

Science - Year 6

Electricity – Block 6E

Electric Celebrations

Session 5

Resource pack

Costings

Components (bulbs, buzzers, motors)

5p per item (e.g. 6 bulbs, 2 buzzers and 2 motors = $10 \times 5 = 50p$)

Wires

3p per wire used

Batteries

20p per 1.5v battery (adjust costs according to voltages used overall – i.e. 3 volts = 40p)

Design materials

Products costed according to level of material:

- **Low level** – e.g. decorative papers etc: 50p for unlimited use
- **Mid level** – e.g. plastic films etc: 70p for given amount
- **High level** – e.g. festive materials such as tinsel: 30p per item

Labour costs

£5 per hour per person

Presentation overview – requirements from Dragons

You will have no more than 3 minutes to present your product and answer questions

Technical details

Please ensure that you can explain and answer questions about:

- The batteries/voltage required, and safe levels of power
- How the circuit works
- The relationship between power supplied and the brightness, volume and speed of the components
- How each component works
- How the switch works
- Health and safety

Design details

Please outline:

- Why you have chosen the aesthetic features that you have
- How the product has been developed and improved
- Where you got your inspiration from

Marketing details:

Please be ready to explain:

- How much the product costs to make and what it would be priced at
- Who your audience is and why the product will appeal to this audience
- Where you would sell it

You will also need to outline how the product fulfils the design brief in reference to your success criteria.