

SPECIFICATION

Your Design Specification is a statement that says what your initial design ideas must do in order to be successful. Select the appropriate specifications for **your** project and write them as a list of bullet points under the headings; *General*, *Electronic circuit* and *Product case*.

- The project must be completed by December 2005.
- The project must be finished in 40 hours.
- The project must cost less than £10.
- The project must be safe to use.
- The PCB and battery must be housed securely in the case.
- The chosen circuit must be built on a printed circuit board and all components hard soldered.
- The printed circuit board must have tracks of no less than 0.05 inches and pads no less than 0.01 inches.
- The LEDs should be assembled with insulated flying leads and secured by strain relief holes.
- A diode must be incorporated into the design to safeguard battery polarity.
- The case should have easy access to remove the battery.
- The project must have an on/off switch.
- The system should have a reset switch.
- The project must be able to operate within a voltage range of +3V dc to +15V dc.
- The circuit should be powered by a suitable 3v or 9v dc battery.
- The project must be easy to operate.
- Should comply with any laws.
- The outputs must be audible or visible.
- The case must be made from a suitable resistant material.
- The case should be attractive and have a professional finish.
- The project must work well and function reliably.
- The output should latch.
- The product must be stable.
- It must weigh no more than 200g.
- The project must have random count output.
- Designed to be batch produced.
- The circuit should have low power consumption.
- It should require very little maintenance and be easily cleaned.