

The need for input and output devices

Teacher's Notes

Lesson Plan

Length	60 mins	Specification Link	2.1.1/O	Need for input and output devices
Learning objective		Understand why input and output devices are needed		
Time (min)	Activity	Further Notes		
5	Introduce the topic. Show students the link to the specification. Explain the purpose and objectives of the lesson.			
5	Watch the video.			
5	Pupils complete the interactive activity independently.			
25	Worksheet 1 Pupils complete the worksheet independently.	This worksheet encourages students to carry out guided research. CS4FN writes about the latest computer science research in a way that is accessible to young minds. By encouraging students to read their material early on in the course, it is hoped that the material will capture their interest and they will continue to refer to this resource throughout the course. Using this resource will also enable pupils to see and recognise peripherals beyond the common mouse, keyboard and printer.		
5–10	Class feedback. This can be done in multiple ways. Some options are: 1. Teacher selects individual students to talk about one technology they were reading about. 2. Students divide into small groups. Each group compares and shares their knowledge with each other. 3. Point 2 above, but then extended so that one member then visits another group. Once there they summarise the findings of their own group, and then they sit and listen to what the group they are visiting found.	It is useful to gain feedback from the class at this stage. Pupils will have discovered a range of different items of technology and it is worth having this shared across the class. The CS4FN site also has activities to help embed concepts, some pupils may have branched out and explored these. Again, the students will learn a lot from each other if this is shared.		
5	Homework Complete Worksheet 2.	Setting this as homework allows more time for Worksheet 1. However it also enables students to revisit this topic after a delay, thereby providing a better assessment of what information they have learnt and retained.		
5	Plenary Teacher asks selected students to summarise two new things they have learnt in today's lesson.			



WORKSHEET 1 ANSWERS

Responses to Worksheet 1 will be varied due to the large amount of content that can be explored.

WORKSHEET 2 ANSWERS

1 Describe the difference between hardware and software. (2)

Hardware is physical component that can be touched.
Software is programming stored on the hardware.

2 Explain what is meant by the term *input device*. (1)

An input device is a piece of equipment which lets users put information into a computer system, for example typing in characters, or recording a person singing.

3 Explain what is meant by the term *output device*. (1)

An output device is any device which is used to transfer the results of data processing to the user.

4 Jessica has purchased a new desktop home computer system. Name *three* peripherals she might expect to receive with the system. (3)

Mouse, keyboard, webcam, microphone, scanner.

5 Touchscreens can be described as both an input and output device. Explain how a touchscreen is an input device and an output device. (4)

Touch on the device enables data to be input. i.e. virtual onscreen keyboard.

The screen element on the device enables simultaneous output; users can immediately see on the same device the results they have just inputted.