

CAIE Computer Science IGCSE

3.2 Input and output devices

Flashcards

This work by [PMT Education](https://www.pmt.education) is licensed under [CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)



Which type of device allows
data to be entered into a
computer system?



Which type of device allows data to be entered into a computer system?

An input device.



Which input device is used at
supermarket checkouts and
in stock control systems?



Which input device is used at supermarket checkouts and in stock control systems?

A barcode scanner.



What does a microphone do?



What does a microphone do?

Captures analogue sound and converts it to a digital signal.



Which input device is used
for advertisements,
contactless menus, and
ticketing?



Which input device is used for advertisements, contactless menus, and ticketing?

QR code scanner.



Which type of touch screen registers touch using pressure on two layers?



Which type of touch screen registers touch using pressure on two layers?

Resistive touch screens.



Which type of touch screen registers touch using electrical properties of the finger?



Which type of touch screen registers touch using pressure on two layers?

Capacitive touch screens.



Which type of touch screen registers touch using a grid of infrared beams?



Which type of touch screen registers touch using a grid of infrared beams?

Infrared touch screens.



What's the difference between 2D and 3D scanners?



What's the difference between 2D and 3D scanners?

2D scanners capture flat documents as digital image files, 3D images capture the shape and appearance of 3D objects to create digital models.



What is an output device?



What is an output device?

Any hardware component that presents data from a computer to the user or another system.



Which type of output device
produces physical
movement?



Which type of output device produces physical movement?

An actuator.



Which type of output device
projects images onto a
surface?



Which type of output device projects images onto a surface?

A Digital Light Processing (DLP) projector.



What's the difference
between how inkjet and laser
printers work?



What's the difference between how inkjet and laser printers work?

Inkjet printers use liquid ink sprayed onto the paper, whereas laser printers use lasers and heat to fuse toner powder to the paper.



Which type of projector can
only project onto a liquid
crystal panel?



Which type of projector can only project onto a liquid crystal panel?

A Liquid Crystal Display (LCD) projector.



How does a Liquid Crystal Display (LCD) screen work?



How does a Liquid Crystal Display (LCD) screen work?

It displays images using liquid crystals (that can change the colour of the light seen) and a backlight.



What is a sensor?



What is a sensor?

A device that detects or measures a physical property and sends this data to a computer system for processing.



Which type of sensor detects sound or vibrations?



Which type of sensor detects sound or vibrations?

An acoustic sensor.



Name two uses of acoustic sensors.



Name two uses of acoustic sensors.

Environmental monitoring and sonar.



What does an accelerometer do?



What does an accelerometer do?

Measures acceleration, movement, or tilt.



Name three uses of
accelerometers.



Name three uses of accelerometers.

Smartphones (auto-rotate), fitness trackers, and gaming controllers.



What does a flow sensor do?



What does a flow sensor do?

Measures the flow rate of liquids or gases.



What does a gas sensor do?



What does a gas sensor do?

Detects presence or concentration of gases.



Name two uses of gas sensors.



Name two uses of gas sensors.

Air quality monitors, carbon monoxide alarms.



Which type of sensor
measures the amount of
moisture in the air?



Which type of sensor measures the amount of moisture in the air?

A humidity sensor.



Which type of sensor is often used to detect heat or motion?



Which type of sensor is often used to detect heat or motion?

An infrared sensor.



Which type of sensor is often used in TV remotes, motion detectors and thermometers?



Which type of sensor is often used in TV remotes, motion detectors and thermometers?

An infrared sensor.



What does a level sensor do?



What does a level sensor do?

Measures the level of liquids or solids in a container.



What does a light sensor do?



What does a light sensor do?

Measures light intensity.



Name three uses of
magnetic field sensors.



Name three uses of magnetic field sensors.

Security systems, metal detectors, and smartphones (digital compass).



Name three uses of moisture sensors.



Name three uses of moisture sensors.

Smart irrigation, agriculture, flood detection.



Which type of sensor
measures acidity or
alkalinity?



Which type of sensor measures acidity or alkalinity?

A pH sensor.



What does a pressure sensor do?



What does a pressure sensor do?

Detects force applied by gases or liquids.



Name three uses of pressure sensors.



Name three uses of pressure sensors.

Tyre pressure monitors, weather forecasting, and medical devices.



What does a proximity sensor do?



What does a proximity sensor do?

Detects when an object is near, without physical contact.



Name two uses of proximity sensors.



Name two uses of proximity sensors.

Phones (screen off when near ear),
automatic doors.



Name three uses of temperature sensors.



Name three uses of temperature sensors.

Thermostats, computers (cooling), and fridges.

