

Resistant Materials at Key Stage 3

Resistant Materials is taught as part of the Design and Technology rotation. In years 7, 8, and 9, pupils have one term in Resistant Materials, approximately 24, one hour lessons.

Year 7

The aim of the project is to learn how to use a variety of workshop equipment to make a small product using timbers, plastics, and composites such as concrete. Pupils will also learn a number of Graphics skills, and they will design and make retail style packaging for their finished product.

Assessed h/w: practical diaries/information poster

Baseline Assessment (first rotation only)

End of year exam (third rotation only)

Year 8

During the year pupils will work on a variety of projects to develop their practical and designing skills. There will be projects focussed on making which will build upon the skills they have learnt in Year 7 and introduce them to some new workshop processes and equipment, and there will be projects where the pupils will only carry out designing tasks and the focus will be on ideas and creativity. Evaluation techniques are further developed.

Assessed h/w: practical dairies/isometric drawing

End of year exam (third rotation only)

Year 9

The aim of the project is to design and make a fully functioning speaker for an iPod or other music playing device. The pupils will learn about electronic components and how to assemble a working electronic circuit. They will learn about classic design and will design a personalised case for the speaker circuit using Computer Aided Design. Lastly, they will learn about plastics and how they are processed by hand and machine.

Assessed h/w: material properties/electronic components/creativity

End of year exam (third rotation only)