

Edexcel Principal Learning

Engineering

Level 2

**Unit 8: Exploring Engineering Innovation,
Enterprise and Technological Advancements**

Pre Release Material
May 2013

Paper Reference
EG208/01

You do not need any other materials.

You are not allowed to take your pre-release work into the examination.

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PEARSON

Case Study – The SolRsurf

Jenny has designed an environmentally friendly laptop called SolRsurf. The SolRsurf is powered by an on board solar panel to allow the product to be used without having to rely on mains electricity.

This product is still at the concept stage, therefore Jenny needs to develop her ideas and carry out research. The design and look of the product will be her own work. Jenny will need to protect her idea.

She wants the SolRsurf to be manufactured using high volume production processes.



Instructions

You are to investigate the viability of the SolRsurf. Your study should identify the steps Jenny will need to undertake if the product is to be a success.

Your study should investigate the following areas:

- intellectual property
- research and development, including testing
- financial support
- a range of suitable materials and their properties
- a range of renewable energy sources
- design considerations for moulding methods
- high volume production processes including automated circuit board production
- social and environmental impact.