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## Hands on #2 - Cable Wiring

1. Why is stranded rather than solid cable used for patch cables?

**Stranded cables are stronger and flexible meaning they can withstand bending unlike solid cables.**

2. Why is it critical not to score the jacket too deeply when stripping the cable?

**You could accidentally cut too deep cutting the wires instead of the jacket.**

3. Why is it recommended to expose more than .5 inches of the wire pairs?

**It is recommended so that you have room to order the pin colors as well as making sure that the exposed wire is long enough for crimping.**

4. Why is it critical to use the proper pin colors in order?

**If the pin order is incorrect then the frequency of the signal through the cable will be distorted and won't be able to transmit correctly.**

5. Why is it critical to cut the wire pairs off .5 inches or less before inserting into the connector?

**The crimping process won't work correctly if the wires aren't the correct length or are uneven.**

6. Why is it critical to make sure that all of the wires are pushed to the end of the connector?

**If the wires aren't pushed all the way to the end, the wires won't crimp correctly causing the connector to be crimped without wires and will come off.**

7. Why is it recommended to double check the wire order and make sure the wires are to the end before crimping?

**If even wire is in the wrong position the signal will be distorted and if cables are not at the end, it will come off and in both cases, crimping will waste an ethernet head.**

8. How is a continuity tester different from a certification tester?

**Continuity tester determines functionality that is used by consumers and companies while certification testers determine pass or fail as a warranty requirement to follow industry standards.**