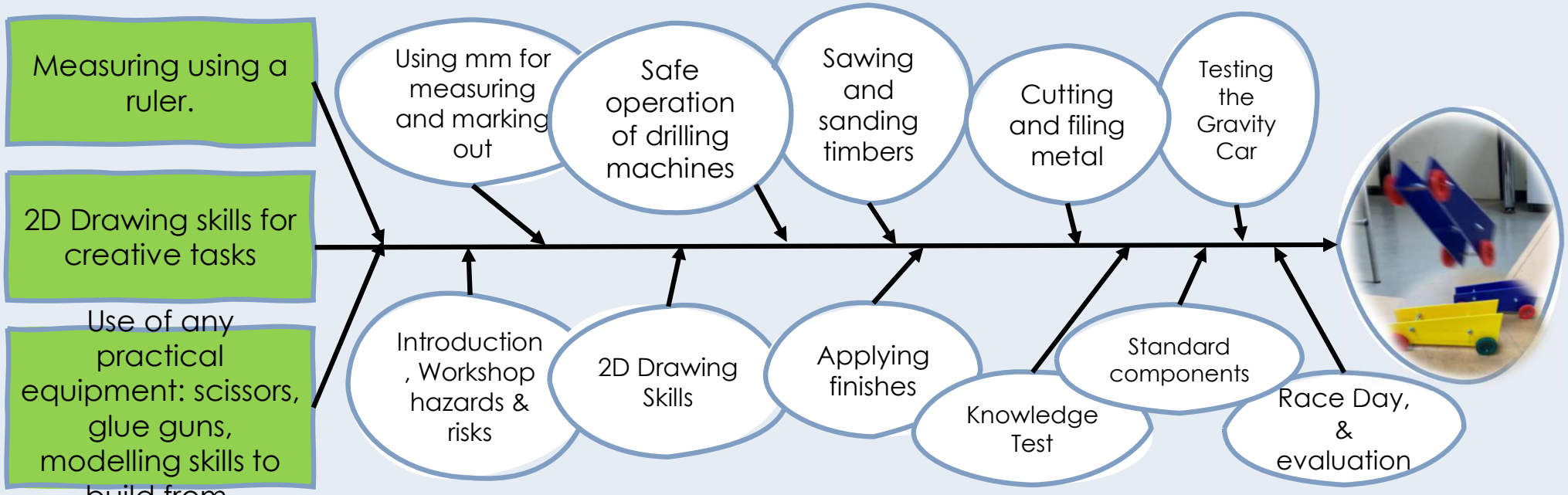
Yr 7 Project 1; The Gravity Car - Why do we study Design Materials?

By studying Design and Technology we allow opportunities to develop skills and knowledge across a wide range of disciplines using traditional, practical and computer aided tools. Design and Technology covers Product Design, Resistant Materials, Electronics, Fashion and Textiles and Engineering, all problem-solving subjects building confidence and resilience in creative skills, testing, failing, improving and creating successful outcomes individually, or as part of a team.

The Gravity Racer project teaches you how to use some tools and machines in a safe environment within the workshop to create a gravity powered car to race against your class!



Yr 7 Project 2; FloGlow Lamp - Why do we study electronics within Design Materials?

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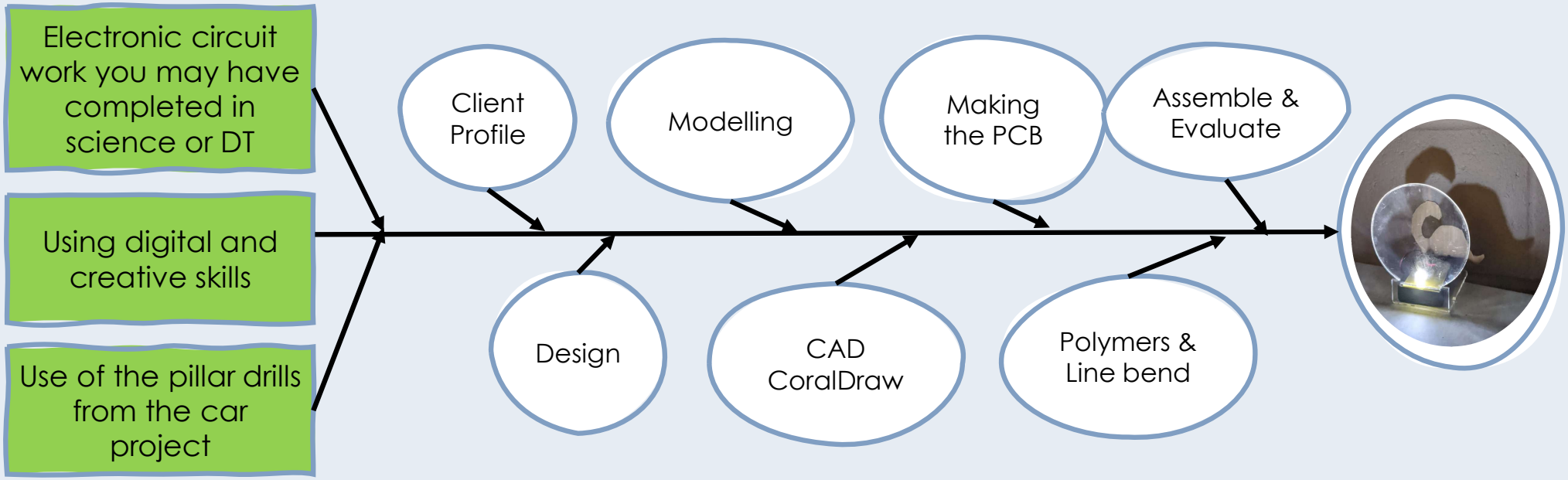
We study electronics to gain a thorough understanding of the world around us. Through building circuits, coding microcontrollers, designing and making casings for our circuit boards, we develop key skills to be able to create solutions to everyday problems in innovative ways.

