Soldering PCBs & Trimming

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Safety

- Make sure components do not have electricity flowing.
- Wash hands after handling solder.
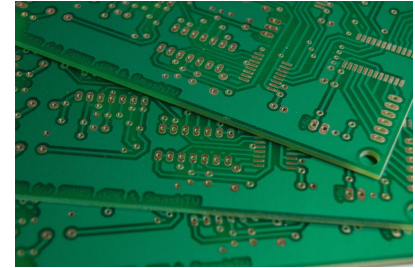- Wear Safety Glasses
- No Food
- Well ventilated area

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Thinning the tip

- Protects from corrosion
- Melt solder on it, and wipe it away with sponge.
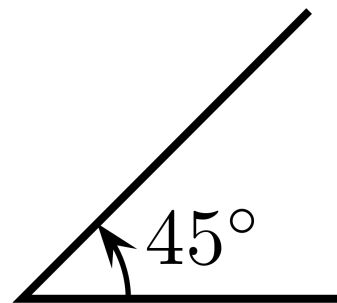- Keep the tip clean

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Soldering PCBs

- PCB - Printed Circuit Board
    - Main component of an electronic
    - Connects resistors, motors, LED, … etc
- Electronics are sensitive to static electricity.
- Possibly wear an anti-static band

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Placing Parts

- Place components onto the circuit board
- Bend the wires at 45 degree angle.
- Do not bend wires too far
  - If done incorrectly they will fall off.

$45°$

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Soldering Iron Tip

- Make sure soldering iron tip is hot enough to melt solder instantly
- Apply solder to iron tip. No more than four seconds.
- Wetting is when solder melts

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Trimming

- Do not trim leads to close to circuit board.
  - May decrease the life.
- May decrease the conductivity.

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Soldering two seperate pieces of wire

- Use the correct tool
  - Use the third hand

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Thank You!

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Sources

Vinck, Marc De. Getting Started with Soldering: a Hands-on Guide to Making Electrical and Mechanical Connections. Maker Media, 2017.