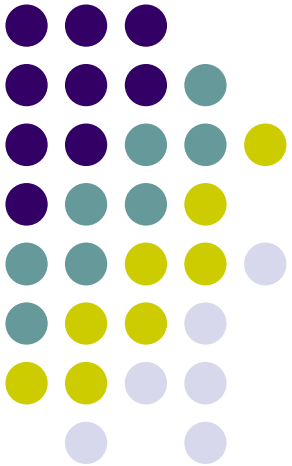
# Network Cabling

Making connections with Cat5

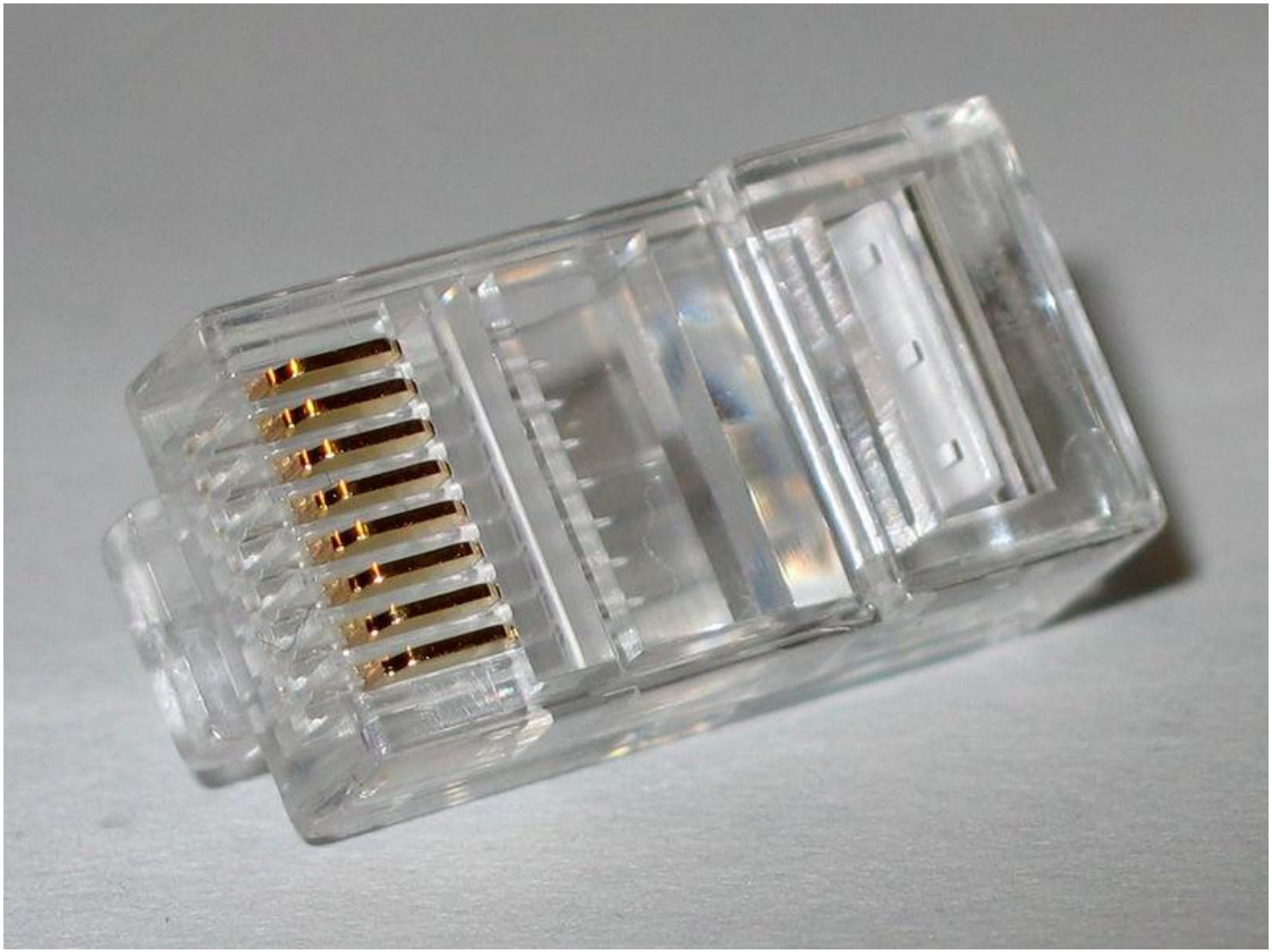
Way cool!



