

## Lithium ion battery [What Are Lithium-Ion Batteries? | UL Research Institutes](#)

- In a lithium-ion battery, lithium ions (Li<sup>+</sup>) move between the cathode and anode internally. Electrons move in the opposite direction in the external circuit. This migration is the reason the battery powers the device—because it creates the electrical current. While the battery is discharging, the anode releases lithium ions to the cathode, generating a flow of electrons that helps to power the relevant device. When the battery is charging, the opposite occurs: lithium ions are released by the cathode and received by the anode. Lithium-ion batteries power the devices we use every day, like our mobile phones and electric vehicles.
- Tesla uses lithium ion batteries Works with magsafe
  - No liquid in battery
- lithium-ion batteries have solids inside of the battery/ [How Does a Lithium-ion Battery Work? - Department of Energy](#)
- With the lithium ion battery inside of a phone a magsafe charger will charge the battery
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## Magsafe (by apple) [magsafe video](#)

- Have one side of the MagSafe on rover
- Charger inside moon surface
- Wireless charger will keep moon dust out of the rover
- Magnets are on the outside of the charger so the whole charger is not made of metal so the thing that is charging can actually charge.
  
- <https://www.belkin.com/products/product-resources/usb-c/what-is-usb-c>
- USB type-c technology will be used to power the charger
- USB-C, also known as Type-C, is the latest connector developed by the USB Implementers' Forum (USB-IF), a group of industry leaders within the consumer electronics community, such as Apple, Intel, Dell, and Belkin. As many of the world's most recognized manufacturers are supporting this new technology, it is likely to be widely adopted. With such support, USB-C will gradually replace previous USB types, including USB-A, USB-B and USB Mini-B. Plus, as future devices are equipped with the new USB-C port, which is smaller than its predecessors, it's likely these devices will also be thinner and lighter than ever before.
  
- Magsafe batteries work with lithium-ion batteries.
- <https://appleinsider.com/inside/iphone>

## Magnets [Magnets](#)

The strongest continuous manmade magnetic field, 45 T, was produced by a hybrid device, consisting of a Bitter magnet inside a superconducting magnet. The resistive magnet produces 33.5 T and the superconducting coil produces the remaining 11.5 T.

[https://www.jpl.nasa.gov/news/press\\_kits/ingenuity/landing/mission/](https://www.jpl.nasa.gov/news/press_kits/ingenuity/landing/mission/)