

D.T: ELECTRICAL SYSTEMS

Famous inventors and inventions

 Thomas Edison: lightbulb, safety fuses and on/off switches for light bulbs

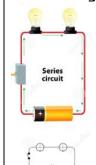
• Joseph Swan: lightbulb, lighting in houses and street lighting.

• Edwin Holmes: burglar alarm

• John Spinello: Operation board game

Design

Circuit diagrams



Components are represented as symbols.

The circuit needs to produce the necessary output (sound) when the wire is touched. It also needs a switch to turn the game on and off.

The theme needs to appeal to the user and it should clearly match the purpose.

Evaluate

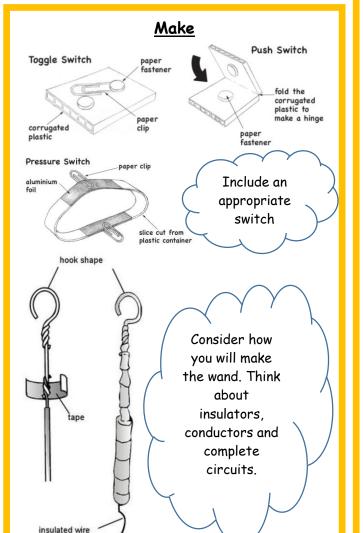
- Does your product match the intend user and purpose?
- What do you think the user's opinion would be of the product and why?
- Does it include a buzzer and switch? Do they work effectively? Which switch did you choose and why?
- Is your product aesthetically pleasing and finished to a high standard? Explain.
- What would you improve/do differently next time and why?

Overview of project

• User: Children

 Purpose: Entertainment and to help develop co-ordination skills.

 Must include: a buzzer for sound and a simple switch to control the overall circuit.





Key vocabulary

Aesthetics

How something looks

Buzzer

A component that produces sound

Circuit

Series of electrical components

Component

Part used in a circuit

• Conductor

Electricity passes through easily

• Design specification

Requirements for a product

• Insulator

Difficult for electricity to pass through

• Output

Something that happens as a result of something else

Product

Something which is made for an intended user with a purpose

• Switch

Completes and breaks a circuit to turn something on/off

• <u>User</u>

Person who would want to buy it