# End of Unit Quiz – Unit 1.3 Storage

1. What is secondary storage?

|  |
| --- |
|  |

1. Why is secondary storage needed on a computer?

|  |
| --- |
|  |

1. Secondary storage is often referred to by another name? What is it?

|  |
| --- |
|  |

1. Data can be either externally or internally stored in secondary storage devices.
   1. What is **one** external secondary storage device?

|  |
| --- |
|  |

* 1. What is **one** internal secondary storage device?

|  |
| --- |
|  |

1. Give three types of secondary storage and describe **one** advantage for each of their uses.

|  |
| --- |
|  |

1. A supermarket checkout uses a barcode reader to store and read items being scanned.
   1. Which type of storage uses a barcode reader to store and read items being scanned?

|  |
| --- |
|  |

* 1. Why is this type of storage the most suitable?

|  |
| --- |
|  |

* 1. What are **two** advantages for using secondary storage?

|  |
| --- |
|  |

* 1. What is **one** disadvantage for using secondary storage?

|  |
| --- |
|  |

1. Which type of secondary storage is most suitable for distributing a movie?

|  |
| --- |
|  |

1. Suggest a storage device that could be used for distributing a movie.

|  |
| --- |
|  |

1. What secondary storage device could be used for distributing music tracks?

|  |
| --- |
|  |

1. Give **two** reasons why a CD-ROM is suitable for distributing music.

|  |
| --- |
|  |

1. What is a secondary storage device that could be used for transferring text files from a school computer to a PC at home?

|  |
| --- |
|  |

1. What is **one** disadvantage of using magnetic tape to store data?

|  |
| --- |
|  |

1. How many bytes are in 3MB of data? You **must** show your working out.

|  |
| --- |
|  |

1. What are **two** factors that should be considered when deciding on how data is stored?

|  |
| --- |
|  |

1. Fill in the table below by placing **hard disk, DVD, CD** against its most appropriate capacity.

|  |  |
| --- | --- |
| **Capacity** | **Storage type** |
| Up to 4.7Gb |  |
| Upto 800Mb |  |
| 200Gb to 1Tb |  |

1. What is meant when describing the ‘capacity’ of a storage device?

|  |
| --- |
|  |

1. What is meant when describing the ‘portability’ of a storage device?

|  |
| --- |
|  |

1. What is meant when describing the ‘durability’ of a storage device?

|  |
| --- |
|  |

1. What is meant when describing the ‘reliability’ of a storage device?

|  |
| --- |
|  |

**Answers**

1. What is secondary storage?

|  |
| --- |
| Where devices are not constantly connected to the computer.  Devices not directly accessible by the computer’s CPU. |

1. Why is secondary storage needed on a computer?

|  |
| --- |
| Used to back up data stored in main memory/primary storage.  Stores programs/data and other files that would otherwise be lost when the power is switched off/RAM is volatile/cannot store data permanently.  Need for larger storage capacity. |

1. Secondary storage is often referred to by another name? What is it?

|  |
| --- |
| Auxiliary (storage). |

1. Data can be either externally or internally stored in secondary storage devices.
   1. What is **one** external secondary storage device?

|  |
| --- |
| * CDs * Memory card * DVD * Blu-ray disc * Flash drive * USB memory stick * External hard disk drive * External solid state drive |

* 1. What is **one** internal secondary storage device?

|  |
| --- |
| * Hard disk drive (HDD) * Solid state drive (SSD) |

1. Give three types of secondary storage and describe **one** advantage for each of their uses.

|  |
| --- |
| **Optical**  Inexpensive/reliable/robust/relatively large capacity  **Magnetic**  Store large capacity/commonly used making it possible to share compatibility/can be used to store operating system and other files and programs/reliable/cost-effective  **Solid state**  Flexible/Inexpensive/faster access to data/Can be used for portable devices/generally smaller in size/robust/easy to use/no setup requirements |

1. A supermarket checkout uses a barcode reader to store and read items being scanned.
   1. Which type of storage uses a barcode reader to store and read items being scanned?

|  |
| --- |
| Solid state. |

* 1. Why is this type of storage the most suitable?

|  |
| --- |
| Fast access. Less delays when turning the device on.  Robust. Device can be moved/handled without it getting damaged.  Small/light. Fits in the barcode reader.  Uses less power to battery life. |

