Hardware and Networking Design/Install/Repair

Beginner Grades 3-5:

Choose 1-2 items from the list and create a report/presentation (including images) of what you did.

* **Deconstruct and reconstruct a computer**
* **Learn and report how binary works and how computers use numbers**
* **Troubleshoot hardware problems**
* **Explore operating systems**
* **Investigate open-source resources**
* **Install/upgrade operating systems**
* **Design a dream machine (give reasons)**
* **Any other similar design/install/repair**

Intermediate Grades 6-8:

Choose 1-2 items from the list and create a report/presentation (including images) of what you did.

* **Identify network hardware**
* **Design a computer network**
* **Explain Internet Protocol**
* **Explain different types of servers**
* **Use different protocols to communicate**
* **Add peripherals to a network**
* **Secure a networked computer**
* **Share applications simultaneously**
* **Setup a Raspberry Pi or other micro-controller**
* **Any other similar design/install/repair**

Advanced Grades 9-12:

Choose one or two items from the list ad create a report/presentation (including images) of what you did.

* **Design and implement a computer network**
* **Secure your network**
* **Understand technology needs in your community.**
* **Help to solve these needs by organizing a committee or team to work on identified issues.**
* **Teach a computer science class to younger 4-Hers.**
* **Build your dream computer**
* **Network multiple micro-controllers**
* **Research careers in technology**
* **Any other similar design/install/repair**