

Computers and Technology

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Information Technology

- Compare and contrast digital and face-to-face video hosting platforms.
- Research the purposes and future outlook of drones.
- Describe the process of obtaining a drone license.
- Generate a list of common problems and solutions that people experience when using computers.
- Research the pros and cons of purchasing a new, used or refurbished computer, gaming system or another electronic device.
- Generate a list of questions to ask prior to purchasing an electronic device.
- Create a buying guide to purchasing a computer, smart phone, gaming system or other electronic device.
- Collect user analytics data on a website.
- Research careers in information technology such as user support, programming and training.
- Identify the challenges facing information technology specialists.
- Start or participate in a technology club for younger 4-H members.

Computer Graphics and Visualization

- Identify opportunities to gain or improve videography skills.
- Compare and contrast games from a variety of gaming systems.
- Create computer graphics and visualizations.
- Create a video game.
- Explore careers and college programs in geometric modeling, computer graphics and visualization.

Software

- List the tools and processes a programmer utilizes when developing an application or website.
- Explain the role of a Content Management System (CMS) in website development and maintenance.



- Define the Learning Management System (LMS) and its role in education.
- Create an application or website.
- Identify educational and career requirements for software engineers and software developers.
- Solve given computer problems with digital tools.
- Describe financial applications such as mobile banking and digital tax filing.

Accessibility

- Identify training opportunities, certification and careers related to accessibility on WebAIM and IAAP.
- Create and share videos on multimedia outlets to teach others how to make their devices more accessible.
- Volunteer to provide technical support and knowledge to residents at an assisted living facility or nursing home.
- Setup a secure Wi-Fi network using a hotspot or connect to a free Wi-Fi network using a virtual private network (VPN).
- Explain how user experience contributes to the accessibility and usability of a website or application

Cybersecurity

- Compare and contrast the security measures of various social media platforms.
- Research current job offerings in the field of cybersecurity.

Cyberethics

- Explain the responsibility of people to act ethically online
- Describe the roles of Google Scholar, Creative Commons and Open Educational Resources in cyberethics.

Cryptography

- Research how different search engines use cryptography.
- Explore cryptography on different applications and/or websites such as Tynker, Kodable, Code.org, Codakid or Bitsbox.
- Research the programming languages (Java, Java Script, etc.) of specific electronic device(s).



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