**Engineering Curriculum 2025/2026**

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| **Year** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **7** | **Zapper Game Project**  H&S in the workshop  Characteristics of natural wood  Product Analysis: Games  Designer Analysis: Celia Smith | **Zapper Game Project**  Characteristics of metal  Bending and shaping metal  Product Design Drawings  CAD zapper game designs | **Consolidation Learning Links**  [**Core design skills KS3 | Y7 Design and technology Lesson Resources | Oak National Academy**](https://www.thenational.academy/teachers/programmes/design-technology-secondary-ks3-l/units/core-design-skills-a819/lessons?sid-df29fa=AX_mMEvyi5&sm=0&src=3) | Rotation | Rotation | Rotation |
| **Assessment** | Formal Assessment at the end of rotation | Formal Assessment at the end of rotation |  |  |  |  |
|  | *Reading Presentations, Carryout worksheet activities, Use of Knowledge organisers, Use of written tutorials , News articles, Comprehension tasks, Word-searches, Homework Tasks, Use of word banks and find the missing word, Use of learning logs for recount and recall, DO NOW tasks* | | | | | |
| **8** | **Sweet Dispenser Project**  H&S metal casting process  Types of wood  Product Analysis: Sweet Dispensers  Designer Analysis: Alessi | **Sweet Dispenser Project**  Product Design Drawings  Intro to acrylic  Shaping Plastic  Logo’s and backdrops  Wood working skills | **Consolidation Learning Links**  [Future tech now! KS3 | Y9 Design and technology Lesson Resources | Oak National Academy](https://www.thenational.academy/teachers/programmes/design-technology-secondary-ks3-l/units/future-tech-now-81fd/lessons?sid-1d1abc=KsU4mueUO0&sm=0&src=3) | Rotation | Rotation | Rotation |
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| **9** | **Automata Toy**  H&S in the workshop and processes  CAM Mechanisms  Mechanical Toys  Product Analysis: Traditional Toys  Designer Analysis: Rob Ives | **Automata Toy**  Drilling techniques  Measuring accurately  Product Designs  Colour Application  Hand tools and machines | **Consolidation Learning Links**  [Design in the natural world KS3 | Y9 Design and technology Lesson Resources | Oak National Academy](https://www.thenational.academy/teachers/programmes/design-technology-secondary-ks3-l/units/design-in-the-natural-world-cc65/lessons?sid-1b0ca0=jOvD7nNR-3&sm=0&src=3) |  |  |  |
| **Assessment** | Written test, overall practical grade | End of unit written test |  |  |  |  |
|  | *Reading Presentations, Carryout worksheet activities, Use of Knowledge organisers, Use of written tutorials, News articles, Writing frames and scaffolding techniques, Use of word banks, DO NOW tasks, Revision guide comprehension tasks for theory element, exam question analysis and breakdown tasks* | | | | | |
| **10** | Component 1 Project 1  Intro to project: mood boards and mind maps  Designer Analysis x3  Designer Responses with model making x3  Primary Source Images  Wood Joints Workshops  Product Design Drawings | Component 1 Project 1  Measuring accurately  Soldering  Graffiti workshops  Acrylic Bending  Casting Workshops  Workshop documentation  Intro to 3D CAD | Component 1 Project 1  Developing ideas of Product Designs  Finishes workshop  Final Designs Drawings  Prototype of Final Design | Component 1 – Project 1 Practical  Final Design Production | Component 1- Project 2- Mock Exam  Intro to titles  Product Analysis  Designer Analysis  Response to designers and model making | Component 1- Project 2- Mock Exam  Creative workshops  Technique workshops  Use of hand tools and machines |
| **11** | Component 1- Project 2- Mock Exam  Developing ideas of Product Designs  Finishes workshop  Final Designs Drawings  Prototype of Final Design | Component 1- Project 2- Mock Exam Practical  Final Design Production | Component 2 – External set exam  Preparation and delivery of external set exam in January. | Component 2 – External set exam  Preparation and delivery of external set exam in January. | Component 2 – External set exam  Preparation and delivery of external set exam in January.  Practical Exam | End of Course |

*Digital Literacy Student Leadership: Actively promote news related articles on: Being Safe, Use of Software, Cyber Security, Health and Well Being, New Technology*

*ICT Competition Key:* **CEIAG SMSC ICT Enrichment**

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