

Project:
Board Game Project

Autumn – Spring 1Term

What are we learning about?

In this project you will learn different graphic design techniques using CAD. You will learn how to use this software along with using skills you have previously learnt to produce a board game for your client.



Why are we learning about it?

An area Of design technology includes graphics which is working with paper and board. Therefore it is important to learn how to work with this materials an use latest CAD/CAM technology to create a high quality product.



What new **KNOWLEDGE** will I gain?

- Different CAD software
- plastic forming process
 - 3d printing
 - NETS
- Adhesives used to attach paper to board



How does this build on the **SKILLS** I already have?

- Skills from the chocolate bar project in year 7 –
- Using tools and equipment safely whilst working in papers and board
 - You will be using your design/branding skills
 - Use of 2D design



What new **SKILLS** will I develop?

- Using CAD software to develop graphics on a project
- How to shape and finish 3d printed work
- Using Cam with board
- Using hand skills to create a board and product



How does this build on the **KNOWLEDGE** I already have?

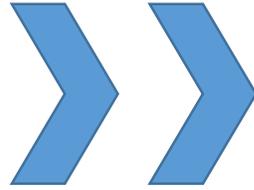
- It will build on your knowledge of CAD/CAM processes from different projects throughout yr 7 & 8.
- New and emerging technology

Project: Task Light

Summer - Spring 2 Term

What are we learning about?

In this project you will learn more about plastic forming and bending processes, how to create a design using biomimicry and incorporate more complex electronic circuit into your product to create a functioning Task light.



Why are we learning about it?

It is important to have an understanding of all material areas and a detailed understanding of electronics. Therefore we are learning how to design a product to suit the needs of a client using primarily plastics which we haven't used as much throughout KS3.



What new **KNOWLEDGE** will I gain?

- Acrylic Properties
- Forming and bending plastic
- What is Biomimicry and how to use it in design



How does this build on the **SKILLS** I already have?

- Skill on cutting and shaping wood
 - Use of 2D design
 - Use of Fusion 360
 - Product analysis skills
 - Sketching skills



What new **SKILLS** will I develop?

- Bending forming and finishing acrylic
- How to use adhesive to attach plastic to plastic
 - Use of Biomimicry to influence design



How does this build on the **KNOWLEDGE** I already have?

- It will build on knowledge of electronics from year 8
- It will build on your knowledge of CAD/CAM