# Cat5e cable

- 1000Mbps data capacity
- For runs of up to 90 meters
- Solid core cable ideal for structural installations (PVC )
- Terminated with RJ-45 connectors

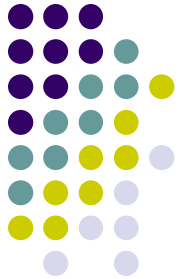
# RJ45 connector



# Making connections - Tools

- Cat5e cable
- RJ45 connectors
- Cable stripper
- Scissors
- Crimping tool

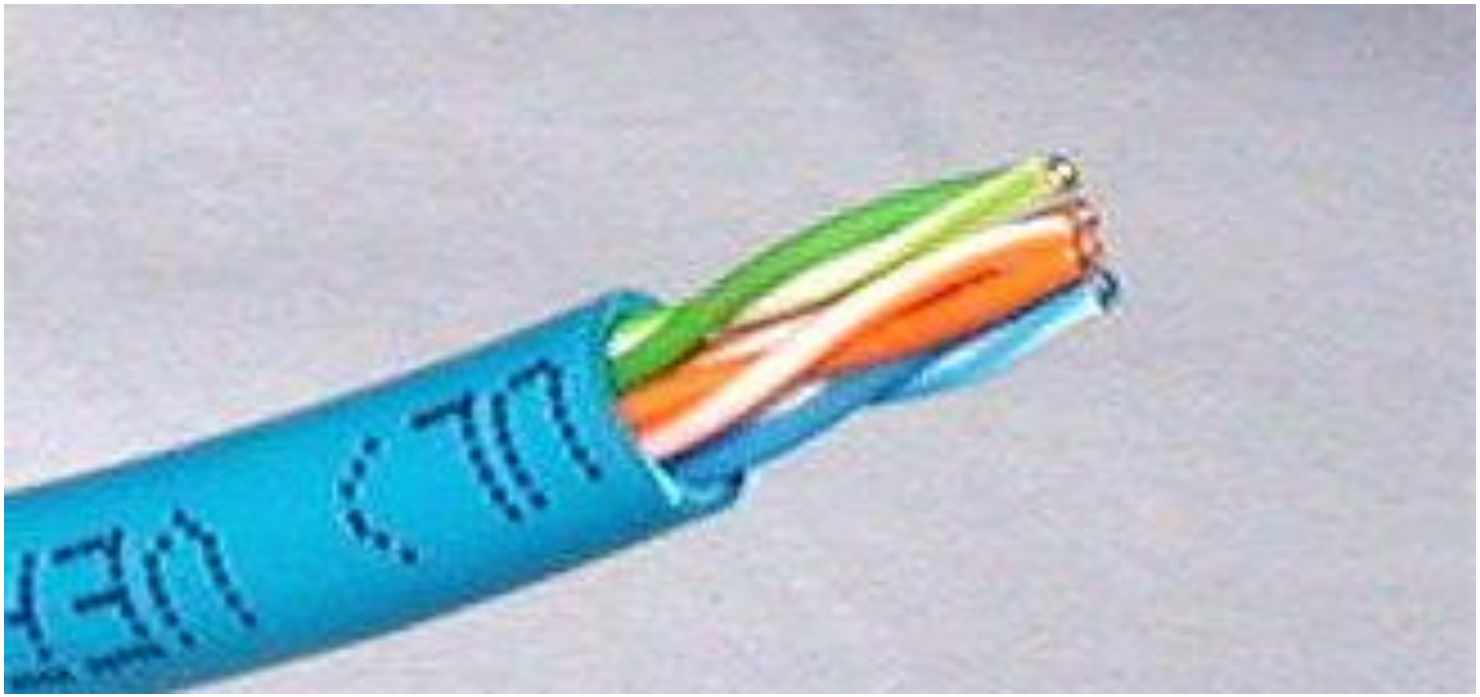
# Making connections - Steps



1. Strip cable end
2. Untwist wire ends
3. Arrange wires
4. Trim wires to size
5. Attach connector
6. Check
7. Crimp
8. Test

