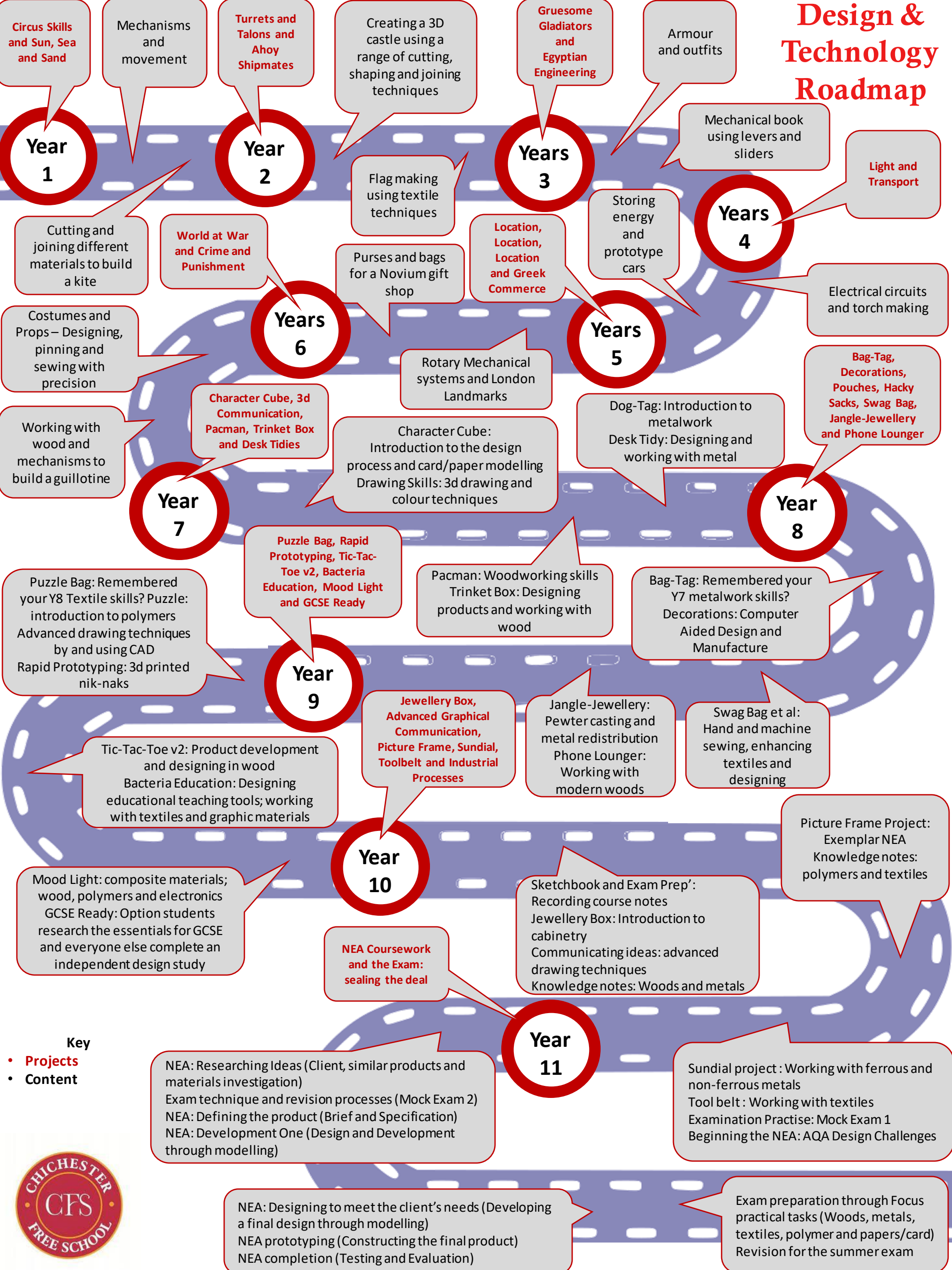


# Design & Technology Roadmap



**Year 1**

- Circus Skills and Sun, Sea and Sand
- Mechanisms and movement
- Cutting and joining different materials to build a kite
- Costumes and Props – Designing, pinning and sewing with precision
- Working with wood and mechanisms to build a guillotine

**Year 2**

- Turrets and Talons and Ahoy Shipmates
- World at War and Crime and Punishment
- Flag making using textile techniques
- Purses and bags for a Novium gift shop
- Character Cube, 3d Communication, Pacman, Trinket Box and Desk Tidies

**Years 3**

- Gruesome Gladiators and Egyptian Engineering
- Armour and outfits
- Mechanical book using levers and sliders
- Light and Transport
- Storing energy and prototype cars
- Rotary Mechanical systems and London Landmarks

**Years 4**

- Location, Location, Location and Greek Commerce
- Electrical circuits and torch making
- Bag-Tag, Decorations, Pouches, Hacky Sacks, Swag Bag, Jangle-Jewellery and Phone Lounger

**Years 5**

- Dog-Tag: Introduction to metalwork
- Desk Tidy: Designing and working with metal

**Year 6**

- Character Cube: Introduction to the design process and card/paper modelling
- Drawing Skills: 3d drawing and colour techniques

**Year 7**

- Puzzle Bag: Remembered your Y8 Textile skills? Puzzle: introduction to polymers
- Advanced drawing techniques by and using CAD
- Rapid Prototyping: 3d printed nik-naks

**Year 8**

- Pacman: Woodworking skills
- Trinket Box: Designing products and working with wood
- Bag-Tag: Remembered your Y7 metalwork skills?
- Decorations: Computer Aided Design and Manufacture

**Year 9**

- Tic-Tac-Toe v2: Product development and designing in wood
- Bacteria Education: Designing educational teaching tools; working with textiles and graphic materials

**Year 10**

- Mood Light: composite materials; wood, polymers and electronics
- GCSE Ready: Option students research the essentials for GCSE and everyone else complete an independent design study
- Jewellery Box, Advanced Graphical Communication, Picture Frame, Sundial, Toolbelt and Industrial Processes
- Jangle-Jewellery: Pewter casting and metal redistribution
- Phone Lounger: Working with modern woods
- Swag Bag et al: Hand and machine sewing, enhancing textiles and designing

**Year 11**

- NEA Coursework and the Exam: sealing the deal
- Sketchbook and Exam Prep': Recording course notes
- Jewellery Box: Introduction to cabinetry
- Communicating ideas: advanced drawing techniques
- Knowledge notes: Woods and metals
- Picture Frame Project: Exemplar NEA
- Knowledge notes: polymers and textiles
- Sundial project: Working with ferrous and non-ferrous metals
- Tool belt: Working with textiles
- Examination Practise: Mock Exam 1
- Beginning the NEA: AQA Design Challenges
- NEA: Researching Ideas (Client, similar products and materials investigation)
- Exam technique and revision processes (Mock Exam 2)
- NEA: Defining the product (Brief and Specification)
- NEA: Development One (Design and Development through modelling)
- NEA: Designing to meet the client's needs (Developing a final design through modelling)
- NEA prototyping (Constructing the final product)
- NEA completion (Testing and Evaluation)
- Exam preparation through Focus practical tasks (Woods, metals, textiles, polymer and papers/card)
- Revision for the summer exam

**Key**

- **Projects**
- **Content**

