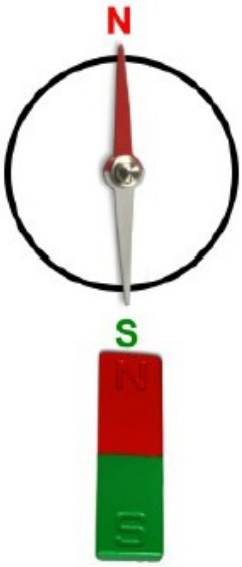
# How to align a compass?


Simple compasses that are stored, for example near magnets, can "lose their orientation". This means that the needle no longer points in the right direction. Rough vibrations or incorrect storage can also irritate the compass needle. In such cases, the compasses are not faulty, but they have to be aligned again.

A compass, provided it is not mechanically defective, or alternatively a compass needle can be realigned in a north-south direction with simple means:

1. (a) Place the compass on a table so that the N printed on it actually points north. You can find the north, for example, using a street map or by knowing that your balcony is on the south side of the apartment, etc. Satellite dishes are also often aligned to the south.




2. Take a magnet. If you want to align a compass, you have to use the magnet to force the red needle point inside the compass to point north.
Place an uncased compass needle on the table with the red needle tip pointing north. Now use the magnet to fix this position by placing the north pole of the magnet close to the white needle tip (as sketched on the right). Inside the compass, you orce the needle to point north matching the cardinal points printed on the case. On the other side, a compass needle only has to be aligne to the north, since the wind rose can later be aligned with the needle when building the compass.

2. Leave the needle with the compass in this position for a time. This process is enough to stabilize the needle. When you remove the magnet, the compass needle realigns itself correctly. The compass is now ready for use.

Normally, compasses are labeled internationally, they follow the english language with the initials N, W, E, S (North, West, East, South).

You can also build compasses yoursel using our compass needles. Compass needles can also be used to construct a representation of Weiss' domains.