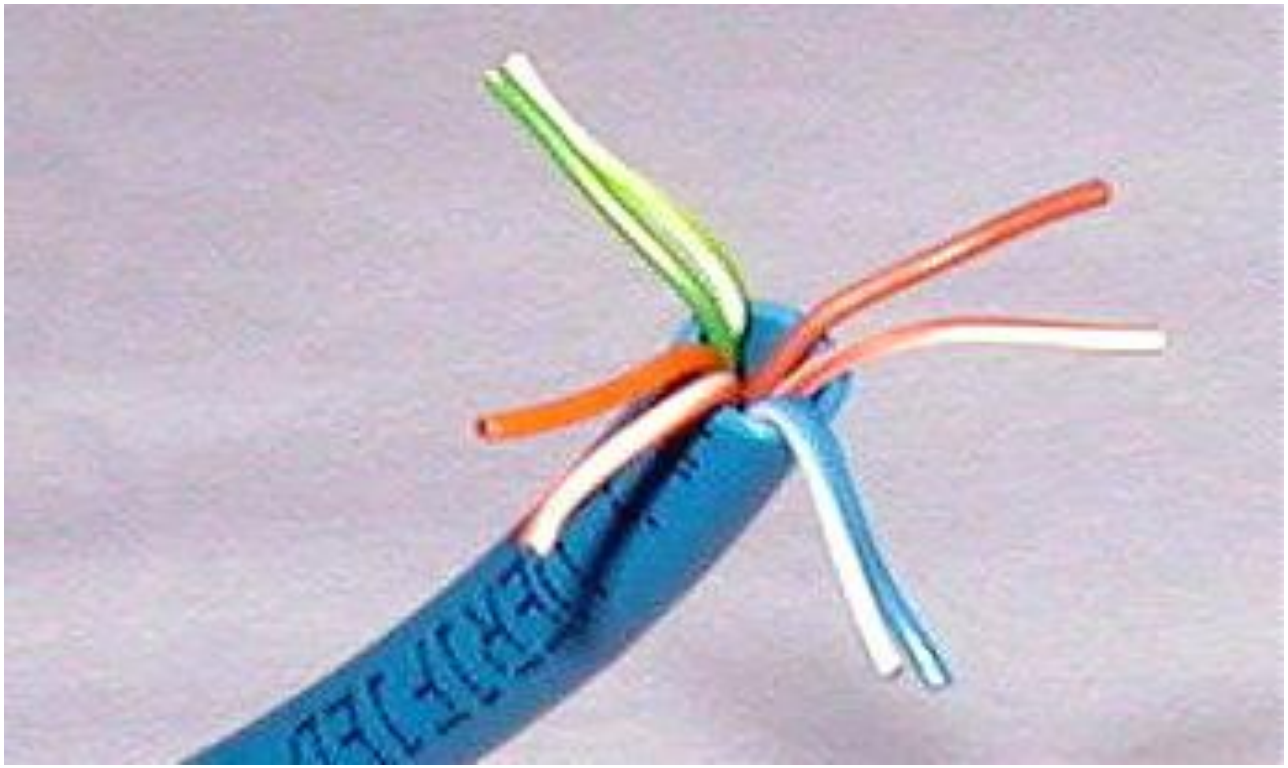
# Step 1 – Strip cable end

- Strip 1 – 1½” of insulating sheath
- Avoid cutting into conductor insulation



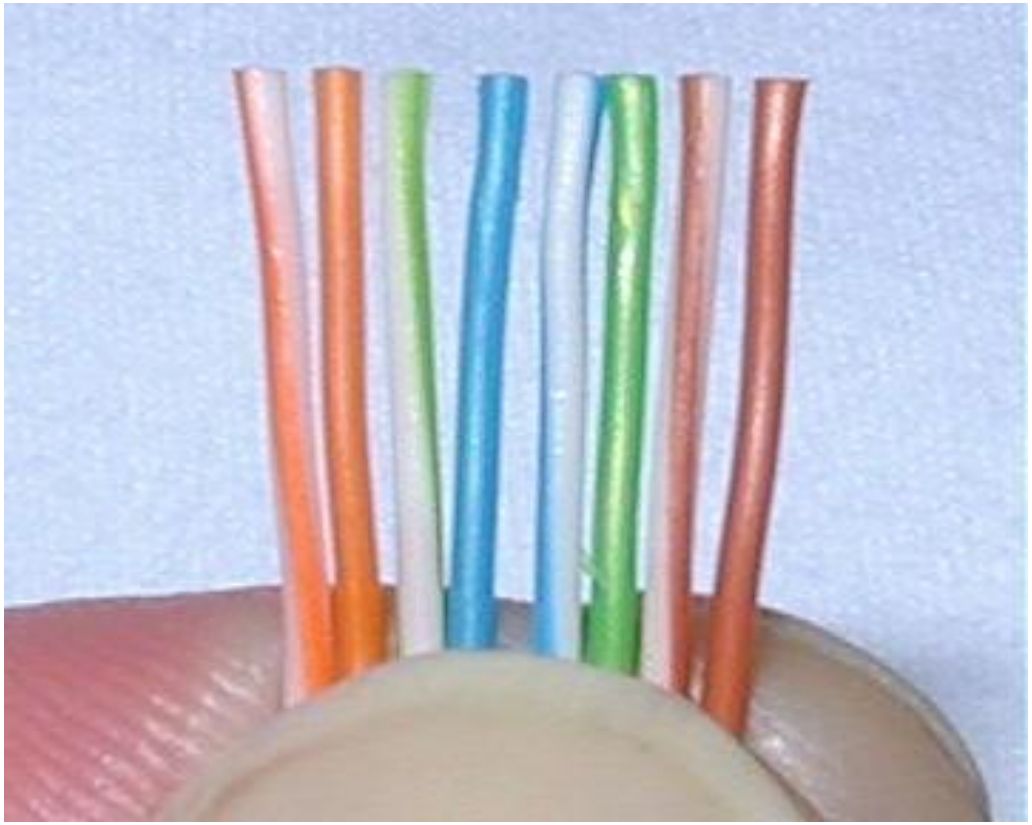
# Step 2 – Untwist wire ends

- Sort wires by insulation colors



