

3.2 Input and output devices

Name: _____ Class: _____ Date: _____

Total: 7 marks

Objective

Build the skills to answer exam questions on **input and output devices** 输入输出设备—how common devices work and choosing a suitable device.

You must be able to:

- describe how input devices (scanner, sensor, touch screen) work
- describe how output devices (printers, actuator, speaker) work
- choose a suitable device for a task

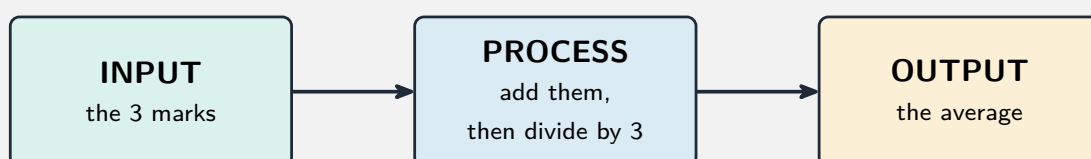
1 Worked examples

■ Input and output



Input sends data in; output sends data out to the user

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Input devices feed the processor, which drives output devices

- **input:** barcode scanner (reads reflected light), sensor (measures a quantity), touch screen.
- **output:** inkjet/laser/3D printer, monitor, speaker, **actuator** (signal → movement).

2 Practice

2.1 State whether a sensor is an input or an output device. [1]

2.2 State what an actuator does. [1]

3 Exam-style questions

3.1 Which is an output device? [1]

- **A** keyboard
 - **B** microphone
 - **C** speaker
 - **D** barcode scanner
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3.2 A supermarket uses a barcode scanner at the checkout.

(a) Describe how a barcode scanner inputs data. [2]

(b) Name a suitable output device to print a paper receipt, and say why. [2]

4 Go further

You are now ready for the real exam questions on this subtopic. Open the **3.2 Input and output devices** past-paper sheet in the Library, or try these in **Practice mode**:

- 0478/12 J25 —Q2 (input/output devices)

- 0478/11 N24 —Q2 (devices)

Solutions

2.1 an input device.

2.2 it turns an electrical signal into movement.

3.1 C. A speaker is an output device.

3.2 (a) it shines light at the bars and reads the pattern reflected back; this is sent to the computer as the product code.

(b) an inkjet (or laser) printer; because it can print the receipt quickly on paper.