



Magnetic Force Fields

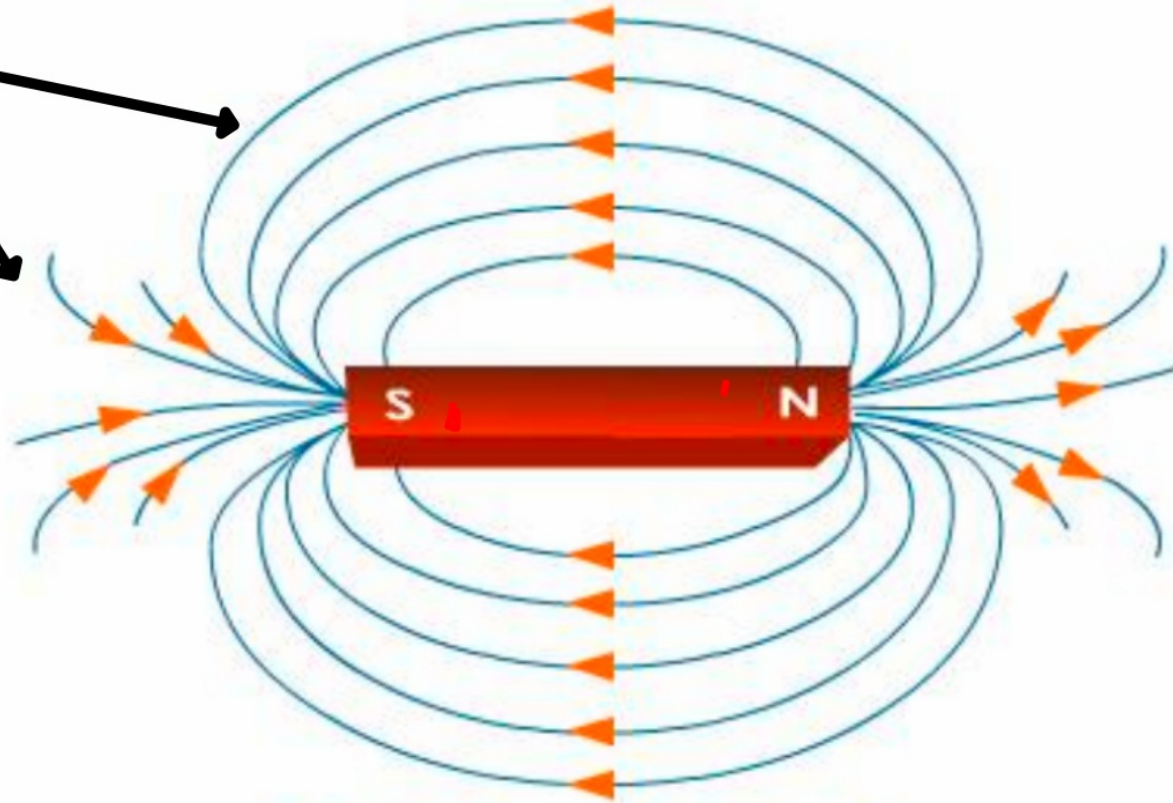
Lines of Force

- Magnets are strongest at their poles
- Invisible lines of force surround a magnet.
 - These lines are closest together where the force is strongest.