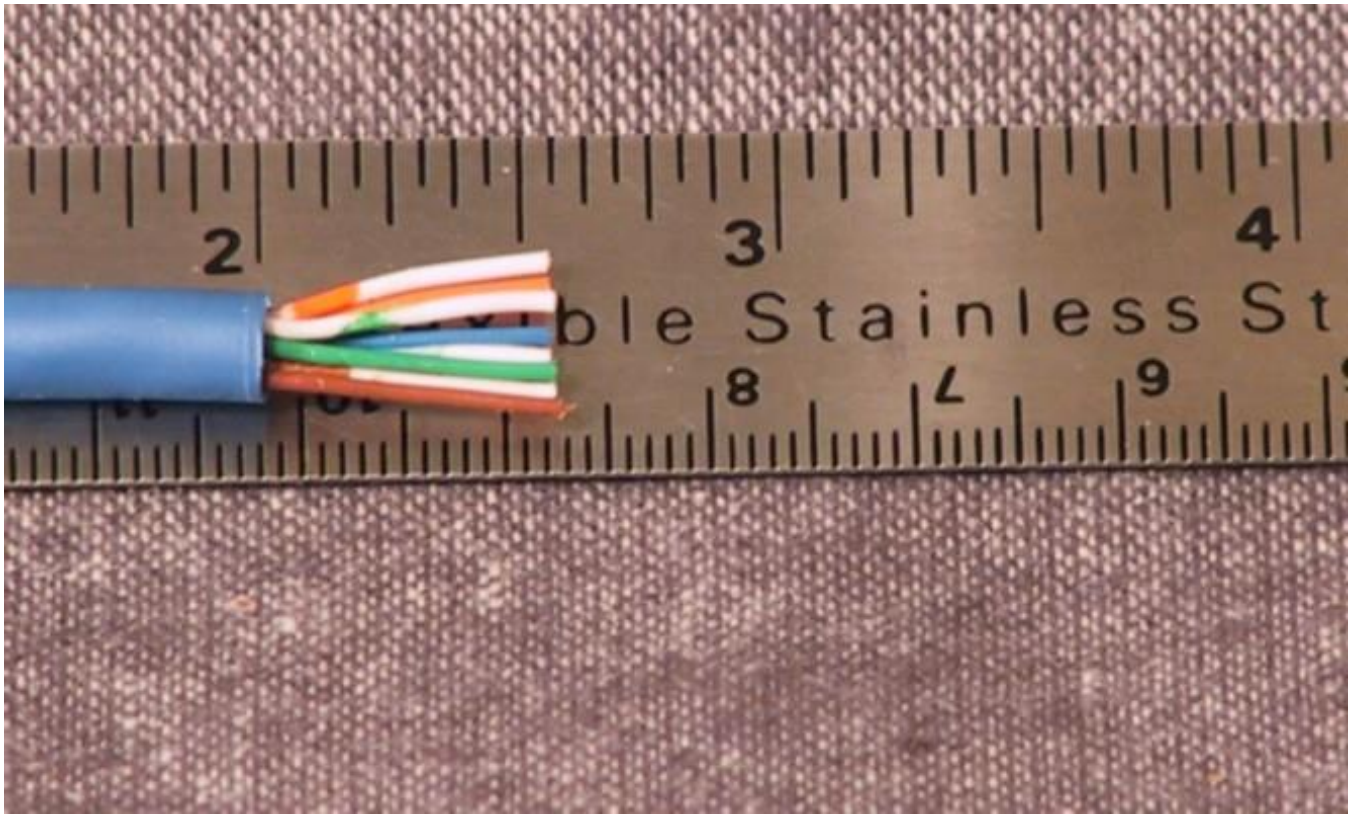
# Step 3 – Arrange wires

- TIA/EIA 568A: GW-G OW-Bl BlW-O BrW-Br
- TIA/EIA 568B: OW-O GW-Bl BlW-G BrW-Br



# Step 4 – Trim wires to size

- Trim all wires evenly
- Leave about ½” of wires exposed



