Curriculum Intent, Implementation and Impact

Subject: Design and Technology KS3.

Year group:7

Periods per fortnight: 3

Intent:

Vision

Engagement, Resilience, Success.

Mission Statement

In the Buckingham School Design and Technology Department, our vision is to give Year 7 students a broad range of design and practical skills. We have created a varied range of current Design and Technology threads for the students to take part in. This engaging curriculum is underpinned with exciting and engaging lessons that will really help students engage with their learning, through the various new learning experiences that they will cover in Design and Technology.

We will encourage the students to develop and demonstrate their resilience, as they progress through a carousel of various Design and Technology Threads in KS3. They will develop an understanding of the design process, then finish with the creation of their ideas into practical working pieces.

The students will also be praised and rewarded as they progress through their learning, with positive and constructive feedback, on each coursework element they complete on their journey to success.

These successful students will then be well prepared for their options choices at the end of Year 9, with sufficiently acquired skills needed to help them access any Design and Technology courses in KS4 that they wish to.

In Year 7 our students will cover the following Design and Technology threads:

- Food Technology.
- Graphics pop up books.
- Textiles.
- Electronics and Woodwork Monster Alarms.

Each Year 7 student will complete the following threads throughout the academic year. These Schemes of learning will be taught using a range of different techniques, including practical and written elements.

The Design & Technology Department will ensure that the School Virtues will be embedded into our schemes of learning.

- Resilience – This will be a cornerstone of our teaching, as we will encourage our Year 7 students to research and discover exciting and new developments and practices within each of the threads. Students will be encouraged to create their own research models and product design with guidance from the teacher, to make mistakes and adapt from them as they then put their ideas into the manufacturing of their final piece.

- Curiosity – Students will be asked to develop a range of research methods and use a variety of new Design and Technology skills. Some students will have no previous or limited experience of Design and Technology from KS2. Their curiosity will be expanded as we will ensure that they have a wide range of questions to ask and perspectives to think about over various Threads.

- Ambition - To strive to develop their design Process skills in each of the Design and Technology Threads. They will be guided throughout with exemplary work; the students will be given constructive feedback throughout as they put these ideas into practise of making their final pieces. Students will also be shown and encouraged to study exemplar pieces in the real world, enabling the students to attain the skillsets to access the KS4 curriculum.

- Confidence - Students will develop confidence, through Peer formative feedback sessions within the class. They will also have to present their final designs to the fellow classmates at the end of the course work unit.

- Respect – Students will be taught to be respectful of each other and of their practical environment. They will learn about the safety rules and regulations associated with a Working Kitchen and Workshop. They will learn to value other opinions and designs through formative Peer feedback.

- Empathy – Students will be asked to develop Empathy when exploring the design process and manufacturing of their final pieces. From sustainable resources to manufacturing practices in LEDC's, they will develop a more Empathetic approach to how and why products are made.

- Integrity – Students will be taught the importance of Health and Safety standards within a Working Kitchen and Workshop. They will be encouraged to develop their understanding of rules and principles throughout the design and manufacturing process.

IMPLEMENTATION:

Term	Topics studied	Extended learning opportunities.	How parents could support students
Each Year 7 group will study one of the various threads over a termly carousel.	Each Year 7 student will have a Design and Technology folder that contains 4 booklets, one for each of the Design & Technology Threads they will study over the course of the academic year. Each Thread will have a summative assessment at the end of each Term. These will either be a written assessment or an assessment of their final piece. This will give an overall progress summary of each student throughout the year across Design and Technology.	Homework will be issued regularly via Google Classroom. Homework will take the form of research and analysis tasks, that will support the various skill sets within the Threads and will be set on Google classroom. Students will be asked to complete worksheets and additional revision tasks for any end of thread written assessments.	