* 1. What are **two** advantages for using secondary storage?

|  |
| --- |
| Memory is non-volatile.  Data is not lost when the computer is switched off.  Stores larger amount of data. |

* 1. What is **one** disadvantage for using secondary storage?

|  |
| --- |
| Data may not be current.  Device could get lost.  Need for a writer on the computer to write information to CD, DVD, Blu-ray discs. |

1. Which type of secondary storage is most suitable for distributing a movie?

|  |
| --- |
| Optical. |

1. Suggest a storage device that could be used for distributing a movie.

|  |
| --- |
| DVD. |

1. What secondary storage device could be used for distributing music tracks?

|  |
| --- |
| CD. |

1. Give **two** reasons why a CD-ROM is suitable for distributing music.

|  |
| --- |
| * Cheap to produce. * Easily portable. * Enough capacity for the music tracks. * Can be read by other devices. * Read only/can’t be over written. |

1. What is a secondary storage device that could be used for transferring text files from a school computer to a PC at home?

|  |
| --- |
| USB stick/pen/flash memory.  CD. |

1. What is **one** disadvantage of using magnetic tape to store data?

|  |
| --- |
| * Slow to write to and read from memory. * All data has to be read before reading the data you want. * Data could be corrupted if close enough to a magnetic field. * Additional equipment needed to read data from tape. |

1. How many bytes are in 3MB of data? You **must** show your working out.

|  |
| --- |
| 3 \* 1 000 000  3 000 000/3m/3 million |

1. What are **two** factors that should be considered when deciding on how data is stored?

|  |
| --- |
| * Capacity * Speed * Portability * Durability * Reliability * Cost |

1. Fill in the table below by placing **hard disk, DVD, CD** against its most appropriate capacity.

|  |  |
| --- | --- |
| **Capacity** | **Storage type** |
| Up to 4.7Gb | DVD |
| Upto 800Mb | CD |
| 200Gb to 1Tb | Hard disk |

1. What is meant when describing the ‘capacity’ of a storage device?

|  |
| --- |
| Size of data/file. |

1. What is meant when describing the ‘portability’ of a storage device?

|  |
| --- |
| Refers to whether the data needs to be moved from one device to another. |

1. What is meant when describing the ‘durability’ of a storage device?

|  |
| --- |
| Length of time expected for data to last. |

1. What is meant when describing the ‘reliability’ of a storage device?

|  |
| --- |
| Refers to whether the data will be saved as expected.  Data is not effected when saved.  No changes to file formatting. |

**OCR Resources**: *the small print*OCR’s resources are provided to support the delivery of OCR qualifications, but in no way constitute an endorsed teaching method that is required by the Board, and the decision to use them lies with the individual teacher. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources.   
© OCR 2017 - This resource may be freely copied and distributed, as long as the OCR logo and this message remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content: n/a

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications: [resources.feedback@ocr.org.uk](mailto:resources.feedback@ocr.org.uk)

We’d like to know your view on the resources we produce. By clicking on ‘[Like’](mailto:resources.feedback@ocr.org.uk?subject=I%20liked%20the%20GCSE%20Computer%20Science%20Quiz%201.3%20Storage) or ‘[Dislike’](mailto:resources.feedback@ocr.org.uk?subject=I%20disliked%20the%20GCSE%20Computer%20Science%20Quiz%201.3%20Storage) you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click ‘Send’. Thank you.

Whether you already offer OCR qualifications, are new to OCR, or are considering switching from your current provider/awarding organisation, you can request more information by completing the Expression of Interest form which can be found here: [www.ocr.org.uk/expression-of-interest](http://www.ocr.org.uk/expression-of-interest)

Looking for a resource? There is now a quick and easy search tool to help find free resources for your qualification:   
[www.ocr.org.uk/i-want-to/find-resources/](http://www.ocr.org.uk/i-want-to/find-resources/)

This formative assessment resource has been produced as part of our free GCSE teaching and learning support package. All the GCSE teaching and learning resources, including delivery guides, topic exploration packs, lesson elements and more are available on the qualification webpages.

If you are looking for examination practice materials, you can find Sample Assessment Materials (SAMs) on the qualification webpage: [Computer Science (9-1)](http://www.ocr.org.uk/qualifications/gcse-computer-science-j276-from-2016/)