Curriculum Plan Key Stage 3
Design and Technology – Resistant Materials

Academic year: 2020/21	Lead Teacher: Mr Bennett (a.bennett@todhigh.co.uk)	
12 week rotation		
Year 7	Year 8	Year 9
Balancing Toy – Introduction to resistant materials Students will be introduced to tools, equipment and materials available to them in the workshop environment. They will design and make a balancing toy using a combination of wood, plastic and metal. They will use an iterative process to develop their own ideas from the Design Brief through to an end product which they may take home. They will develop design skills, including research and analysis of existing products, producing annotated sketches of their ideas. Once they have designed their ideas they will make them using hand tools and powered tools in the workshop. Students will also be introduced to Computer Aided Design and Computer Aided Manufacturing techniques.	**Bauhaus Cushion- Introduction to Textiles** Students will develop their knowledge of inspirational Art and crafts movements from the past 100 years, then develop their own ideas based on one of these arts movements. Students will design and make a small cushion based on the Bauhaus arts and crafts movement, of the 20th Century. They will then produce designs inspired by the work of others. They will learn how to sew by hand, using needles and thread, plus creating their own patterns. They will use the applique technique to recreate Bauhaus styled images on their cushions. Students will then have the opportunity to use a sewing machine to complete the final outcome. They will develop drawing and design skills as well as the practical skills, ultimately producing an end product, a cushion, which they may take home.	**Earphone wrap –Designing with CAD and CAM** Students will follow an iterative design process to design and make a product which has proved to be successful with teenagers and commercially viable. This project is focussed on the design process, rather than making, however each student will have the opportunity to take home a finished product. Initially looking at the work of other past and present, students will use their research to develop their own ideas. They will develop their ideas through drawings and sketches, modelling using cheap and quick techniques, before developing their ideas using Computer aided Design. Ultimately students will produce their final outcome using Computer Aided Manufacturing methods.

How can parents and carers help?		
Year 7	Year 8	Year 9
Talk to your child about any part of their work. Look at any kinds of desk toys/ tools/ objects around the home and ask them how they think it was created, i.e. what materials it is made from? How they think it was joined together? What finish has it got and why? Encourage your child to question and investigate how everyday products are made. What materials have been used, and which tools? Encourage them to practise their drawing skills as much as possible and set them challenges to motivate and inspire them. 'Commission' them to replicate an item in the home. Nurture their talent and encourage them to improve, value their ability and take an open-minded approach should your child wish gain employment in the world of design or technology in the future.	Talk to your child about any part of their work. Look at examples of textile based products around the home and ask them how they think it was created i.e. Cushions, curtain s and clothes? How were they decorated, embroidery, print, repeat patterns etc. Encourage them to practise their drawing skills as much as possible and set them challenges to motivate and inspire them. 'Commission' them to replicate an item in the home. Nurture their talent and encourage them to improve, value their ability and take an open-minded approach should your child wish to be an artist/take up employment in the art world in future.	Talk to your child about any part of their work. Look at any kinds of desk toys/ tools/ objects around the home and ask them how they think it was created i.e. What materials it is made from? How they think it was joined together? What finish has it got and why? Encourage them to practise as much as possible and set those challenges to motivate and inspire them. 'Commission' them to create a piece of art for you or someone else. Nurture their talent and encourage them to improve, value their ability and take an open-minded approach should your child wish to be an artist/take up employment in the art world in future.

Homework		
Year 7	Year 8	Year 9
Homework is set up to every two weeks. Students are welcome to access computers in Rm 25 if needed.	Homework is set up to every two weeks. Students are welcome to access computers in Rm 25 if needed.	Homework is set up to every two weeks. Students are welcome to access computers in Rm 25 if needed.
Assessment		
Year 7	Year 8	Year 9
Students complete formal assessments leading up to each data check. These assessments will test the skills, knowledge and understanding they have covered to that point. *The grade used for the data check is an accumulation of the results of these assessments.* *Students do at times complete practice assessments, informal assessments or pre-checks to help inform teaching.*	*Students complete formal assessments leading up to each data check. These assessments will test the skills, knowledge and understanding they have covered to that point.* *The grade used for the data check (previously STARS) is an accumulation of the results of these assessments.* *Students do at times complete practice assessments, informal assessments or pre-checks to help inform teaching.*	*Students complete formal assessments leading up to each data check. These assessments will test the skills, knowledge and understanding they have covered to that point.* *The grade used for the data check is an accumulation of the results of these assessments.* *Students do at times complete practice assessments, informal assessments or pre-checks to help inform teaching.*