

DT * students work on a carousel in order to study multiple aspects of Design Technology and so may not be taught these topics in this order. Practical skills may be amended due to Covid restrictions.

Module 1

Subject: DT
Topic Title: Electronics and Forces in Motion
Brief Summary of Content Studied: Electronic and mechanical systems can be adapted to complete different functions. Students to learn electronic circuits can be altered to engage mechanically in products, that simple circuits can be integrated into more complex systems and that the forces that act on a design may not be static. From this, students should be able to consider future problems as a series of smaller systems and components and apply Systems Thinking where needed.
Knowledge Organiser: https://docs.google.com/presentation/d/1fSW5mq3e_wbuh_3eHwXd8pT0Tdlu4ScO8dr85wtd3ik/edit?usp=sharing

Module 2

Subject: DT
Topic Title: Biomimicry
Brief Summary of Content Studied: Nature can be adapted to develop & improve the functionality of products through scientific and technical innovation. students to develop design communication SKills needed at KS4 to access the higher grades. Students to be able to work to a design brief and conduct research to inform design decisions leading to modelling solutions

Module 3

Subject: DT
Topic Title: Food Provenance/ Food and the environment
Brief Summary of Content Studied: Key groups and communities can use the processes and production methods that import our resources in both sustainable and unsustainable ways. This year pupils will be able to gain an understanding of where food comes from and various production methods. Under this topics pupils will also look at how these production methods impact the environment and possible solutions to reduce food waste, food miles and the overall carbon footprint of the food industry.
Knowledge Organiser: https://drive.google.com/file/d/1hpJRGp6APwMkpl0k8OliK6t7_MAEoZiq/view?usp=sharing

Module 4

Subject: DT
Topic Title: Food Provenance/ Food and the environment
Brief Summary of Content Studied: Key groups and communities can use the processes and production methods that import our resources in both sustainable and unsustainable ways. This year pupils will be able to gain an understanding of where food comes from and various production methods. Under this topics pupils will also look at how these production methods impact the environment and possible solutions to reduce food waste, food miles and the overall carbon footprint of the food industry.
Knowledge Organiser: https://drive.google.com/file/d/1hpJRGp6APwMkpl_0k8QliK6t7_MAEoZiq/view?usp=sharing

Module 5

Subject: DT
Topic Title: Memphis box
Brief Summary of Content Studied: Create a trinket box based on a design movement by analysing the work of past and present professionals to broaden understanding. Test, evaluate and refine their ideas and products against the specification.
Knowledge Organiser: https://drive.google.com/file/d/1z_qVHjWQJRfp3izW8gYFLPVHZAIOJgxO/view?usp=sharing

Module 6

Subject: DT
Topic Title: Memphis box
Brief Summary of Content Studied: Create a trinket box based on a design movement by analysing the work of past and present professionals to broaden understanding. Test, evaluate and refine their ideas and products against the specification.
Knowledge Organiser: https://docs.google.com/presentation/d/15zbPyR6PiZXkuqC0x6FtkaMec6OXRzNli6qau2nLkgY/edit?usp=sharing