

GCSE

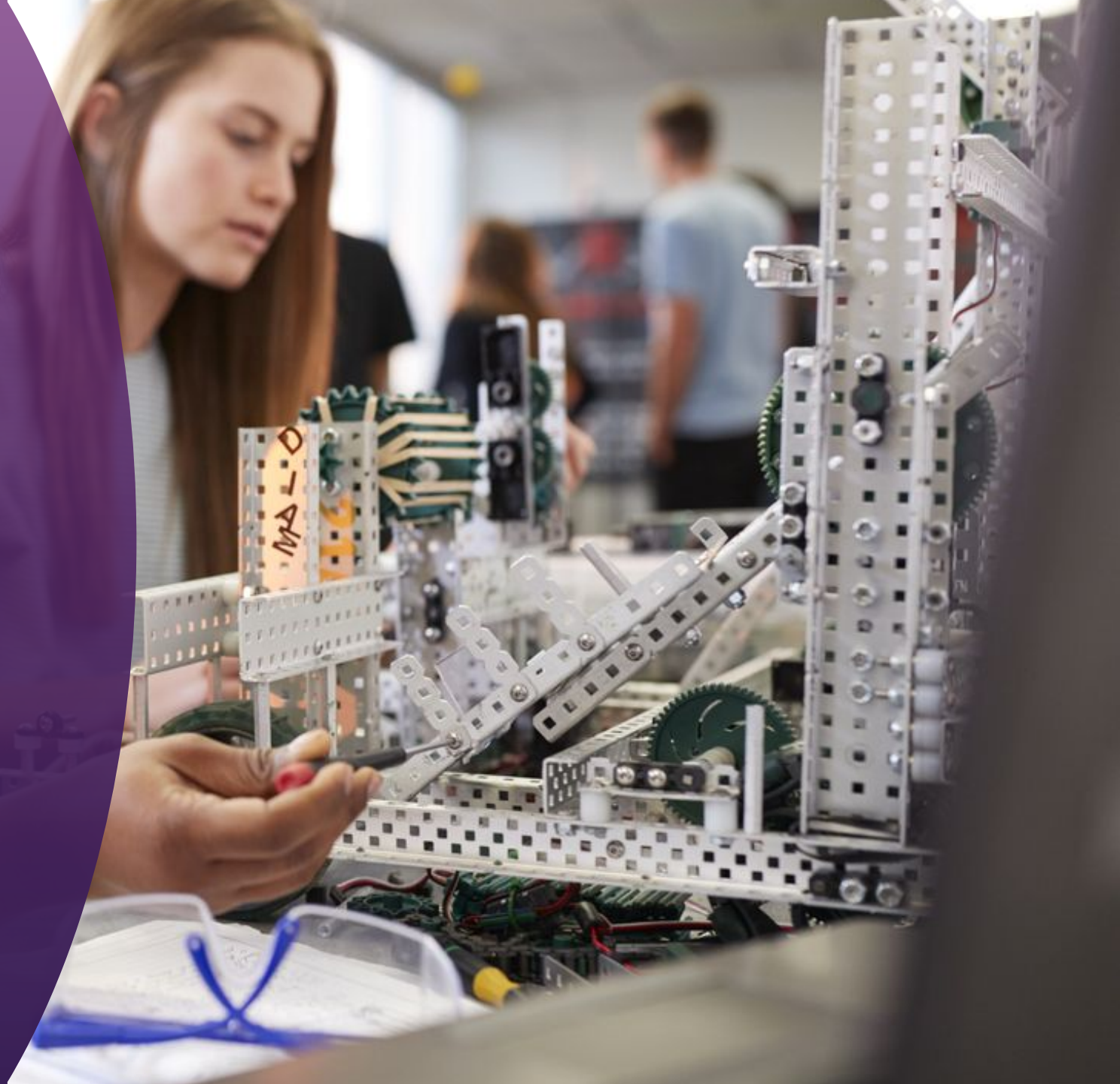
Design and Technology: Textiles



What is Design and Technology?

Studying **Design and Technology** is a valuable foundation for future careers and further study. Developing students skills include:

- **Problem-Solving and Creativity:** Design and Technology (D&T) encourages students to approach problems with creative solutions. This ability to think critically and innovate is highly sought after in various career fields.
- **Practical and Technical Skills:** Students gain hands-on experience working with materials and technologies. These practical skills, including using tools, machinery, and software, are useful in many careers, especially in engineering, architecture, and fashion.
- **Time Management and Project Planning:** Through coursework and projects, students learn to plan, manage, and deliver projects within set timelines. These organizational skills are beneficial in nearly any career path.



Assessment

WRITTEN EXAM: (50% of the overall grade)

The paper consists of two sections.

Section A is assessed on the core content covered by all subjects.

Section B is assessed on the specialist category students have chosen: **Textiles**.

COURSEWORK- Non-Examined Assessment (NEA):

(50% of the overall grade)

Students select a question and identify a problem they then design and make solutions for. There are four parts to the assessment: Investigate, Design, Make and Evaluate.



