

Electricity safety at home

- Find the fuse box of your house or apartment. You should be able to find it within the area you call home.
 - Take a photo of its contents, but leave it be otherwise.
 - If you happen to touch a button, you might disable your fridge or your heating system, so be extra careful.
 - If it is locked and if your guardians are busy and cannot open it for you, take a photo of the fuse box door.
 - If you get to take a look at the insides, answer the following questions.
1. Does the fuse box contain fuses (mushroom-like cylinders) or residual current circuit breakers (switches)?
 2. Can you find the security plate of the fuse box (see the attachment *arvokilpi*)?
 - If so, does it state the rated current (*nimellisvirta*) and the rated voltage (*nimellisjännite*)?
 - In my example, these are 40 A and 400 V.
 - If so, does it state the [IP Code](#)?
 - The code IP20 in my example means:
 - 2 = Protected against fingers or similar objects
 - 0 = No water protection.

The life and times of a charger

Note the pun.

Find a charger of your choice, and detach the part that you usually insert in a socket.

3. Values of quantities.

- Find the INPUT voltage? $U =$
- Find the OUTPUT voltage? $U =$

4. Find the power and frequency of the charger.

5. Find the level of protection stated by the safety symbols. As these categories are not mutually exclusive, you may find several among these, or none in the case of a hazardous charger.

- **yes/no** example
- yes/no suojaeristetty (two squares)
- yes/no suojamaadoitettu (a flipped T)
- yes/no tippuvedenpitävä (one droplet)
- yes/no vedenpitävä (two droplets)
- yes/no sateenpitävä (a droplet in a square)

6. Find the IP Code and its meaning.