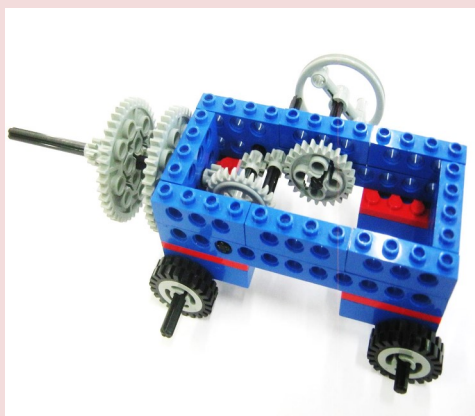


**Overview:**

Year 7 Design and Technology covers Product Design & Make, including Resistant Materials, Systems & Control, Textiles and Cooking/Nutrition – taught in specialist rooms. A variety of creative and practical tasks are undertaken to develop the skills required of a designer/maker. Cooking techniques and an understanding of nutrition and healthy eating are also developed.



# Year 7

## DESIGN & TECHNOLOGY

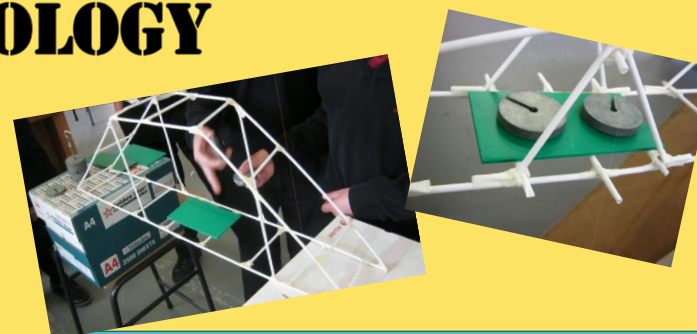
**Product Design/Resistant Materials**

You will be taught how to use hand tools and machinery safely and accurately.

An initial project requires you to design and make a holder for a tea-light candle. You will design and make card models before working with metal and wood. Your tea-light holder must function and do its job of supporting the candle – but it must look the part. You will learn to consider aesthetics/form – heating of the copper will allow you to change its 3D form, colour and surface pattern.

**Product Design – Mini-Activities**

LEGO models will be built to find out about mechanisms. Finding out about gears– and how to use them to slow things down or make them move faster. You'll apply your maths skills to gear ratios. You will assemble an LED and batteries to make a mini torch. Making the torch light up will be the start of understanding electronic systems. You'll find out about frame structures–building bridges and towers out of art straws. You'll compete in groups to find out whose bridge is the best –as they are tested to destruction.

**Food & Nutrition**

You will work on the hob, creating a roux sauce and macaroni cheese. You'll find out about food hygiene when preparing and cooking chicken—when making chicken goujons and chicken fajitas. Testing and tasting will be taught—things to look out for when reviewing your culinary delights.

You'll learn how to operate an oven, and work safely in a kitchen. Chopping fruit and vegetables will be one skill you'll develop, along with preparing a fruit crumble.

**Textiles**

You will find out about types of natural and synthetic fibres and their construction. You'll develop your weaving skills and a variety of hand stitching techniques. Then you'll use 'scruffiti' as a design tool, and apply your practical skills to a design and make assignment— Creative Creature.

