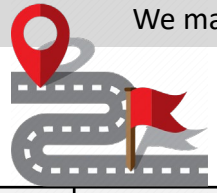
Curriculum map

Computing at BBA



	Term 1	Term 2	Term 3 / Term 4	Term 5 / Term 6
Year 7	**Computing Rotation (9 weeks)** ○ **Computer System:** E-safety, Passwords, File Management, Cloud Computing ○ **Hardware:** Input/Output, Secondary Systems ○ **Computational Thinking:** Abstraction, Decomposition, Pattern Recognition, Algorithms ○ **Data Representation:** Binary, Image Representation, File types, Quality	**Food Rotation (9 weeks)** ○ Introduction to health safety and hygiene in food. ○ Eatwell plate can be used to make healthy choices and an introduction to nutrients. ○ Identification and safe use of a range of equipment. ○ Introduction to basic skills in food preparation (cutting, peeling, frying, boiling, baking, using a food processor to grate). ○ Introduction to product analysis and sensory analysis, Reading label ○ Introduction to festivals and their foods ○ Introduction to food science.	**Textiles Rotation (9 Weeks)** ○ Introduction to health and safety in Textiles. ○ What are textiles and where are they used. ○ Introduction to using a client brief to create a specification and inform design choices. ○ Creating, annotating design ideas. ○ Introduction to product analysis. ○ Introduction to sewing machine safety and sewing of straight lines. ○ Construction of a tote bag with a biomimicry themed pocket decorated with fabric crayons.	**Product Design Rotation (9 Weeks)** ○ Health and safety in and around the workshop, how to use each tool/machine safely. ○ Analysis of products using ACCESS FM ○ Understanding why we design for a client. ○ Using sketching to produce a design idea that follows a given theme ○ Understanding about the different types of wood (hard/soft woods) ○ Evaluating design decisions throughout the design process
Year 8	**Computing (9 weeks)** ○ **Hardware:** CPU, Performance, Memory, Secondary Storage ○ **Networking:** LAN/WAN/PAN, Hardware, Connection and Network security. ○ **Computational Thinking:** Developing Algorithms, Sequence, selections, Iterations, Testing, Debugging ○ **Data Representation:** Binary conversions, Additions, Scripting, Character Sets, Units of data	**Food (9 weeks)** ○ Health, safety and hygiene in depth with food poisoning ○ Ingredient experimentation and product analysis. ○ Combination of dishes with more components including meat. ○ Introduction to countries and their traditional foods. ○ Introduction to secondary processing, cuts of meat and how this can affect price. ○ Choosing and adapting recipes based on nutritional need and age. ○ Adapting recipes to make them healthier. ○ Introduction to creaming as a method of cake making.	**Textiles Rotation (9 Weeks)** ○ Introduction to health and safety in Textiles. ○ What are textiles and where are they used. ○ Introduction to using a client brief to create a specification and inform design choices. ○ Analysis of products using ACCESSFM. ○ Creating and annotating design ideas. ○ Introduction to sewing machine safety, terminology and sewing of straight lines. ○ Construction of a cushion using food packaging as a theme. ○ Using the practical skills of fabric pens, applique, ironing, machine sewing, hand sewing.	**Product Design and Textiles (9 Weeks)** ○ Health and safety. ○ Analysis of products using ACCESS FM ○ Completing a client profile that links to the brief ○ Using different sketching techniques to come up with design ideas ○ CAD/CAM ○ Soldering/electronics knowledge ○ Environmental issues of plastic and where plastic comes from. ○ Theory on manufactured woods (properties/types etc) ○ Protoype of a design idea that solves an original problem ○ Evaluating design decisions throughout the design process

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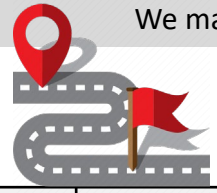

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 9	<u>Computing (9 weeks)</u> ○ **System Security:** Malware, Protection methods, encryption ○ **Networking:** Sequencing and Variables, ○ **Algorithms and Programming** ○ **Practical Application of Programming**		<u>Food (9 weeks)</u>		<u>Product Design and Textiles (9 Weeks)</u>	
OCR GCSE (9-1) Computer Science: Please click here for the Specification						
Year 10	○ Boolean Logic ○ Units ○ Data Storage ○ Designing, creating, refining algorithms.	○ Designing, Creating and refining ○ Algorithms ○ Programming Fundamentals ○ Data Types	○ Programming Techniques ○ Practical Programming skills	○ Binary – Characters – Images – Sounds – Compressions ○ Architecture of CPU ○ CPU Performance	○ Embedded systems ○ RAM/ROM/Cache ○ Secondary Storages ○ Network Topologies	○ Wired and Wireless networks ○ Protocols and layers ○ Practical programming revision.
Year 11	○ Threats to systems and Networks ○ Operating Systems ○ Utility software ○ Ethical, Legal, Cultural and environmental impacts	○ Defensive Designs ○ Testing ○ Language ○ IDE – Integrated Development Environment	○ Practical Programming revision ○ Searching and Sorting Algorithms and Programming	○ Theory Revision ○ Practical Programming Revision	○ **Theory Revision** ○ **Practical Programming Revision**	Final Exams