

## RESISTANT MATERIALS

<p><b>Innovation project</b> (13weeks)</p> <p>Students develop skills in designing and model making. Working as individuals and in groups, keeping safe in a workshop and empathising with the end user who has a disability.</p>	<p><b>Sellotape Dispenser</b> (7 weeks)</p> <p>An introduction to using tools in a workshop, focussing on accuracy, and cutting and shaping aluminium.</p>	<p><b>Moisture Sensor</b> (6 weeks)</p> <p>A project to introduce the concepts of electronics to students, using soldering irons to make a sensing unit.</p>	<p><b>Sweet Dispenser</b> (13 weeks)</p> <p>This project brings together the designing and making skills taught in Year7 and allows pupils to design and make a creative product using mostly wood tools and machines.</p>	<p><b>Prior Learning</b> Students will have experienced modelling at KS2 and may have worked with a small array of materials. They will have been exposed to the concept of design and development.</p>
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## CAD/CAM

<p><b>Board Game</b> (13 weeks)</p> <p>Students learn to use Corel draw as a design package on the computer to design a logo. Then in a combination of hand drawing and computer skills, they design a board game, which is then laser cut into a puzzle. Students learn how to use Computer Aided Design and manufacture to make a product and package it. Students also learn about the many features of a package and what information is included.</p>	<p><b>Prior Learning</b> Basic ICT skills are taught at KS2, some primaries use google Sketchup. Pupils have different levels of expertise that we build on, very few have used a graphics package such as coral draw before.</p>
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## TEXTILES

<p><b>Pencil Case</b> (13 weeks)</p> <p>Pupils research a theme (such as endangered animals) draw a range of designs and then use a combination of felt applique and machine stitching to make the front. They then weave recycled fabrics and machine stitch. It is all then made into a pencil case with a zip using the sewing machine.</p>	<p><b>Prior Learning</b> Most students have done very little textiles in KS2, some have done a significant amount at home.</p>
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## FOOD

<p><b>Hygiene and safety in the kitchen &amp; basic practical skills.</b></p> <p>Students will acquire a range of practical skills such as fruit and veg preparation They will learn how to work safely in a school environment. They will learn how to use all parts of the cooker to make a variety of dishes e.g. Pizza toast, pasta, wedges.</p>	<p><b>Eat well plate</b></p> <p>Recall and apply the principles of the 'Eat Well Plate' and the 8 tips for healthy eating. Use equipment to learn how to measure and weigh accurately. Be able to adapt recipes to make them healthier. Dishes to be made include a pasta dish, fruit crumble or rock buns.</p>	<p><b>Safe food storage and the use of the refrigerator.</b></p> <p>Learn how to store food safely to avoid wastage. Learn about food poisoning bacteria and how it can be avoided.</p>	<p><b>Prior Learning</b> Many students have cooked, learned about the purpose of different foods on the body and learned about healthy eating while in KS2. Some students do cook at home.</p>
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## CAREERS LINKS

ICT teacher, graphic designer, games developer, product designer, engineer, using CAD as a designer, architect or engineer, fashion designer, fabric specialist, costume designer, textile technician or textile developer, careers in catering, as a chef, food hygiene, product development, manufacturing and many more.

## CHARACTER LINKS

Teamwork, responsibility when using tools and equipment (performance virtues), resilience, learning from failure, awareness of the needs of others, awareness of environmental issues (civic virtues), critical thinking, problem solving, making judgements, awareness of health and wellbeing (moral virtues).

## KEY ASSESSMENT DATES

The main areas for assessment are designing/ making/ evaluating and technical knowledge. Each project has formal assessment pieces built into the project. For example, Food assesses making and technical knowledge; the innovation project assesses making and evaluation. All areas are covered at least twice through the year.