The Flo-Glow lamp project builds on what you may have learnt from the science and DT in primary school, developing our skills and understanding on how electronic products work.



Project 3; Game in a Box - Why do we study Design Materials?

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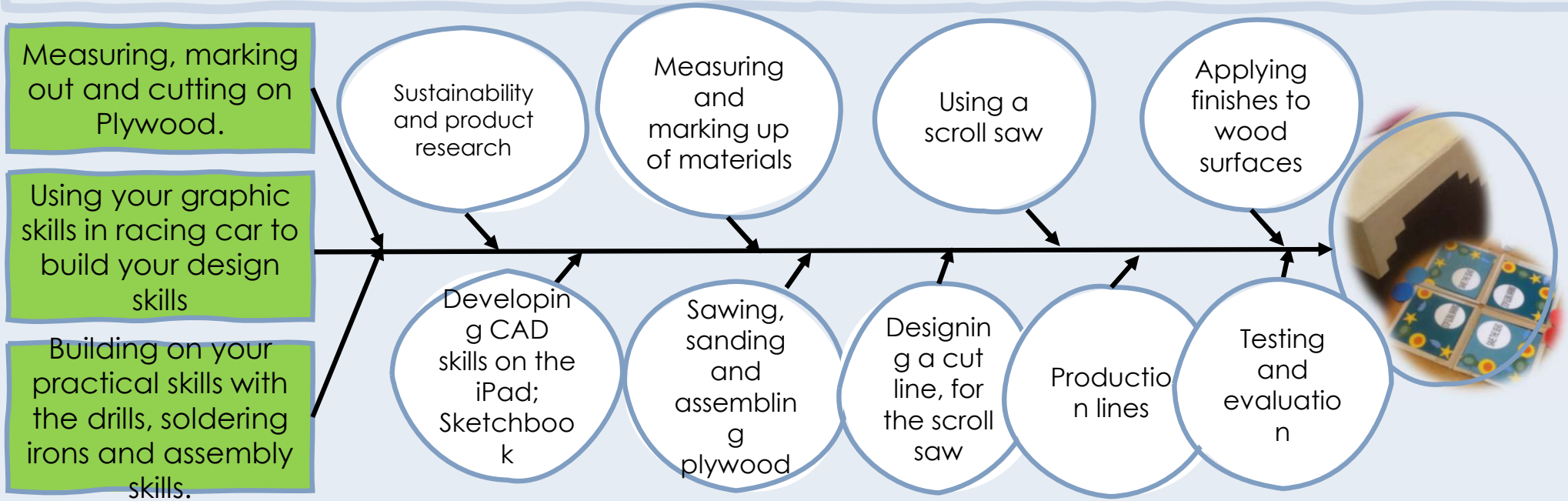
The Game In A Box teaches you how to use hand and machine tools for wood working to create an individual box. Within this you will expand your creative skills to design and make a gameboard within Computer Aided Design software.



Yr 8 Project 1; Clock - Why do we study Resistant Materials within DM?

By studying Design and Technology we allow opportunities to develop skills and knowledge across a wide range of disciplines using traditional, practical and computer aided tools. Design and Technology covers Product Design, Resistant Materials, Electronics, Fashion and Textiles and Engineering, all problem-solving subjects building confidence and resilience in creative skills, testing, failing, improving and creating successful outcomes individually, or as part of a team.

We study resistant materials to gain a thorough understanding of the world around us. Through sketching, CAD and model making (design and making products) we develop key skills to be able to create solutions to everyday problems in innovative ways.

The Clock project builds on what you may have learnt from the science and DT in primary school, developing our skills and understanding on how we can use materials to create products.

2D and 3D sketching to create original ideas.

Using Computer Aided Design to model and develop your product.

Use thermoplastic and vacuum forming to make the prototype product.

Design Brief and Specification

Famous Designers2 D and 3D sketching

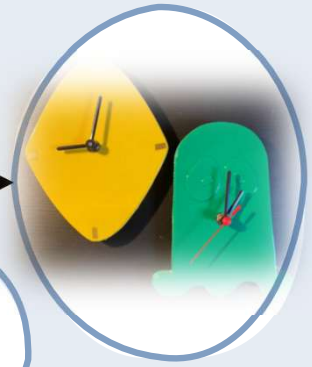
2D and 3D CAD: Onshape

Develop – paper modelling

Making the pattern for forming

Vacuum forming and finishing

Assembly



Project 1; Torch Project - Why do we study electronics within Design Materials?

By studying Design and Technology we allow opportunities to develop skills and knowledge across a wide range of disciplines using traditional, practical and computer aided tools. Design and Technology covers Product Design, Resistant Materials, Electronics, Fashion and Textiles and Engineering, all problem-solving subjects building confidence and resilience in creative skills, testing, failing, improving and creating successful outcomes individually, or as part of a team.

We study electronics to gain a thorough understanding of the world around us. Through building circuits, coding microcontrollers, designing and making casings for our circuit boards, we develop key skills to be able to create solutions to everyday problems in innovative ways.

The torch project builds on what you learned in the Flo Glow project and introduces new components, such as capacitors to build a more complex product. As well as soldering, you'll expand your knowledge of CAD CAM, and develop your designing skills.