	<u>Graphics and design.</u> <u>Pop up books.</u> <u>Time: 9-12 weeks</u> Year 7 students will take part in developing their own Children's popup book. ● Students will be given a design brief and asked to develop ideas for a successful Children's Character. ● They will start ideas development with mood boards and Character feature analysis in their booklets. ● Storyline ideas and development. ● Pop up mechanisms and the making process of a popup book. ● Practical making process of manufacturing their Popup book. ● Analysis of final product and design process reflection.	● Students will have to research varied Character ideas and storylines. ● Also research various Pop Up Mechanisms that are used currently in mainstream publishing. ● Analysis and formative feedback on their design process and creation of working models.	● Parents will be able to support your child, by ensuring all homework tasks are completed on time. ● Ensuring all students have access to Google Homework. ● Encourage and incentivise their children to complete the other websites used, linked through the Google Homework.
	<u>Food Technology.</u> <u>Time: 9-12 weeks.</u> Year 7 students will take part in understanding where food comes from, how to cook a range of dishes safely and hygienically and to apply their knowledge of healthy eating. Students will have the opportunity to work through the following contexts: Domestic and local (home and health); Industrial (food and agriculture). ● Students will develop their knowledge and understanding of ingredients and healthy eating;	Homework and ingredient lists will be issued regularly via Google Classroom. Homework will take the form of research and analysis tasks, that will support the various skill sets within the Threads and will be set on Google classroom. Students will be asked to complete worksheets and additional revision tasks for any end of thread written assessments.	● Parents will be able to support your child, by ensuring all homework tasks are completed on time. ● Ensuring all students have access to Google Homework. ● Encourage and incentivise their children to complete the other websites used, linked through the Google Homework. ● Parents will be asked to support their children by ensuring they have all of their

	● Students will develop food preparation and cooking techniques; ● Students will develop their knowledge of consumer food and drink choice; ● Students will be able to apply their knowledge to make informed choices; ● Students will develop the creative, technical and practical expertise needed to perform everyday tasks confidently; ● Students will build an apply a repertoire of knowledge, understanding and skills in order to design and make high quality products for a wide range of users; ● Students will evaluate and test their ideas and products and the work of others. There will be a summative assessment at the end of this topic to gauge student attainment and progress.		ingredients ready for practical lessons.
	<u>Electronics/Monster alarms.</u> <u>Time: 9-12 weeks.</u> Year 7 students will take part in developing their own working electronic alarm. ● Design brief. ● Ideas creation. ● Designers research. ● Modeling and woodwork. ● Electronic circuits and components. ● Creation of final piece. ● Analysis of final product and design process reflection. ● There will be a summative assessment of their final piece at the end of this topic to gauge student attainment and progress.	Homework and ingredient lists will be issued regularly via Google Classroom. Homework will take the form of research and analysis tasks, that will support the various skill sets within the Threads and will be set on Google classroom. Students will be asked to complete worksheets and additional revision tasks for any end of thread written assessments.	● Parents will be able to support your child, by ensuring all homework tasks are completed on time. ● Ensuring all students have access to Google Homework. ● Encourage and incentivise their children to complete the other websites used, linked through the Google Homework.

	<u>Textiles.</u> <u>Time: 9-12 weeks.</u> Year 7 students will be able to show a knowledge and understanding of Textiles tools, equipment and materials. They should be able to confidently describe and discuss the process they went through to make their final product, using the correct technical language. **Students achieve through this curriculum and learn how to:** ● Stenciling, design, make and use ● Accurate measuring, use of measuring tools, seam allowance ● Following a plan and a pattern ● Use of specialist equipment ● A working vocabulary and specialist terminology that is relevant to textiles. There will be a summative assessment of their final piece at the end of this topic to gauge student attainment and progress.	Homework will be issued regularly via Google Classroom. Homework will take the form of research and analysis tasks that will support students in class. Homework will either consolidate lessons or be flipped learning opportunities. Extended learning opportunities include researching fabric, artists, designers and textile products. Opportunities will also involve evaluation of work, designing ideas and sources.	● Parents will be able to support your child, by ensuring all homework tasks are completed on time. ● Ensuring all students have access to Google Homework. ● Encourage and incentivise their children to complete the other websites used, linked through the Google Homework.

IMPACT:

By the end of the Year 7, students will have had a real taste of three Threads of Design and Technology. This will be evident in the classroom folders, classroom booklets and also any practical pieces that they will make. This highly engaging and varied curriculum will teach them life skills and also provide the stepping stones needed to continue on a pathway in KS4 Design and Technology.

The Seven School Virtues will be evident within the engaging Schemes of Learning and in each of their lessons. The student's will have developed and built up resilience throughout the year, by regularly challenging themselves both in and out of the classroom, to further their enquiry about the subject content. They will also have shown a passion for their subject and have demonstrated their success in the summative assessments throughout the year.