

KS4 ICT: This worksheet accompanies the presentation **Operating Systems**.

Name..... Date.....

Scenario: Chatty Call Centre is looking at updating some of the operating systems they have running computer systems. Your task is to answer the below questions to help them work out which new operating systems to use.

1

Describe what an operating system is.

An operating system (or OS), is a computer program which controls everything the computer does. You need to have an operating system installed to be able to use different software.

2

The Chatty Call Centre is aware that an operating system carries out a number of different tasks, but they would like some more detail on the tasks. Discuss the 3 main tasks carried out by an operating system.

The 3 main tasks carried out by operating systems include the handling of communications between software and hardware. Operating systems also allocate computer memory and manage CPU time. Operating systems organize how data is stored on backing storage.

3

The Chatty Call Centre is interested in finding out how an operating system works with the CPU in a computer system. Describe how the operating system works with the CPU in a computer system.

The operating system splits CPU time into tiny slices and allocates each task some time. This is how a computer can multi-task. The operating system helps to manage which tasks take priority.

4

The Chatty Call Centre is considering purchasing different operating systems but they are not away of the main interface types available. Name the 3 operating system interfaces.

1. Command line interfaces (CLI)
2. Graphical user interfaces (GUI)

5

Command line interfaces are an older type of operating system. Describe a command line interface operating system.

Older operating systems such as MS-DOS are often called command line interfaces. These operating systems are text-based and for them to work the user has to type in what they want to do, using commands the computer will understand. These operating systems work very quickly and don't use up many system resources. One drawback of this type of operating system is you need to know the commands to type in.

6

Graphical user interfaces are a popular type of operating system available to computer users. Describe a graphical user interface operating system.

Graphical user interfaces are generally easy to use and they use pictures called icons to represent files or buttons. The user needs to click on the buttons with a pointer moved by a mouse. Touch-screen informational panels often use GUIs. Examples of GUI's include Windows 7 and Linux.