

2.1. Study of magnetic field with filings

Aim: study of magnetic field with filings.

Apparatus: from the Low-Tech kit you will need:

- one magnet,
- plastic box with filings (put into Cd's container).



Photo 1. Magnet and filings. Study of magnetic field with filings.

Procedure:

Take small CD container and put into it iron filings. Take a magnet and move it under a box. What happens? Iron filings move and follow the magnet's movement. Put the magnets below the box. What happens? The filings align themselves according to a characteristic formation.

Explanation:

When we move the magnet iron filings follow it because magnetic force acts. They become small magnets.

When we put the magnet below the box iron filings align in a specific way. Group of them is next to the both poles - north and south and the rest spread out in ray (as it is shown at the picture above). Filings' configuration is different - some of them lie, some stand. Their configuration show as a magnetic field.