Peacehaven Community School
Aspire • Believe • Contribute • Achieve

DT Learning Journey

Design Technology Wood-based Learning Journey
Year 7 to 11

YEAR 11

- Section C - Design and making Principles
- Section B Specialist Principles
- Section A Core Principles
- Final interventions
- NEA Hand-in & marking
- Evaluation write up
- Finishes & finishing
- Cutting list including costing
- Coached mock practice
- Revision programme
- Mock review
- Exam technique & practices
- ZigZag topic tests BBC bitesize Seneca
- February mock full paper
- Manufacturing Specification
- Catch-up opportunities
- October Mock
- 3.3 Topic Test 5 Prototype development
- What makes IKEA such profitable company?
- NEA Section E - Realising a design.
- NEA Section D Developing a prototype
- Topic Test 4 Communication of design ideas
- NEA Context issued. Section A
- Flat Pack Box
- Evidencing creativity
- NEA Section C Creative designs & modelling ideas

YEAR 10

- Environmental, social and economic factors
- Topic Test 6 Stencils, jigs, tessellation
- Design strategies
- Topic Test 7 Surface treatments and finishes
- Production aids, tolerance and datums
- Specialist principles 2 - Timber based materials
- Personal hygiene storage
- Specialist techniques and processes
- Specialist tools and equipment
- Perspective and sketching review
- Topic Test 1 Primary & secondary research
- What does GCSE NEA coursework look like?
- Occasional Table
- How can we ensure that all parts and joints are exactly the same?
- Surface treatments and finishes
- Influential Design Styles
- What are the characteristics of the Bauhaus design style?
- NEA Section B Brief & design specification
- Core Principles 6 - Material categories & properties
- Core principles 4 - Systems approach to designing
- How can mechanisms make life easier?
- making different movements using cams and levers
- Iconic product companies
- Health & safety review

YEAR 9

- Smart Textiles
- What are SMART materials?
- 9 investigate new and emerging technologies including photochromic material & encapsulated fabric
- Mechanisms
- 13 understand how more advanced mechanical systems used in their products enable changes in movement and force
- 14 What techniques are there to help us think of original, amazing ideas?
- understand how more advanced electrical and electronic systems can be powered and used in their products
- How do planes fly and what are the forces involved?
- Flight & Biomimicry
- LED Lamp
- How can electronics help us to control our environment?
- Orthographic, isometr and cutting lists.
- Electronic component
- Creativity & Communication
- 2d-design CAD
- 4 use a variety of approaches to generate creative ideas and avoid stereotypical responses
- 2 identify and solve their own design problems and understand how to reformulate problems given to them
- 8 analyse the work of past and present professionals and others to develop and broaden their understanding
- Working to plans within tolerances
- Structures and forces, platforms & bridges
- 12 understand and use the properties of materials and the performance of structural elements to achieve functioning solutions
- Structures
- 5 What is the secret of making a strong bridge structure?
- What has textiles design got to do with Black History?
- Gee Bend Quilting
- Types of fabric
- Sequence of making
- Black history month
- develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools
- 10 test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups
- 1 use research and exploration, such as the study of different cultures, to identify and understand user needs
- Sustainability audit
- the importance of insects

YEAR 8

- Maths for DT
- Why is aluminium a terrific material?
- Tealight Holder
- What are the benefits of using CAM cut moulds to make pewter shapes?
- Pewter Jewellery
- How do we design products that don't harm the planet?
- Sustainable BUG BOX
- 6Rs of recycling
- Woven / non-woven fabrics
- Pouring liquid metal
- Finishing metal
- understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists
- 11

YEAR 7

- How do I sew a button on and use applique to make fabulous textiles designs?
- 6 select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture
- What have you designed or made in primary school or at home?
- Material properties
- Plywood nature keyfob
- Monster Bag Tag
- Phone Holder
- Keyfob
- Sewing stitches
- Hand Embroidery
- 3 develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
- Where do different materials come from?
- Building confidence and resilience
- Keeping yourself and others safe in a workshop
- Measuring and units
- SAFETY GLASSES REQUIRED
- 7 select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties