



There are countless devices and extraordinary price variations. Usually, the variations in prices relate to brand and reputation. Often it is virtually the same product with a different name. When shopping for the device there are some absolute specifications that need to be present for any machine to be a worthwhile device for your child in the classroom. Shortcutting these specifications will simply result in a slow functioning machine, frustrated learning and ultimately a negative return for the investment that you are considering.

RECOMMENDED MINIMUM SPECIFICATIONS		
ELEMENT	SIZE / DESCRIPTION	WHY?
<b>Operating System (OS)</b>	<p>Recommended: Windows 11 Pro OR Windows 11 Education</p> <p>Minimum: Windows 11 Home</p>	<p><b>Our Diocese is a Microsoft Windows Environment. In order to have the best user experience we recommend that devices have <u>Windows Pro or Windows Education versions pre-installed.</u></b></p> <p>This enables easy setup of devices for students with their school credentials and eliminates the need for students and parents to create any additional accounts to use Windows.</p> <p><b><i>DO NOT purchase a non-Windows device such as a Chromebook or Apple Mac.</i></b></p> <p><b><i>DO NOT purchase a Windows S device</i></b></p> <p>Some devices come with Windows 11S. Windows S-Mode is a scaled down version of Windows that takes up less memory on the device but does not allow apps outside of the Windows Store to be loaded on the computer. This limits what applications can be used for learning. Also, it cannot be used for sitting NAPLAN online or installing security certificates therefore <b>it will not be able to access the school network.</b></p>
<b>Display</b>	<p>Recommended: 11 to 13 inch with Touch Screen &amp; Stylus capabilities (often called 2in1)</p> <p>Minimum: 11 inch screen non-touch</p> <p>Maximum: 15inch</p>	<p>11 to 13 inch screens are the standard size of student devices. Larger screens mean a bigger device and more weight. You should consider your child's visual and physical needs. 11inch devices are small enough to carry and large enough to work on, 14 to 15 inch should be the largest size you will need to purchase.</p> <p>Touch screens are advertised as 2 in 1 devices. They normally include or have a compatible stylus pen available to use with the device. This enables students to interact with the device using a pen and utilise inking tools in programs. Consider your child's learning needs and preferences and whether the ability to draw on their screen will support their learning.</p>
<b>Hard Drive (Storage)</b>	<p>Recommended: 256GB or greater SSD</p> <p>Minimum: 128 GB</p>	<p>There must be enough storage on the device to install Windows 11 and the M365 suite of software as well as various other applications that will be downloaded to use on the device.</p>

	Solid State Drive (SSD) highly recommended	SSD are by far the more reliable, durable and consistent due to there being no moving parts. Avoid eMMC storage. These are often found in cheaper devices and tend to have high failure rates.
<b>RAM</b> (Working memory)	Recommended: 8GB or greater	We recommend 8GB as a minimum to ensure students can utilise all programs effectively. When a program is opened, it operates through the working memory. Anything less than 4GB means that the working memory cannot cope with multiple programs being used at once and either slows down its functioning or shuts down a program in the middle of use.
<b>Processor speed</b>	Recommended: 2GHz or greater	The more programs that are being used, the greater demands it has on the speed at which the machine can work. A 1.5GHz processor at its maximum can become very slow and frustrating to use. Some programs for video production will not operate on laptop with slower processor. On the flipside, larger processors such as <b>Intel's i7</b> use more power (140 watts) compared to an <b>i5</b> (65 watts).  We need to balance speed vs longevity of battery life.
<b>Processor brand</b>	Intel Core, AMD Ryzen, Qualcomm	This is the brains of the computer. There are a variety of processors. The main brands in the Windows environment are Intel Core, AMD Ryzen, and Qualcomm's Snapdragon. Below highlights the different levels based on cost and performance.  <b><u>Low Budget &amp; Low performance:</u></b> <ul style="list-style-type: none"> <li>• <b>Intel</b> -- Core i3, Core 3 (U series), All N Series, legacy Celeron and Pentium</li> <li>• <b>AMD</b> -- Athlon, Ryzen 3 (U Series)</li> </ul> <b><u>Mid Budget &amp; Good performance:</u></b> <ul style="list-style-type: none"> <li>• <b>Intel</b> -- Core i5, Core 3, Core 5, Core 7 (U series)</li> <li>• <b>AMD</b> -- Ryzen 3, Ryzen 5 (U series)</li> </ul> <b><u>High Budget and High Performance:</u></b> <ul style="list-style-type: none"> <li>• <b>Intel</b> -- Core i5 (HX series), Core i7 (U,H, and HX series), Core Ultra (5, 7 and 9)</li> <li>• <b>AMD</b> -- Ryzen 7 (U, HS, H series), Ryzen 9 (H, HS, and HX)</li> <li>• <b>Qualcomm</b> -- Snapdragon X</li> </ul>
<b>Battery life</b>	Minimum 6 hours	The students will need at least 6 hours battery life. We also recommend that the device has USB-C Charging. This makes it easier to quickly charge the device when needed through any USB-C charging cable.
<b>Camera and microphone</b>	Yes	This provides access to multimedia responses to classroom tasks without having to use a separate device, downloading it and adding it to the task. Most devices should have a front facing (faces you) web-camera. If possible, a back facing one is good for filming for students. Check that the device comes with a built-in microphone.

