

Solar Panel Investigation Practice Assessment

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Part I

The Plan

1 Working Title

the working title of the investigation

The Physics of Solar Panels

2 Aim

the aim of the investigation

3 Initial Experiments

an outline of the initial experiments

For ease of recording, we want the apparatus to return values that can be accurately and quickly recorded. This means we want the equipment to return values between 0 and 999, and no more than two decimal places

- Find an appropriate initial intensity
 - First, the LCD panel was connected to power and turned on
 - Then, the panel was set to maximum brightness, and the light meter attached
 - The light meter was then set to 2000, as that gave integer values between 0 and 999
- Find appropriate voltmeter sensitivity settings

- With the panel still turned on, the solar cell was affixed to the LCD panel, using blue tack to minimise light leak
- Then, the panel was set to maximum brightness, and the solar cell was connected to the Multimeter
- The multimeter was adjusted to 200m for voltage, as this sensitivity returned values between 0 and 999, and no more than two decimal places
- Find appropriate ammeter sensitivity settings
 - The multimeter was then set to 20μ for current, as this sensitivity returned values between 0 and 999, and no more than two decimal places

4 Apparatus

a list of the required apparatus

1. Solar Cell
2. RGB LCD Panel
3. Blue tack
4. Crocodile clips and cables
5. Multimeter
6. Light Meter

5 Initial Diagram

a diagram of the initial experiment

6 Risk Assessment

a risk assessment

7 Timeline

a rough breakdown of how the two-week period of intensive practical work will be spent

Part II

Practical Work