

## KS3 Curriculum – Year 8 Design and Technology

<b>Terms 1 - 6</b>	<p>During Year 8 pupils will continue to develop an understanding of Design and Technology through studying the following topics:</p> <ul style="list-style-type: none"><li>• Microelectronics – Pupils will design and manufacture a printed circuit board for a changing sign</li><li>• Pizza Challenge – Pupils will consider the nutritional needs of a specified consumer group and design a pizza to meet their requirements.</li><li>• Personal Organisation – Pupils will design and make a textile product that can be used for storage in the home.</li><li>• Structures – Pupils will build a structure that will span a specified distance. The structure will be expected to support a maximum load at its mid-point and will be tested to destruction.</li><li>• Better Balance – students will design and fabricate a balancing figure using a combination of hand and machine tools.</li></ul>
<b>Recommended Resources:</b> <ul style="list-style-type: none"><li>• Protective cotton apron when working with wood, metal and plastic (these can be purchased from the shop in the finance office)</li><li>• A durable container to transport food products and ingredients to and from home</li><li>• Basic graphic equipment including good quality 2H and HB pencils, coloured pencils, felt pens and a pair of compasses</li></ul>	
<b>How you can help:</b> <ul style="list-style-type: none"><li>• We ask that you make a small contribution toward the cost of the materials being used and will provide further details in due course.</li><li>• Throughout the course students will have the opportunity to use computer aided design. West Point Bridge Designer software can be downloaded free of charge and it would be very helpful if students had access to it at home. <b>SketchUp</b> 3D modeling software is easy to learn and incredibly fun to use. This is also available as a free download.</li><li>• Homework tasks often take the form of research and project evaluations. Access to encyclopaedia type material either through books, CD-ROM, or the Internet would be most beneficial. Your advice, support and observations as consumers will be very helpful, particularly at the evaluation stage.</li><li>• Pupils will need to provide ingredients for food projects and may require help with shopping and preparation. Pupils will also need to provide materials for textiles work.</li><li>• In the past some parents have been able to support us through the donation of surplus materials. If you have access to any resources which you consider may be of use please let us know. We are particularly interested in plywood off cuts, thermoforming plastic, thin card and fabric.</li></ul>	