<b>Ports</b>	<p>Recommended:</p> <ul style="list-style-type: none"> <li>• USB C charging</li> <li>• USB C</li> <li>• USB 2 and/or USB 3</li> <li>• Headphone/Mic jack</li> <li>• HDMI</li> </ul>	<p>The ability to connect to other devices is important. You will need to ensure you have the appropriate type and number of ports to connect your peripherals. E.g.</p> <ul style="list-style-type: none"> <li>• Mouse</li> <li>• Headphones</li> <li>• External storage device</li> </ul> <p>HDMI and USB C ports will allow the student to connect their device to an external monitor.</p>
<b>Keyboard</b>	English (US) Keyboard	<p>In Australia, the English (US) Keyboard layout is the standard used. There are subtle differences compared to the English (UK) layout. This is an important consideration when purchasing online.</p>
<b>WARRANTY, IT SUPPORT AND INSURANCE</b>		
<b>Extended warranty</b>	Parent decision (Recommended)	Each new device by law comes with a 12-month warranty. When you buy products in this market, you will probably be offered extended warranty. The extended warranty gives you warranty for the intended life span of the device (3 years).
<b>Battery Replacement</b>	Parent decision (Recommended)	Even when devices are looked after, generally the first component that might fail on a device when it is approaching 'end of life' will be the battery. Battery replacement can often be included as part of the warranty and the terms of replacement may vary between different brands. Check the Terms and Conditions of the extended warranty.
<b>IT support</b>	Parent decision (Consider carefully)	When you buy products in this market, you will probably be offered 24hour IT support. This could be an option for you. However, please note that it is <u>technical</u> support – not advice on how to use a particular software program. Your children will learn how to use software applications at school.
<b>Accidental Damage Protection</b>	Parent decision (Recommended)	This is parent decision that should be considered carefully. Accidental Damage Protection provides you with assurance that if the device is damaged, that it will be fixed. Check the terms and conditions as there may be an excess on claims.
<b>Insurance</b>	Parent Decision (Recommended)	This could be an option through your Home and Contents Insurance provider or could be added on as a separate policy. Insurance may cover the device for accidental damage that could occur when device is out of the home.
<b>ACCESSORIES</b>		
<b>Mouse</b>	Optional	Mouse may be either wired or wireless. Wired is less likely to be lost. However, some students prefer to use a touch pad. Be guided by your child's preference.
<b>Headphones</b>	<p>Essential</p> <p>Recommended: Integrated microphone</p>	<p>A set of headphones that has an integrated mic as well are best as this can be used for creating multimodal texts and accessing learning tools such as Immersive Reader.</p> <p>Headphones are essential for enabling students to access video and audio learning materials without disturbing other students in class.</p>

<b>Stylus</b>	Optional	If the device has a touch screen a stylus is recommended to enable students to write and draw.
<b>Protective case</b>	Essential	Various types but the best form of protection is a hard carry case.
<b>Gaming apps</b>	Highly discouraged	This is an educational tool. Gaming apps will slow down the device's operational ability and make it vulnerable to viruses. Several online games allow for students to play without downloading the app. These games will enable students to access some games without the risk of downloading a virus.
<b>Microsoft 365</b>	Purchase not required	The M365 suite is provided to every student of Maitland-Newcastle Diocese. Each student qualifies to download M365 on up to five devices. Students will be guided through downloading these applications during setup process at school.
<b>Third Party Virus Software</b>	Consider Carefully	Windows operating systems come with Windows Defender. Other Virus software such as McAfee etc have been known to bloat the computer, slow it down and conflict with diocesan systems making the user experience frustrating. Keeping Windows OS and Defender updated is usually sufficient.