

STEM SCHOOL

HIGHLANDS RANCH

2025 - 25 STUDENT LAPTOP RECOMMENDATIONS

INTRODUCTION

STEM School Highlands Ranch provides laptops for all 6th and 7th grade students as part of our technology program. Students in grades 8–12 are required to bring their own device that meets the recommended specifications. Families with students in these grades should plan accordingly when preparing for the school year.

The following provides recommended specifications and information for purchasing a laptop for your student at the STEM School Highlands Ranch. It is possible to use a laptop or tablet that does not meet these specifications, but this may, at some point, limit the student's ability to use more complex and system-intensive software such as Google SketchUp, Unity 3D, Blender, Gimp, AutoCAD, etc. You may also purchase a more expensive laptop with better hardware, but keep in mind that our young students are taking their laptops with them everywhere and laptops do not tend to last for years when they are banged and dropped in and out of backpacks and lockers. Therefore, it is highly encouraged to purchase a warranty for the computer that will cover repairs if the machine is damaged.

Our teachers often incorporate software solutions in their lessons and units, such as Google SketchUp in social studies and language arts. Although our teachers would find alternate methods of instruction and assessment for students that do not have a computer that might not be able to run SketchUp, the student might not be able to participate in the same manner.

RECOMMENDATIONS

PC

- Processor:
 - Minimum - Intel Core i3-10xxx (10th generation)
 - Recommended - Intel Core i5-7xxxx
 - Alternative - Minimum - Ryzen 3
 - Alternative - Recommended Ryzen 5
- RAM: Recommended - 16 GB
 - Minimum - 8 GB
- Hard Drive:
 - Minimum: Solid State Drive (SSD) 128 GB
 - Recommended: Solid State Drive (SSD) 256 GB
- WiFi: Recommended - 802.11ac (must transmit 5 Ghz)
- Operating System: Recommended - Windows 10 64 - bit

Note: There are many options available under \$500.

Mac

Apple offers two laptop options MacBook Air and MacBook Pro, each being customizable. Either model will meet the recommendations noted above. If you want a Mac but don't want to pay the price for a new machine, there are some reputable places where you can find a refurbished machine that will work just as well as a fraction of the price. We would recommend at least an M1 version.

Chromebook

Chromebooks are a great option for our younger students (K-5), though Elementary Students are provided devices for classroom use. The two main specs to keep in mind when purchasing a Chromebook for school use are:

- RAM - minimum 4 GB
- WiFi- Minimum 802.11ac

Linux

If you choose to install Linux on your machine, we will not be able to help you to get connected to the wireless network. Please take this into consideration before installing this operating system.

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SOFTWARE

The standard software needed for all operating systems includes a current web browser, Adobe Flash, and Java.

Virus protection: This is for all operating systems (including OS X). AVG and Avast. There are over 1,500 devices that connect via our wireless infrastructure every day. You cannot control what they have on their machine but you can work to mitigate any adverse effects that can occur by being on the same network.

OLDER DEVICES

Older and lower-end laptops tend to reach their usable timeframe within only 2-3 years of purchase. The number of students who have had hard drives or operating systems that crash, especially older laptops, has been quite substantial in our experience. Although you do not eliminate this possibility with a new laptop, it is at least minimized.

Along those lines, it is HIGHLY recommended that students implement regular file backup, either with an external hard drive, or with a cloud-based system such as Google Drive. Google Drive is free on the student's school email account.

ACCESSORIES

Another thing to consider is purchasing an extra power cord the student can keep at home. Finally, make sure to label EVERYTHING computer, external mouse (if purchased), and power cords as there have been instances where students forget these items when moving about the building and we can quickly identify the owners if they are labeled

SUPPORT

The Technology Support Team (also known as Office of Awesomeness!) helps to support all of the technology needs of our students and staff, while also assisting our families with getting connected. Please reach out and a member of our IT team will respond as soon as they are able.

Email: support@stemk12.org

Phone: 720-864-0255