

# ELECTRICAL SYSTEMS: NIGHT LIGHTS

Design, make and evaluate a night light (**product**) for children (**user**) to use at bedtime (**purpose**).

*Key Focus: Series circuits with switches*



## KEY KNOWLEDGE AND SKILLS

- That the relevant components within a series circuit, incorporating switches and bulbs, must be connected in an unbroken loop for electricity to travel round the circuit.
- That switches should be carefully positioned so that they are accessible to the user.
- Know and use technical vocabulary relevant to the project (e.g., series circuit, bulb, wire, battery).

## RELEVANT PRIOR LEARNING / UNITS

- Y4 SCIENCE: Children will have constructed a simple series electrical circuit, using bulbs, batteries, switches and buzzers. They will understand how switches close or break circuits, and that this turns the bulb on or off as a result.
- From previous D&T units, children will have experience of cutting and joining a variety of construction materials, such as wood, card, plastic, reclaimed materials and glue.

NAME: \_\_\_\_\_