BYOD DEVICE SPECIFICATION EXPLAINED

Touchscreen and stylus

Why?

We have been teaching and learning with touchscreen devices and digital pens since 2019 and their use has proved most effective and transformational in the classroom. Indeed, touchscreens for general purpose devices are now commonplace rather than exceptional. Be it drawing atomic structures in Chemistry, composing music on a stave, annotating and analysing maps in Geography or peer and self-assessing their work, the possibilities across the curriculum are endless and we are continuing to identify even more ways in which the technology can be used to the benefit of the learning in the classroom.

Screen size

What is a suitable minimum screen size?

Whilst screen size is a personal preference, we do believe that smaller screens do not enable students to make effective use of the tools available, especially where more than one application is being used at the same time. Screen sizes of around 10 inches would be very much at the minimum of the range that would enable effective learning in and out of the classroom.

Recommended 4 core processor, minimum 2 core.

Why?

Modern, effective learning activities require the combination of more than one type of digital tool and in our lessons we often make use of a range of different digital media types, including audio, video and high-resolution graphics. These activities require devices that are capable of carrying out activities above and beyond simple word-processing or web browsing.

Recommended 8GB RAM, minimum 4GB. (3GB minimum for iPads)

Why?

Combining the use of more than one type of application, especially when enabling the use of rich media, requires a minimum level of RAM. Anything below 4GB will mean slow performance when making use of more than one application at the same time.

Local Storage minimum 120GB (1TB of Cloud Storage is provided by free School Microsoft Account) (64GB for iPads and 32GB for Chromebooks)

Why?

Despite the huge advantages of cloud-based computing that the schools are using with Office 365, and the speed of access to the internet improving year on year, it is generally much quicker to work with files on local storage. Plus, many students may choose to store some files locally, such as playlists and videos, so that the device can be used offline. With Windows devices, applications can take up a large amount of this local storage and hence the requirement for a minimum of 120GB.

Battery life to last a school day

Why?

Our aim is to create a flexible, effective digitally-enabled learning environment where digital tools may be used for a whole lesson or simply for a few minutes, depending in how and when it is most appropriate. In order for this to work, devices should be able to be taken in and out at different times during a lesson and having to plug a device in adds unacceptable friction to the learning being carried out. Our experience is that laptop batteries become less effective over time, hence the suggestion that parents think about choosing a battery life that will last the whole school day even after two to three years of use.

Wireless Network – Dual Band 802.11a/b/g/n/ac

Why?

Most devices now come with this type of wireless network and these are the standards supported by the Foundation wireless network system.

Keyboard

Why?

Whilst many activities can be carried out without a keyboard (web browsing, reading, creating, watching or listening to video and audio resources) a great deal of our activities will still require large amounts of text to be entered and, at present, this can only be done safely and effectively using an external keyboard.

Camera

Why?

Developing a more digitally-enabled learning environment involves making smarter choices about how some activities are carried out. In some cases, taking a photo or creating a simple video can not only save time and make more time for higher-level thinking skills to be developed, but can be a more effective way of recording learning progress and learning outcomes.

Up to date antivirus & Operating System

Why?

We want our students to be able to use their device safely, securely and effectively. This requires continuously updating the operating system and any associated anti-virus tools that are available and being used.

Headphones are required.

Why?

With such a range of opportunities to use audio and video on devices in the classroom to enhance teaching and learning, students will need a pair of headphones to access or create such rich media. This applies to all subjects, but in particular there are huge applications for the languages, where devices will come into their own for listening and speaking exercises for example.

A Protective case/sleeve is strongly recommended.

Why?

Whilst the schools will provide support and advice on how to look after their device, and lockers for secure storage, a sleeve is highly recommended to protect devices from damage from the bumps and knocks it may incur in the typical school bag.