# Step 5 – Attach connector

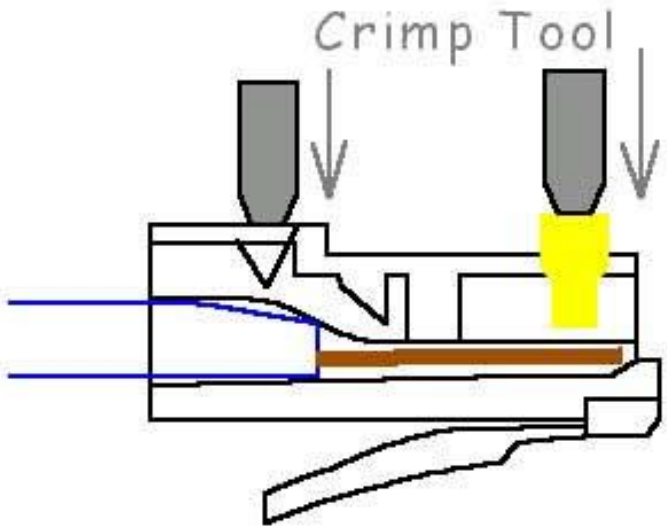
- Maintain wire order, left-to-right, with RJ45 tab facing downward

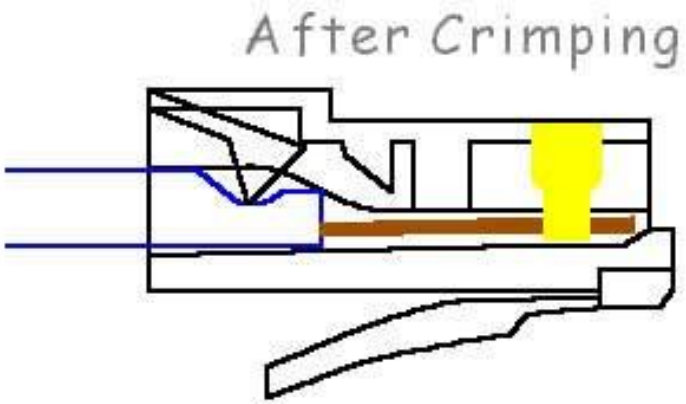
# Step 6 - Check

- Do all wires extend to end?
- Is sheath well inside connector?