Design and Technology: Component 1: Written EXAM

50% of the qualification, 100 marks

The paper consists of two sections. Section A is assessed on the core content covered by all subjects, and Section B is assessed on the specialist category students have chosen:

1DT0/1B - Papers and boards

1DT0/1E - Textiles

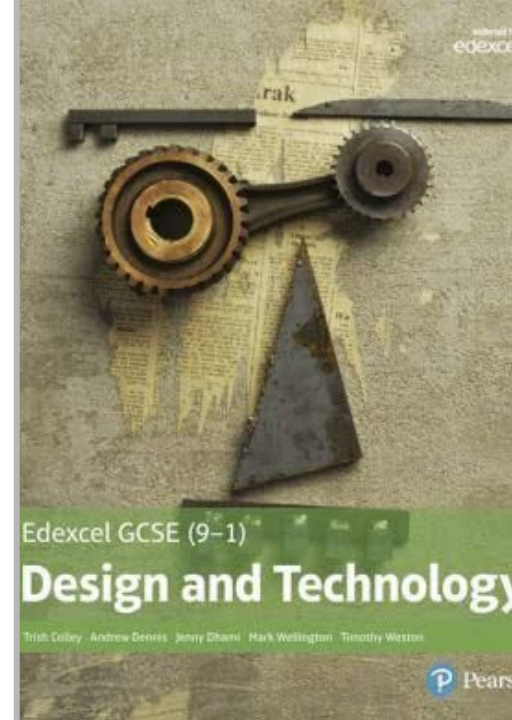
Section A: CORE

This section is 40 marks and contains a mixture of different question styles, including open-response, graphical, calculation questions.

There will be 10 marks on calculations in section A.

Section B: MATERIAL CATEGORIES

This section is 60 marks and contains a mixture of different question styles, including open-response, graphical, calculation questions in Section B.



Please check the examination details below before entering your candidate information

Candidate surname: _____ Other names: _____

Centre Number: _____ Candidate Number: _____

Pearson Edexcel Level 1/Level 2 GCSE (9-1)

Monday 19 June 2023

Morning (Time: 1 hour 45 minutes) Paper reference **1DT0/1B**

Design and Technology
COMPONENT 1: Papers and Boards

You must have:
calculator, ruler, HB pencil, protractor, pair of compasses

Total Marks: _____

- Instructions**
- Use black ink or ball-point pen.
 - Fill in the boxes at the top of this page with your name, centre number and candidate number.
 - Answer all questions.
 - Answer the questions in the spaces provided – there may be more space than you need.
 - Calculators may be used.
 - Any diagrams may NOT be accurately drawn, unless otherwise indicated.
 - You must show all your working out with your answer clearly identified at the end of your solution.
- Information**
- The total mark for this paper is 100.
 - The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.
- Advice**
- Read each question carefully before you start to answer it.
 - Try to answer every question.
 - Check your answers if you have time at the end.



3 Figure 5 shows a vegetable growing frame that is manufactured from a softwood.

Figure 5

(a) Name **one** softwood that can be used to manufacture the vegetable growing frame. (1)

(b) Explain **one** reason for manufacturing the vegetable growing frame from a softwood rather than a hardwood. (2)

The original length of timber that is used to make the frame is 300 cm.
The combined length of one short side and one long side of the frame is 270 cm.

(c) Calculate how much timber is left when a short side and a long side have been cut to size, giving your answer as a fraction of the original length of timber. Ignore the width of any saw cuts. (2)

Answer

2 Figure 2 shows a concrete candle holder.

Figure 2

(a) Name the drawing method that has been used to show the concrete candle holder in Figure 2. (1)

(b) Explain **one** reason for using concrete for the candle holder. (2)

Key Career Skills

- Creativity
- Analysing
- Practical skills – fine motor skills
- Computer Aided Design
- Organisation
- Independence
- Critical thinking

Future career opportunities

Studying **Design and Technology** can lead to a career in;

- **Graphic Designer:** Graphic designers work on a variety of projects such as branding, advertising, websites, product packaging, and print media. They use software like Adobe Photoshop, Illustrator, and InDesign to create designs.
- **Illustrator:** Illustrators create artwork for various industries, including advertising, publishing, fashion, and entertainment. Their work can be found in books, magazines, product packaging, and digital platforms.
- **Advertising Designer:** These professionals design visuals for marketing campaigns, working with ad agencies or marketing teams to create eye-catching, persuasive advertisements across various media platforms (print, digital, TV, etc.).
- **Set Designer:** Set designers create the environment for movies, theater productions, or TV shows. Your skills in designing and building models, along with your creative problem-solving, would be vital in designing visually compelling and functional sets.
- **Architect:** Architects design buildings and structures, requiring a blend of creativity and technical knowledge. You'd apply your skills in drawing, materials, and structural understanding to create functional, aesthetic, and sustainable spaces.

Future study opportunities

Studying **Design and Technology** can lead to further study in;

- Any relevant subject at Level 3 (A level), for example at NSG we offer:
 - **A Level Product Design**
 - **A Level Textiles**
 - **A Level Photography**
- Other creative subjects, such as;
 - **Art subjects, such as fine art, illustrator etc.**
 - **Performing Art subjects, such as drama, dance or music.**
 - **Computing subjects, such as web design and computing.**