

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

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Valid ONLY for certification in 2023

Paper Reference **1DT0/02**

Design and Technology **Component 2**

You do not need any other materials.

Instructions to candidates

- You must undertake a project in response to one of the contextual challenges, taking into account the needs and wants of the user.
- You should use creativity and imagination when applying iterative design processes to develop and modify designs, and to design and make a prototype.
- You have been provided with three themes, each with two contextual challenges listed. Through your ideas and your final prototype, you will be required to show how you have addressed the contextual challenge.
- You must produce a portfolio and a prototype.
- The portfolio must contain photographic evidence of the manufacture of the prototype.
- Your portfolio must be approximately 20–30 pages (or electronic equivalent).

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Contextual challenges

All design and technology happens within a context. It is important for designers to understand the context they are designing within, as this will impact on the wants and needs of users as well as the requirements for the design.

Designers often need to find innovative solutions to design challenges and they look for inspiration from many places to come up with ideas. Often, these design challenges relate to ways in which improvements can be made to the lives or environments in which people live.

Below are three themes, each with two contextual challenges. You must choose **one** contextual challenge to explore and respond to through your assessment project.

Theme 1 Visiting Places

Contextual challenges

- (a) How can products be used to encourage people to attend an open day at an organisation?
- (b) How can products be used to guide visitors around a building?

Theme 2 Alternative Energy

Contextual challenges

- (a) How can products be used to promote an awareness of renewable energy sources?
- (b) How can products be used to promote the use of electric vehicles in everyday life?

Theme 3 Home Working Environments

Contextual challenges

- (a) How can products be used to improve a teenager's study area at home?
- (b) How can products be used to encourage adults to work from home?