concepts

- Research
- Design
- Make
- Reflect
- Improve



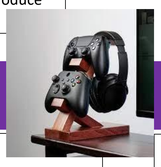
Summer Term

Term 5

CAD/CAM (Cycle B)
Generate a final idea by collecting information already used
Designing a unique product for a specific need for multiple users
Drawing and communicating design ideas
Developing a final design idea including labels and annotations.
Using tools with accuracy to cut and shape materials to produce final outcome

Term 6

CAD/CAM (Cycle B)
Developing a design idea using CAD
Combining mixed materials with accuracy to meet the design.
Use tools with accuracy to cut and shape materials to use components together
What is working well and what can be improved
Testing and Evaluating the outcome



Spring Term

Term 4

Refining PS X Box Controller Stand (Cycle B)
Drilling, cutting and shaping components for stand
Assembling product using the correct joins and tools
Can say how well their design is progressing given the design criteria
Identifies what is working well and what can be improved
Can communicate alternate ideas using words and labelled sketches showing awareness of constraints

Term 3

PS X Box Controller Stand (Cycle B)
Research and design a product with an end user in mind.
Manufacturing simple wood joints to enable product to be freestanding
Selecting appropriate tools cutting out accurately
Identify if the product is fit for purpose
Judge if the product is fit for the end user

Autumn Term

Yr 8/9 Cycle B

Term 1

Marble Maze Designs
Designing using own research and interests
Measuring accurately to create Marble Maze
Cutting, drilling, use of glue and polishing
Using electronic skills to produce circuit from standard components

Term 2

Christmas Decorations Upcycling Project
Create a drawing/template for their own design.
Recognizes what they have done well as their work progresses.
Demonstrate cutting with increasing accuracy
Checking and judging quality of finish to improve upon.

Summer Term

Term 6

Textiles
Designing using own research and interests
Produces step-by-step plan to develop design
Can identify multiple machines/materials in order to create design
Can use appropriate tools, equipment, components to complete final outcome

Term 5

Textiles – Making Cyanotype prints on t-shirts/bags
Printing images on fabric
Designing using own research and interests
Communicate ideas through drawing and discussing with others
Identify what process works well and what can be improved
Can plan, draw and create a final outcome using appropriate materials

Spring Term

Term 3

Box Making
Upcycling Project – Using techniques and machinery to restore timber for future use
Design products thinking about user views and targeted audience
Use of machinery in the workshop to achieve final product
Hegnar Saw, Bandfacer, Chamois Polisher

Term 4

Coaster Set
Selecting materials and designing different products using a range of materials.
Make realistic plans to achieve design of coaster set and holder
Discussing who is it aimed at how can your design choices reflect that?
Identify what is going well and what can be improved

Autumn Term

Term 2

Christmas Decorations Upcycling Project
Create a drawing/template for their own design.
Recognizes what they have done well as their work progresses.
Demonstrate cutting with increasing accuracy
Checking and judging quality of finish to improve upon.

Term 1

Skateboard Design and Template
Using the internet to research design ideas
Make realistic plans to achieve their ideas
Work with a range of different tools
Identify what works well and what can be improved

Yr 8/9 Cycle A

Summer Term

Term 5

Toy Cars
Using simple tools to incorporate mechanisms in the toy car – wheels, hinges, levers etc.
Communicate how well their design is against the original criteria
Think ahead about the order of their work

Term 6

Toy Cars
Project Creating Simple wood joints – Halving joint
Using words and sketches to explain their choices/design
Select appropriate tools for design with their explanation why
Put ideas into practice with support
Use tools and materials with help where needed

Term 4

Coaster Set & Holder
Make realistic plans for achieving their aims
Recognise what they have done well through their progress
Upcycling Project – Using techniques to restore timber for future use
Using wasting tools effectively

Term 3

Picture Framing Project
Designing with manufacturing technique in mind.
Use words and pictures to describe their design.
Use tape and glue to make temporary joins
Demonstrate cutting with increasing accuracy
Checking and judging quality of finish to improve upon.

Spring Term

Y 7

Autumn Term

Term 1

Health and Safety
Identify and demonstrate safe use of Machines and tools with increasing accuracy. Basic tool practice.
Using H&S rules to work in the DT room with others.
Complete assessment to identify all tools and machinery used.

Term 2

Christmas Decorations Upcycling Project
Create a drawing/template for their own design.
Recognizes what they have done well as their work progresses.
Demonstrate cutting with increasing accuracy
Checking and judging quality of finish to improve upon.