# Step 7 - Crimp

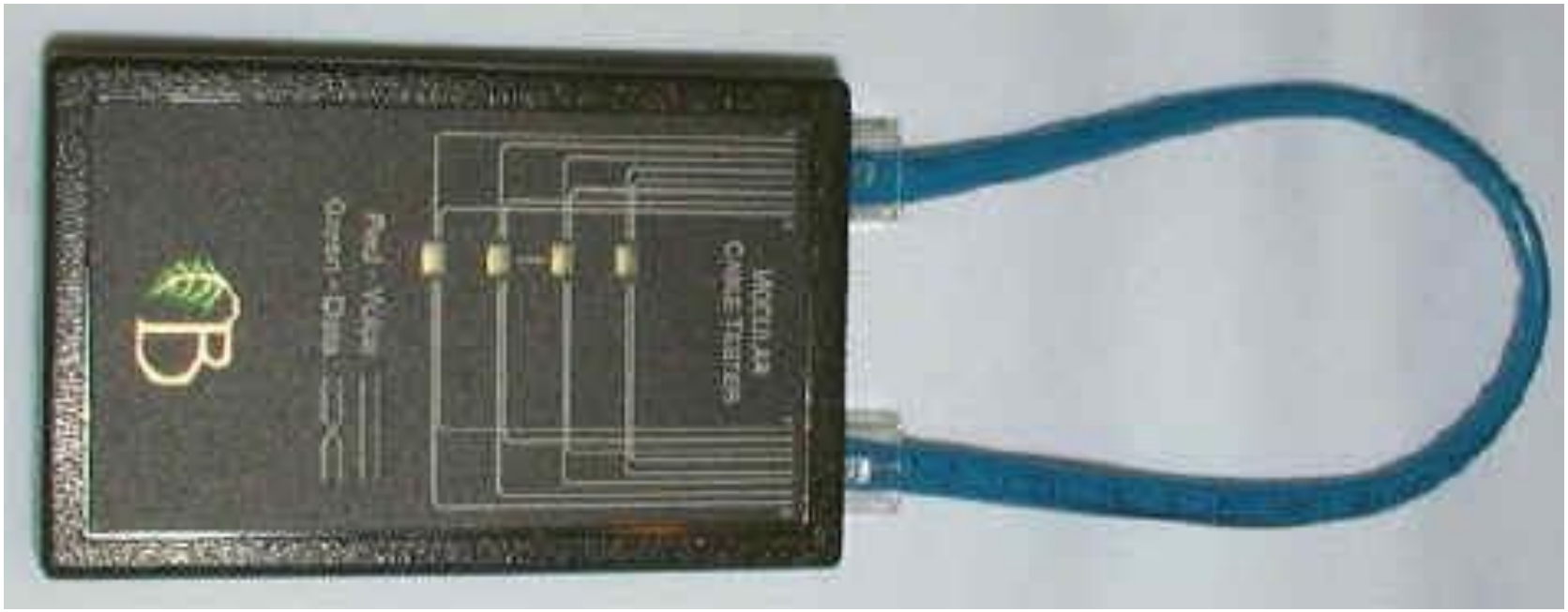
- Squeeze firmly to crimp connecter onto cable end (8P)



