Be the best that we can be.

Learning objectives

Pupils who are secure will be able to:
- Give a brief explanation of the digital revolution and/or remember key examples.
- Suggest a feature from the virtual micro:bit that is suitable for the product.
- Write a program that initiates a flashing LED panel, or another pattern, on the virtual micro:bit when a button is pressed.
- Identify errors, if testing is unsuccessful, by comparing their code to a correct example.
- Explain the basic functionality of their finished program.
- Suggest key features for a way to attach the product to the user, with some consideration for the overall theme and the user.
- Create annotated diagrams to help illustrate how their product is worn.
- Describe what is meant by 'point of sale display' with an example.
- Follow basic design requirements using computer-aided design, drawing at least one shape with a text box and bright colours, following a demonstration.
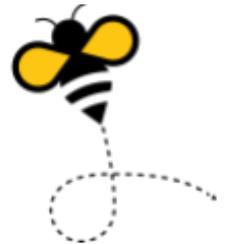- Evaluate their design using a focus group.

Key vocab and facts

analyse	Look at something in detail.
annotate	Labels on a drawing which help to explain it.
concept	An idea; in this unit, a drawing with labels.
control	To command something to change, such as lighting up or flashing.
evaluate	To decide if the design is the best it can be.
function	What something does.
initiate	To start a program.
program	A script of code that instructs a device to do something.
simulator	A computer-generated imitation of something.
user	A person who uses something.

Digital revolution

Began in the 1980s and is still happening today. Computer-based (digital) technology has become how many products function. Digital products make life easier for us all.
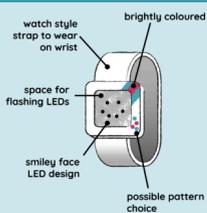
Design

wearable technology

Technology you can wear to help with day-to-day activities. It has developed over time.

product concept

- watch style strap to wear on wrist
- brightly coloured
- space for flashing LEDs
- smiley face LED design
- possible pattern choice

An image with annotations, explaining ideas for the shape of a product (form) and how it works (function).
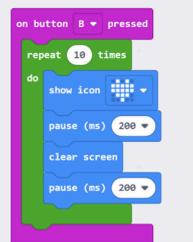
computer-aided design (CAD)

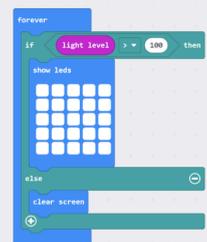POPULAR

Software that enables the user to create digital images.

Technology

Flashing LEDS
Add a flashing pattern
Light sensor

Tips for a good evaluation

- Check your design against the design criteria.
- Note down something you have done well.
- Get feedback from someone else.
- Suggest a change.

- Designed for children.
- Should light up and flash.
- Must be wearable.
- Must use computer technology.
- Must use CAD to sell the technology.
- Use a focus group to evaluate the product.