

**Edexcel**  
**Principal Learning**

# **Engineering**

**Level 2**

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

January 2010

**Pre-release Material**

Paper Reference

**EG208/01**

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

*Turn over* ►

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### **Case Study – Pack-a-Bike**

Susan has designed a fold away bicycle called Pack-a-Bike and, although the idea is not new or novel, the design and look of the product are her own work. A friend has offered to help Susan develop the product and has suggested that she should protect her idea. Susan and her friend will research how this is done.

Susan wants her bicycle to be built from a range of sustainable and recyclable materials.



#### **Instructions**

You are required to investigate the viability of the Pack-a-Bike product. Your study should identify the steps Susan will need to undertake if the product is to be a success. Your study should include investigating the following areas:

- intellectual property
- research and development, including testing
- financial support
- sustainability of a range of materials and their properties (frame, saddle and mudguards)
- potential impact on the home, workplace and built environment
- social and environmental impact.