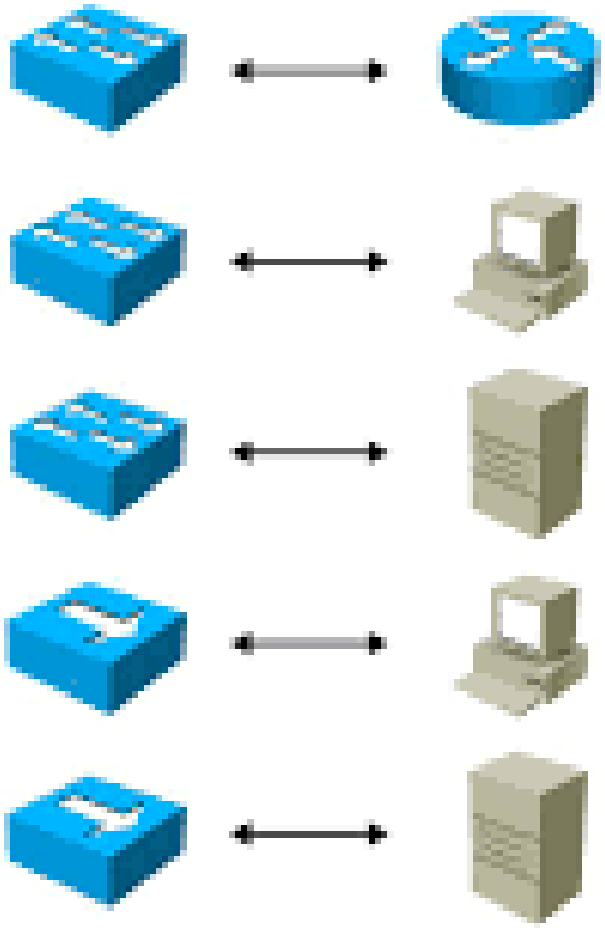



# Step 8 – Test

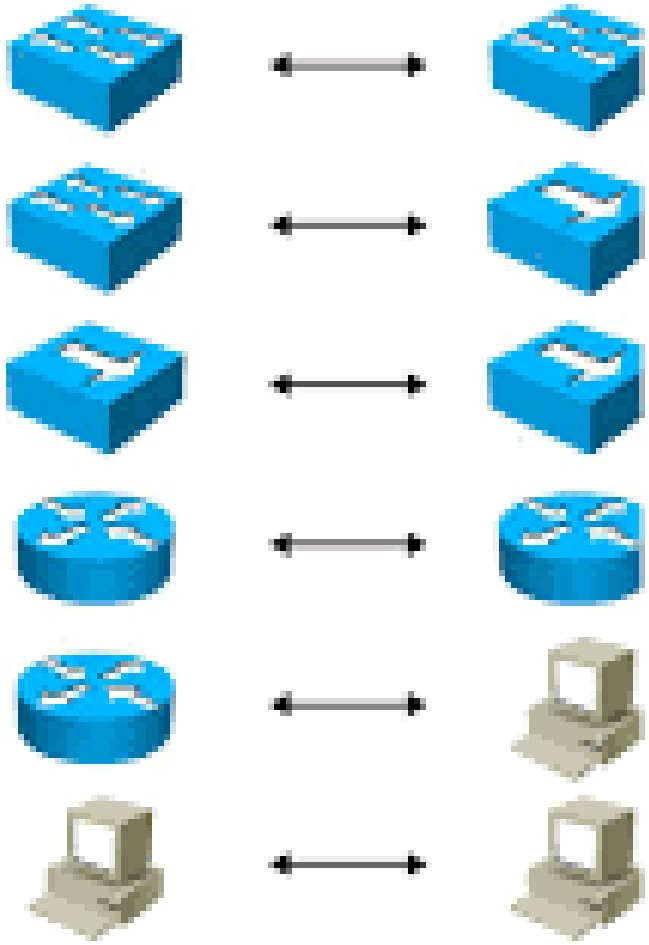
- Does the cable work?

