We are Designers

Electrical Systems

We are curious, we are unique, we are together, we are Whiteshill!

Nightlight: A small light that is designed for bedtime.

Push-to-break switch
The switch is off while the button is pushed, but returns to its 'on' position when button is released.

Push-to-make switch
When you push, the electricity flows through the circuit, but when you release it the circuit is broken and the switch is off.

Toggle switch
Simple on/off switch

Design: Show how your product is going to meet your audiences' wants and needs.

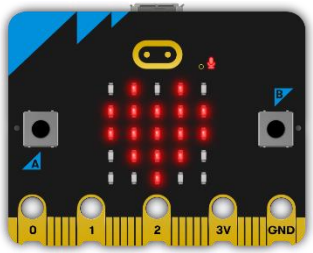
Make: Create your product in line with your design.

Evaluate: decide whether your product has been successful in line with your design.

Microbits:

Control – running something on a Computer.

Program – set of instructions for a computer to follow.

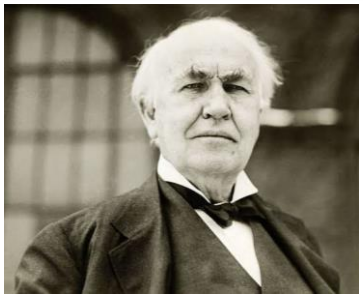


Input device – enters data into the computer

Output device – receives data from the computer

Coding - writing instructions for computers and other hardware.

Thomas Edison – invention of lightbulb 1880



Candle

Gas Lamp

Electric Lightbulb

Elements of Design

Audience: who we are making our product for.

Product: what we are making.

Purpose: the reason we are making our product.

Design Criteria: The things that our product must include to be successful.

Initial ideas: lots of ideas which might work.

Final idea: the chosen idea which best meets the design criteria.

Material – what the product is made of.

Feedback – what do people think of your product.

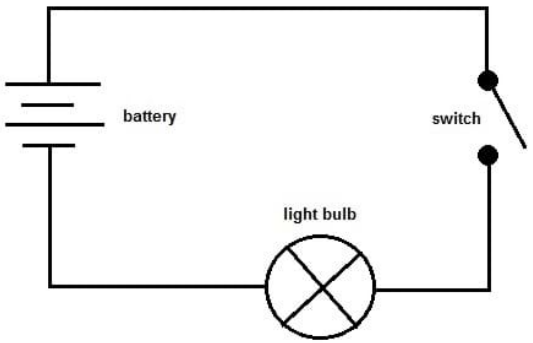
Glue Gun and Craft Knife Safety

Group supervised by an adult – one child at a time per tool.

Wear gloves and goggles.

Leave in rest position.

Do not touch hot or sharp end and keep it facing down towards the table.

Mat underneath to protect the table.

Simple Circuit