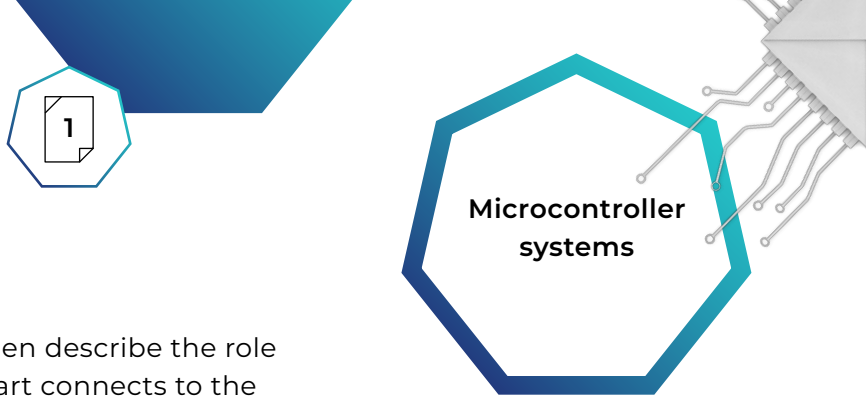




Activity sheet 1

1a. Look at each part of the control system, then describe the role of each part. Add arrows to show how each part connects to the others. Label which ones provide inputs, outputs and feedback.

Input
device

Electronic
controller

Output
device

Sensor

1b.

Activity sheet 2

Sort the examples into sensors and actuators.
Organise the sensors into their five categories.

Sensors

User input

Presence

Temperature

Light

Movement/orientation

Actuators

Activity sheet 3

These systems all use dedicated microcontroller chips or PLCs.
List at least one input and one output device each system might contain.
What form of controller do they include? What are the advantages
of using this type of controller?

Car automatic windscreen wipers

Input:

Output:

Controller:

Advantages:

Smartphone

Input:

Output:

Controller:

Advantages:

CNC milling machine

Input:

Output:

Controller:

Advantages:

Injection moulding machine

Input:

Output:

Controller:

Advantages: