Summative assessment – Answers

Systems

Which of the following is an output device?

1. A microphone
2. **A monitor ✔**
3. A keyboard

A monitor displays images and text, which are outputs. Both a microphone and a keyboard are used to enter instructions into a computer, which are then processed and outputs are produced.

2. Computer systems accept inputs, \_\_\_\_\_\_\_\_ them, and then produce outputs.

1. **Process ✔**
2. Print
3. Clear

This question tests learners’ recollection of the Input, Process, Output (IPO) model. A print from a computer is an output. ‘Clear’ is neither an input nor an output, but would happen as a result of an input.

3. Which one of the following is managed by the computer system in a pedestrian crossing with sensors?

1. The amount of times the button is pressed
2. The number of cars in the queue
3. **The length of time the light takes to change ✔**

Answer A is determined by when pedestrians choose to press the button. Answer B is determined by the volume of traffic. The correct answer is C — the sensors on the crossing will analyse the number of pedestrians crossing and the volume of traffic and set the lights accordingly.

4. Automatic doors are used in many buildings; they open when you walk towards them. This system helps people because:

1. **It make it easier to enter and leave the building ✔**
2. It is safer than other types of door
3. It stops buildings from becoming too crowded

Answer A is correct. Automatic doors remove the need for people to have to perform a manual action to open or close a door. Automatic doors could be safer in certain circumstances compared to manual doors. However, the question specifies ‘when you walk towards them’. To stop a building becoming too crowded, a crowd monitoring system would be required to work in conjunction with the automatic door system.

## Searching

5. What is the purpose of Google.com, DuckDuckGo, and Bing?

1. To help you access the internet
2. **To help you find websites ✔**
3. To help you share videos

They are all search engines. Google offers a web browser (Chrome) which enables access to the internet. Video sharing sites have search facilities within them, but cannot help you find other websites.

6. If you search the same search term on different search engines, you get different results. Why is this?

1. **They have different indices ✔**
2. They think different websites are better than others
3. They are located in different places

Search engines select results based on the index of that particular search engine. Search engines do not make subjective judgments about the quality of websites. Some search engines may favour websites in certain locations, but this does not relate to where the search engine itself is located.

7. Complete the following sentence using the words below.

A **search engine** uses **web crawlers** to create an **index** of **webpages**.

**webpages web crawlers index search engine**

8. Which of these search terms would be likely to return the fewest results?

* 1. Car
  2. Red car
  3. **Red sports car ✔**

The more specific the search term, the fewer results will be returned. ‘Car’ is the most general of the three options and would return the most results, followed by ‘red car’ and then ‘red sports car’.

9. Complete the following sentence using the words below.

**Selection** explains which webpages a search engine displays; **ranking** explains the order in which they are displayed.

**selection ranking**

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