

Year 9

Wooden coat hook

The wooden coat hook project is a largely practical project that introduces students to the workshop at Queen Elizabeth High School. The practical nature of the topic is used to deliver key subject knowledge to the students and develop their use of tools and equipment in the workshop. During this project students learn about the different categories and specific types of timber. They will learn about the different properties we use to describe how a material behaves, building on knowledge gained in year 7 and 8.

Students will use working drawings, learn about different wood joining and finishing techniques, and how to safely use the tools and equipment in the workshop.

Sustainable toy design

This topic is a design-based project where students are expected to solve design problems in a creative and sustainable manner. They will work creatively within the constraints of a design brief and specification. Students will be able to understand the difference between the linear and iterative design process. Students will understand the effect of design and technology on society and the environment, to understand the wider responsibilities of designers.

Students will practice and perfect their presentation skills which were introduced in middle school. This will allow them to confidently use the isometric drawing and rendering techniques to communicate their ideas to others.

Buzz box project: Introduction to electronics

During this project students will manufacture an electronic product. They will all gain an understanding of basic electronic concepts as well as manufacturing their own circuit using the soldering process. Components covered include resistors, capacitors, integrated circuits and different output devices. The student will learn about how the different components on the PCB (Printed Circuit Board) work and how they control the flow of electrons.