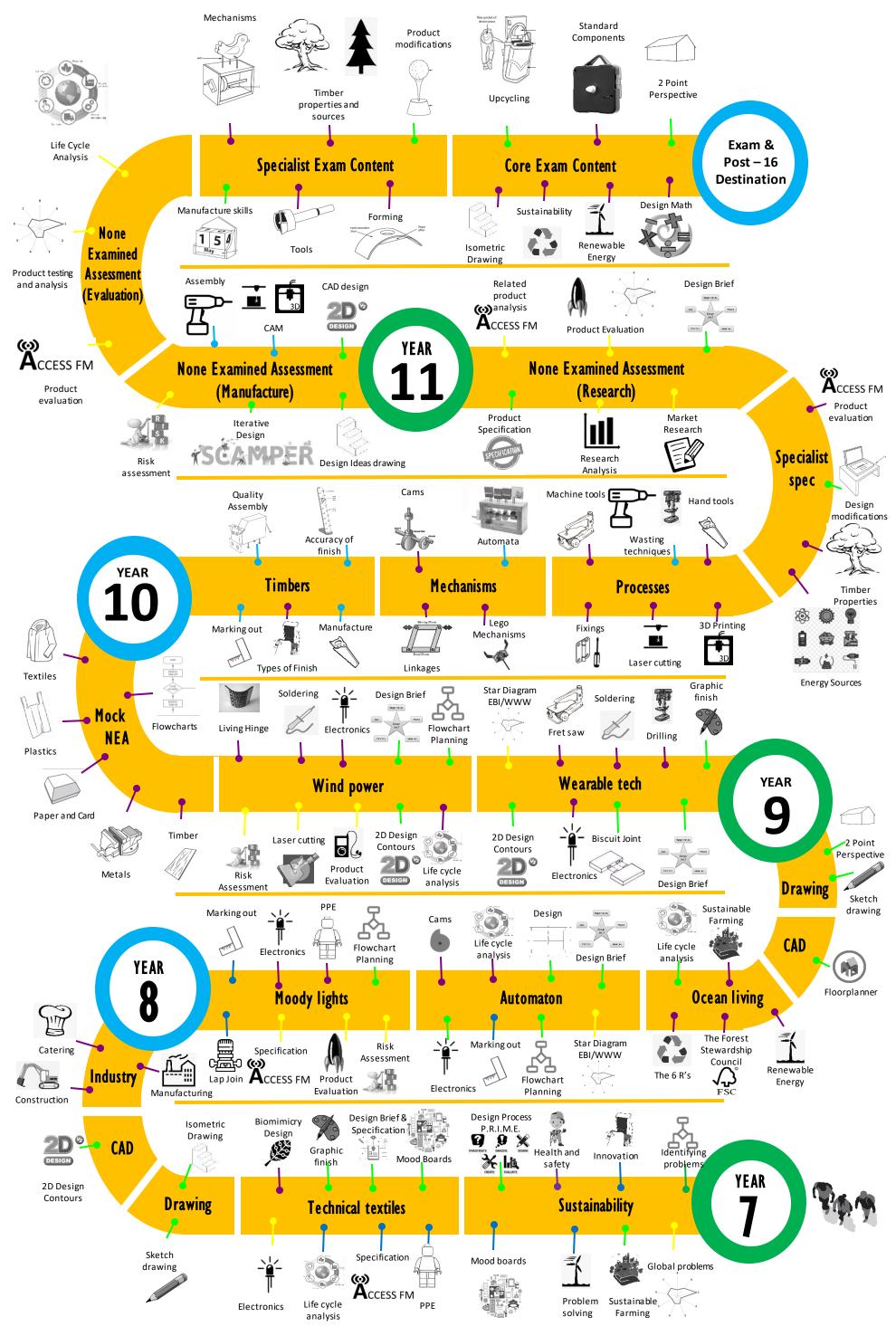# Design & Technology Curriculum Map

D&T offers you a curriculum which will engage and enthuse a passion for the subject. Giving you the opportunity to explore practical activities which will enable you to master the skills and secure your knowledge.

D&T provides the subject specific skills and knowledge as a platform for you to take your next steps, from KS3 to KS4, then onto a professional career within the Creative sector or further education.

Year 7 → **Remember – Understand – Apply – Analyse – Evaluate - Appraise** ← Year 11

GCSE Design and Technology will develop your skills in working with textiles, electronics, paper and boards, and timber. You will explore iterative design concepts, review a range of past designs and designers, develop your drawing skills and find out about new and emerging technologies such as Laser cutting, 3D printing and smart materials.

Specialist Exam Content
- Mechanisms
- Timber properties and sources
- Product modifications
- Manufacture skills
- Tools
- Forming

Core Exam Content
- Upcycling
- Standard Components
- 2 Point Perspective
- Isometric Drawing
- Sustainability
- Renewable Energy
- Design Math

Exam & Post – 16 Destination

None Examined Assessment (Evaluation)
- Life Cycle Analysis
- Product testing and analysis
- ACCESS FM
- Product evaluation

None Examined Assessment (Manufacture)
- Assembly
- CAM
- CAD design
- Risk assessment
- Iterative Design
- Design Ideas drawing

None Examined Assessment (Research)
- Related product analysis — ACCESS FM
- Product Evaluation
- Design Brief
- Product Specification
- Research Analysis
- Market Research

YEAR 11

Specialist spec
- ACCESS FM — Product evaluation
- Design modifications
- Timber Properties
- Energy Sources

Timbers
- Quality Assembly
- Accuracy of finish
- Marking out
- Types of Finish
- Manufacture

Mechanisms
- Cams
- Automata
- Lego Mechanisms
- Linkages

Processes
- Machine tools
- Hand tools
- Wasting techniques
- Fixings
- Laser cutting
- 3D Printing

YEAR 10

Mock NEA
- Textiles
- Plastics
- Paper and Card
- Flowcharts
- Timber
- Metals

Wind power
- Living Hinge
- Soldering
- Design Brief
- Flowchart Planning
- Electronics
- Risk Assessment
- Laser cutting
- Product Evaluation
- 2D Design Contours

Wearable tech
- Star Diagram EBI/WWW
- Soldering
- Graphic finish
- Fret saw
- Drilling
- 2D Design Contours
- Electronics
- Biscuit Joint
- Design Brief

YEAR 9
- 2 Point Perspective
- Sketch drawing

Drawing

CAD
- Floorplanner

Moody lights
- Marking out
- PPE
- Electronics
- Flowchart Planning
- Specification
- Product Evaluation
- Lap Join
- ACCESS FM
- Manufacturing
- Risk Assessment

Automaton
- Cams
- Design
- Life cycle analysis
- Design Brief
- Marking out
- Electronics
- Flowchart Planning
- Star Diagram EBI/WWW

Ocean living
- Sustainable Farming
- Life cycle analysis
- The Forest Stewardship Council
- The 6 R's
- FSC
- Renewable Energy

YEAR 8

Industry
- Catering
- Construction

CAD
- 2D Design Contours

Drawing
- Isometric Drawing
- Sketch drawing

Technical textiles
- Biomimicry Design
- Graphic finish
- Design Brief & Specification
- Mood Boards
- Specification
- Electronics
- Life cycle analysis
- ACCESS FM
- PPE

Sustainability
- Design Process P.R.I.M.E.
- Health and safety
- Innovation
- Identifying problems
- Mood boards
- Problem solving
- Sustainable Farming
- Global problems

YEAR 7

Design • **Knowledge** • **Manufacture** • **Evaluate**