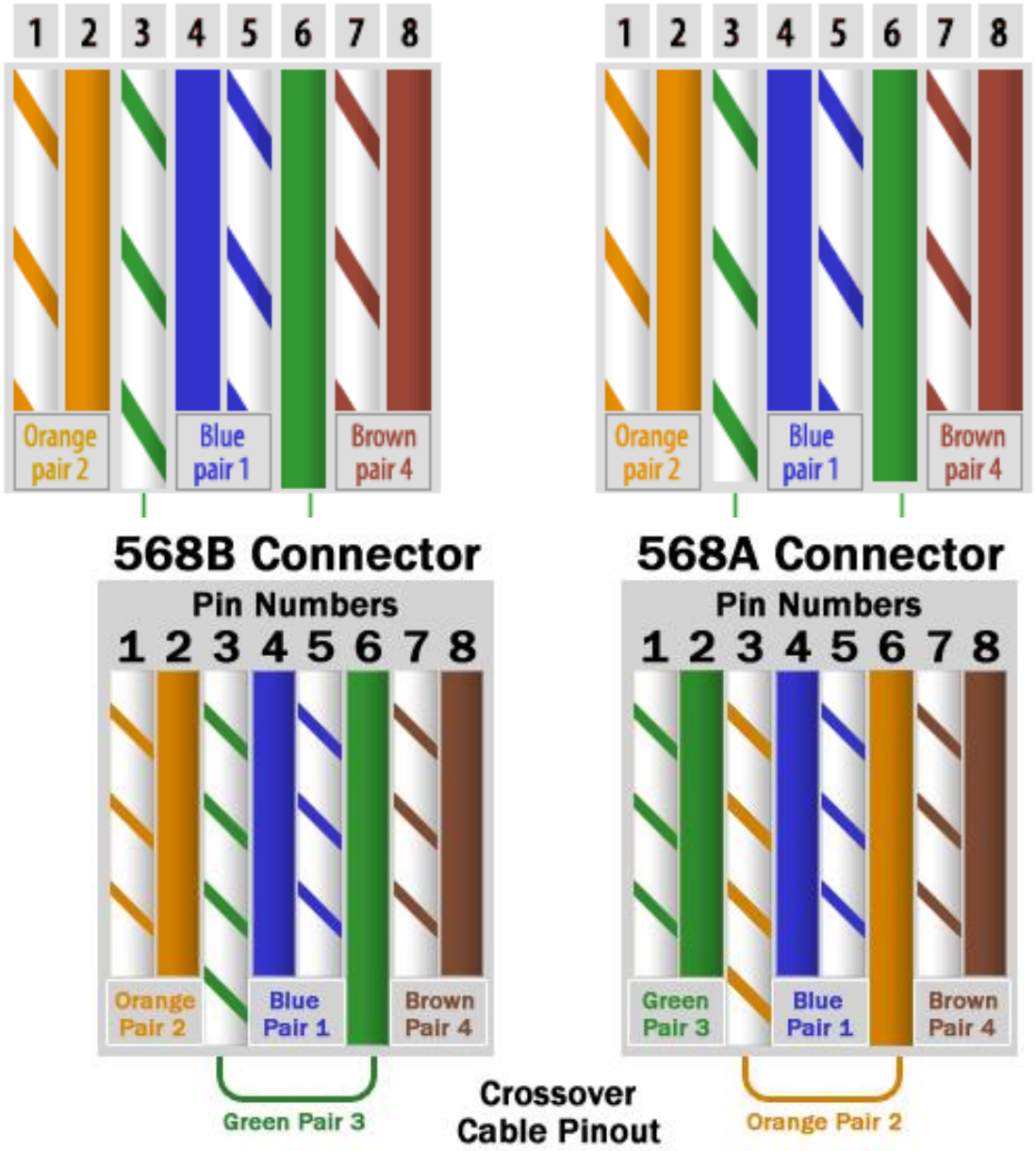


## Straight-Through Cable



## Crossover Cable




1 2 3 4 5 6 7 8
Orange pair 2
Blue pair 1
Brown pair 4
568B Connector
Pin Numbers
1 2 3 4 5 6 7 8
Orange Pair 2
Blue Pair 1
Brown Pair 4
Green Pair 3
1 2 3 4 5 6 7 8
Orange pair 2
Blue pair 1
Brown pair 4
568A Connector
Pin Numbers
1 2 3 4 5 6 7 8
Green Pair 3
Blue Pair 1
Brown Pair 4
Orange Pair 2
Crossover Cable Pinout

# Let’s go to work!