



## Ironsides BYOD Program – Laptop Specifications

We have based the specifications for the BYOD program off the current software list as of 2024 Q4. Often, as software developers add features to their software the system requirements may change. To allow for this we have endeavoured to maintain a minimum device specification level that will last a year. Any device running the minimum specifications will be slow but not unusable. We cannot account for the resources of any additional software outside of the school's requirements that may be installed by the user. If you have additional software that you would like to install, we can only suggest that you purchase a device that adheres to the minimum system requirements of all additional software. No Apple devices are to be used in the BYOD Program.

### Processor

This is the main processing component of a device. It is often listed as the manufacturers make and model (eg Intel Pentium, Intel Core i5, AMD Ryzen), the generation of processor (eg. 12<sup>th</sup> Generation Intel Core i7), the frequency (GHz), the number of cores, and sometimes the amount of threads.

We have listed Intel Pentium Gold as the minimum specifications, although an Intel Celeron processor would work if **all** other system requirements are met. Intel's Atom processors are not supported.

AMD chipsets are supported but also must meet the core and frequency specifications listed in the table below.

### RAM

Random Access Memory (RAM) is working memory that the computer uses to run tasks and applications. It is often referred to as the size (eg. 4GB), and a broad-based speed rating (eg. DDR4).

Our minimum specification for ram is 8GB.

### Display

Video/Graphics adapters convert the information from your devices processes into a visual display on a screen or a monitor. Video adapters are often listed as a manufacturer make and model (eg. Intel UHD), frequency (GHz) or an amount of memory (GB).

Screen size or resolution is the viewing area of your screen. It is listed in pixel width by pixel height (1280x800).

As modern laptops have the ability to run school applications on their standard video adapters we do not have a video card requirement. We do however have the minimum standard for the resolution as 1280x800.

For anyone wanting to use an older laptop please be aware that the driver will need to be at the following standard: Direct X9, WDDM2.0.

## Hard Drive

Hard disk drives (HDD) can be of 2 types, an older mechanical drive (Often referred in stores as HDD), or a modern solid-state drive (SSD). Both drives are listed as a size of storage in either Gigabytes (GB), or Terabytes (TB). (1000GB = 1TB)

Mechanical drives have an enclosed disk spinning at high speeds which stores and reads the data. By today's standards these drives are slow and more susceptible to drop or impact damage. They aren't common but can still be found on modern laptops.

Solid state drives work more like memory (RAM), are a lot faster, and are not affected by drop or impact damage.

We recommend the solid-state drive. 128GB is the minimum that Windows 11 version 23H2 and school software will run on.

## Operating System

The operating system (OS) is what your device boots into when it is turned on, and Windows 11 is the only operating systems permitted. Windows 11 is listed as editions (eg. Home edition), and build versions (23H2). Build versions can be updated for free within windows using Windows Update.

We recommend Windows 11 Education with the 23H2 build as the minimum standard.

We do not provide the ability to use Apple (MacOS or bootcamp Windows), Android, Linux, or Chrome based operating systems or devices.

## Antivirus

Many antivirus packages are available for purchase and can be used as a replacement for our minimum specified, but please check the system resources for your own antivirus software prior to making your laptop selection. All antivirus software will need to be kept up to date and a full scan must be completed regularly. Please deactivate any VPN, or DNS reconfiguring components as these will disable internet usage while at school.

Our minimum and recommended antivirus solution is Windows Defender that comes free with Windows 11.

## Wireless

Wireless adapters are used to connect to the school's wireless network and all laptops must have a wireless adapter. We use a specific type of security and signal frequency (GHz) and both will need to be achieved to connect.

The majority of network adapters in modern laptops will work, but to be certain please make sure that the wireless adapter will work on the 5GHz band using 802.1x security.

### Warranty

All newly purchased laptops will come with a minimum of 1 year warranty. Often laptops can be sold with Accidental Damage Protection (ADP), this will cover any damages that may occur from drops, bumps and spills and is highly recommended.

As a minimum, we recommend obtaining warranty to cover the laptop for regular hardware faults during the period the student will be at school (eg. 2 years).

### Additional Hardware

SIM slots in laptops are allowed but an active inserted SIM card that allows Internet access is prohibited.

Mobile broadband devices are also prohibited.

### Minimum Specifications

	Minimum	Recommended
<b>Processor make/model</b>	Intel Pentium Gold Or AMD Equivalent	Intel Core i3
<b>Processor cores</b>	2	2
<b>Processor frequency</b>	2.0GHz	2.0GHz
<b>Processor release date</b>	2021	2023
<b>RAM</b>	48	8
<b>Display</b>	1280x800	1280x800
<b>Hard drive size</b>	128GB	256GB
<b>OS edition</b>	Windows 11 Home	Windows 11 Home
<b>OS build</b>	23H2	23H2
<b>Wireless</b>	5GHz, 802.1x	5GHz, 802.1x
<b>Antivirus</b>	Windows Defender	Windows Defender
<b>Warranty</b>	1 Year manufacturer	2 years ADP