

# Pearson Edexcel Principal Learning

## Engineering

Level 2

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

Pre-release Material

May 2015

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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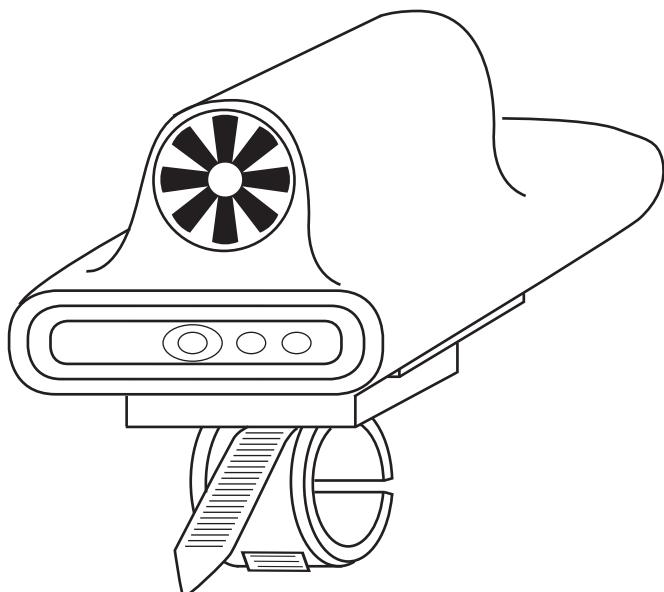
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## Case Study – Wind Powered Bike Light

Ben has designed an environmentally friendly bike light called BreezeLite. The BreezeLite is powered by a small wind turbine.

The product is still at the concept stage, therefore the design and look of the product are Ben's own. A colleague has offered to help Ben develop the product and has suggested that he should protect his idea.

Ben wants the BreezeLite to be manufactured using high volume production processes.



### Instructions

You are to investigate the viability of the BreezeLite product. Your investigation should identify the steps Ben needs to undertake if the product is to be successful.

You should investigate the following areas:

- intellectual property
- finance, research and development activities
- a range of materials, their properties and forms of supply
- creating power from renewable energy sources
- high volume production processes (casing, lens and turbine)
- social and environmental impact.