Google IT Support Certificate: Course 2: The Bits and Bites of Computer Networking

Week 1: Introduction to Networking

Practice Quiz: Cabling Tools

Cabling Tools

As we have covered, ports and patch panels are part of the Physical Layer. Cabling tools are an expansion of the Physical Layer. In this reading, you will learn more about cabling tools, what they look like, and what they are used for.



Crimper

A crimper is a hand-held tool that looks like a set of pliers. It is used to squeeze down or crimp wires.



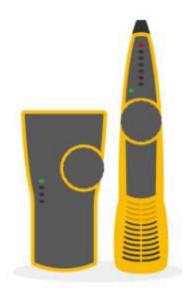
Cable Stipper

A cable stripper is another handheld device that also looks like pliers. It's purpose is to remove the protective rubber coating from cables.



Wi-Fi Analyzer

A WiFi analyzer is a scanner that analyzes the power and quality of the WiFi in an area. It also collects data about the WiFi and its circumstances.



Toner Probe

A toner probe is a part of a set of devices that are used for finding ethernet and other internet connectors. One device plugs into a cable, while the other device, the tone probe, uses a tone which gets louder as it gets closer to the device plugged into the cable. (Meyers, 2022).



Punch Down Tool

A Punch Down Tool or Krone Tool is used for punching down wires into punch down panels or jacks. First the protective covering is taken off the wires, then the wires are punched into place.

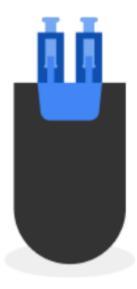


Cable Tester

A cable tester digitally measures integrity of the cable for compliance with developed cabling standards. They measure several parameters:

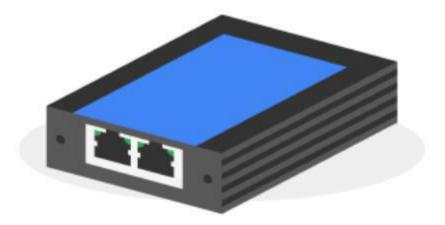
- Attenuation
- Impedance
- Noise
- Near-End Crosstalk
- Attenuation to Crosstalk Radio (ACR)

PowerSum NEXT (Network Encyclopedia, 2022).



Loopback Plug

A loopback plug is a device that tests ports. Wires are connected in a loop that sends traffic back to the port after it receives it.



Network Tap

A network tap is a device that copies traffic information for use in monitoring devices. It is an external device.

Identify cabling tools and their uses

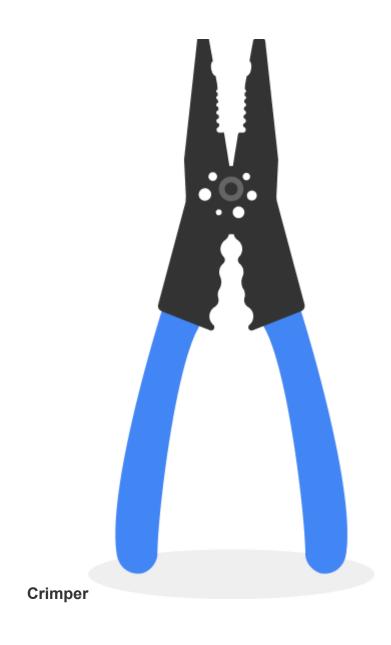
In this exercise, you'll be asked to identify different cabling tools and remember when you should use each tool.



Can you identify these tools?

Review the tool and identify its use by selecting the correct option from the list.

Tool



Use

Removes protective coating from wires

Connects wires

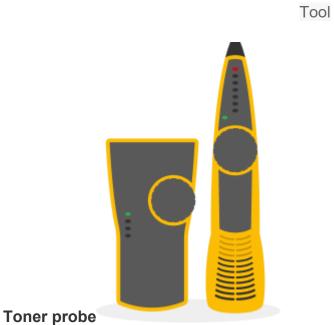
Punches wires into panels and jacks



Wi-Fi analyzer

Use

Measures integrity for standards compliance Finds ethernet and internet connectors Inspects power and Wi-Fi quality



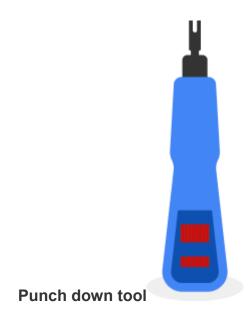
Use

Removes protective coating from wires

Finds ethernet and internet connectors

Tests ports

Tool



Use

Crimps down wires

Removes protective coating from wires

Connects wires to panels and jacks

Tool

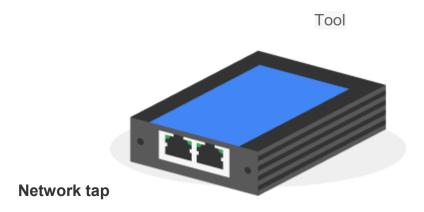


Use

Tests ports

Finds ethernet and internet connectors

Analyzes power and Wi-Fi quality

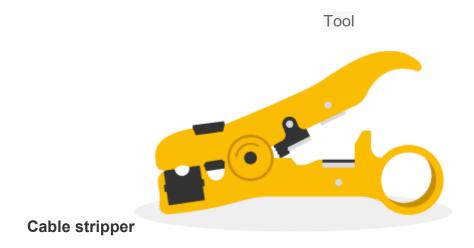


Use

Punches wires into panels and jacks

Copies traffic information for use in monitoring devices

Measures integrity for standards compliance



Use

Removes protective coating from wires

Analyzes power and Wi-Fi quality
Punches wires into panels and jacks



Tool

Use

Measures integrity for standard compliance

Tests ports Analyzes power and Wi-Fi quality

You're done!

By understanding what tasks these cabling tools are meant for, you'll be better prepared to use the tools.