Magnetic Field

Lines
of
Force

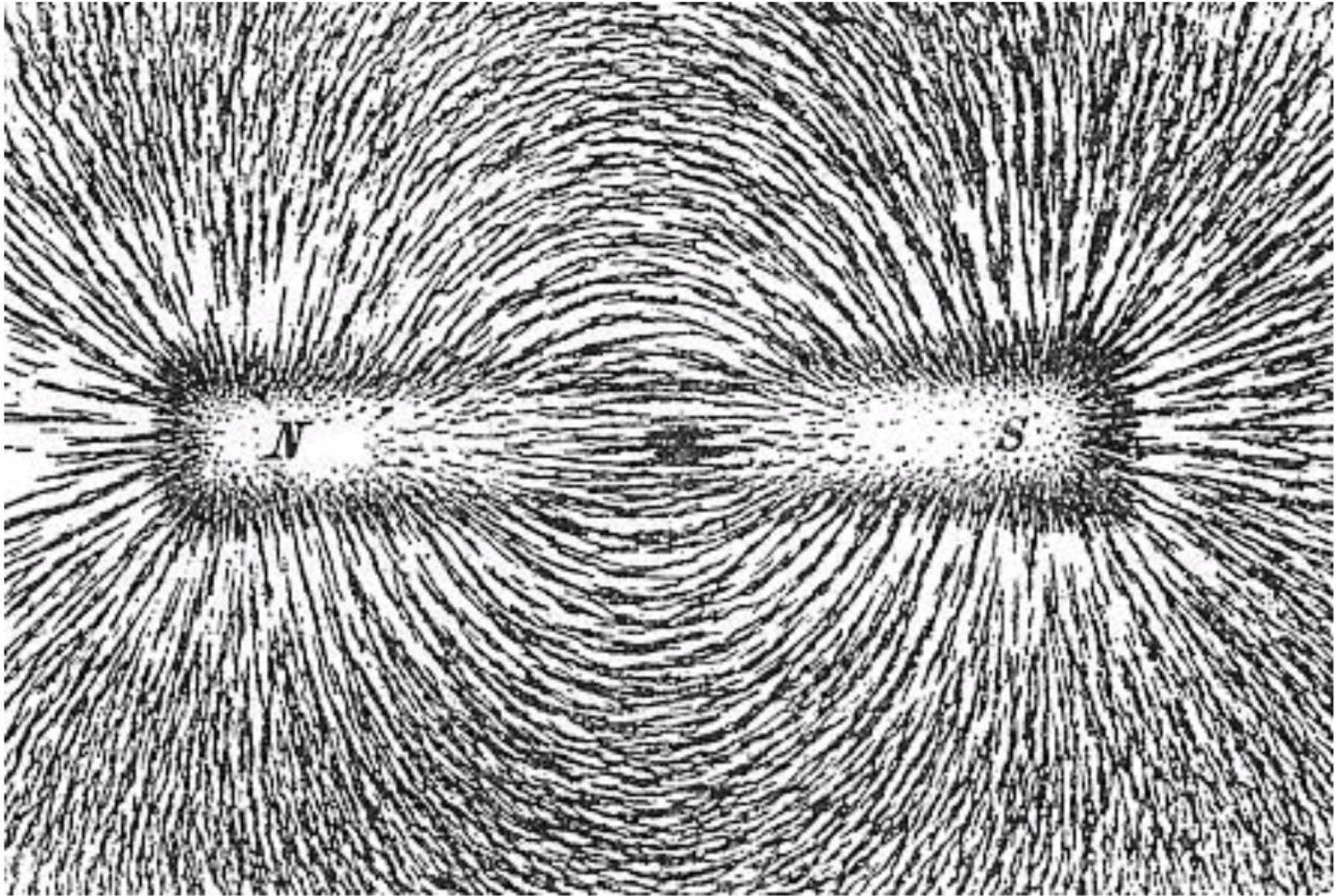


Field Lines Around a Bar Magnet

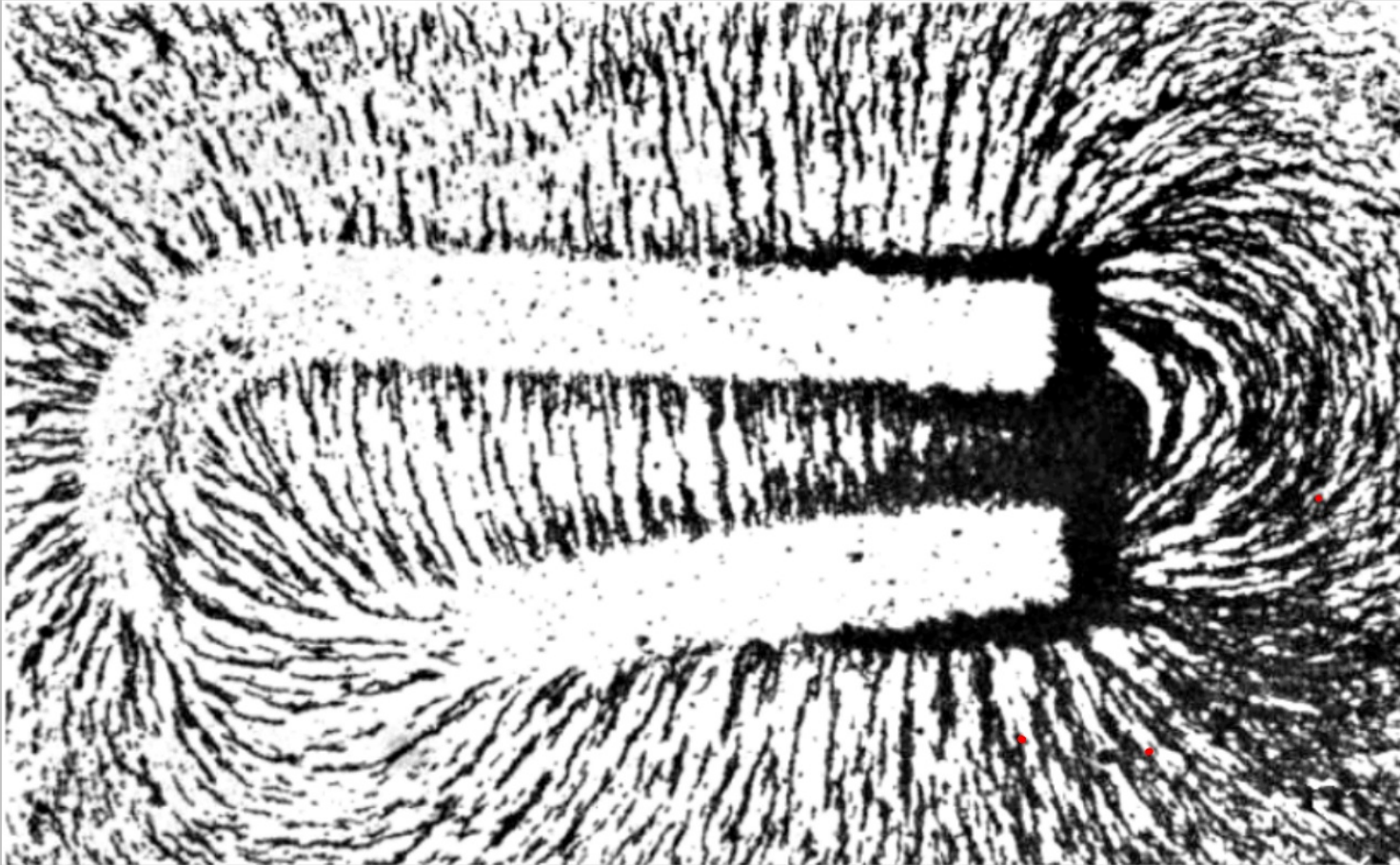
Magnetic Field

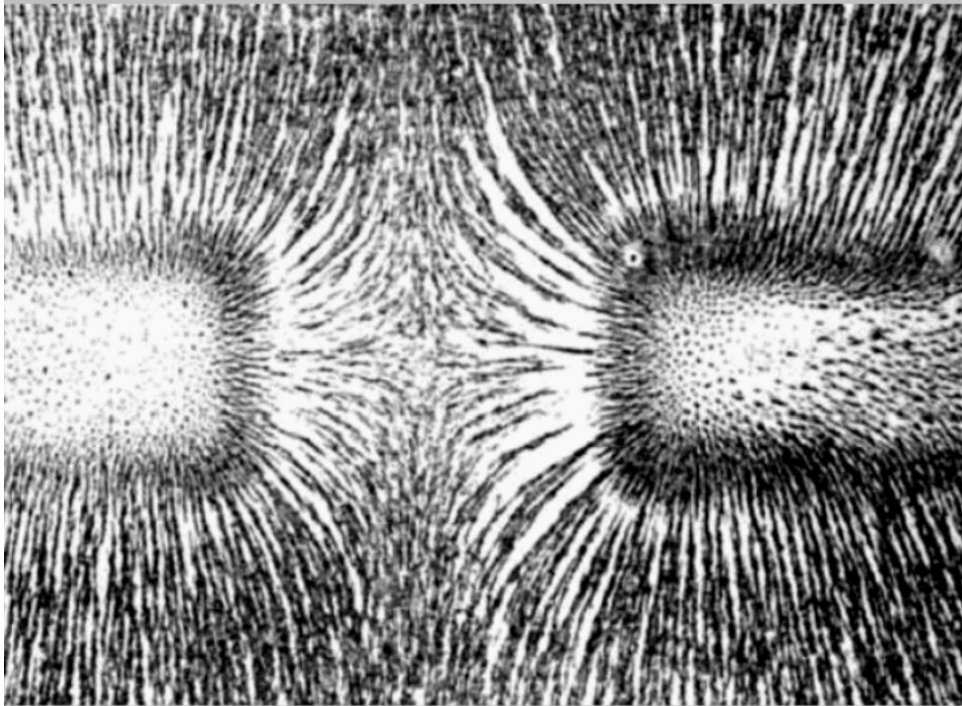
- The space in which the force of a magnet can act
- The **magnetic field** is not flat: it spreads out in all directions around the magnet

Magnetic Field of a Bar Magnet



Magnetic Field of a Horseshoe Magnet

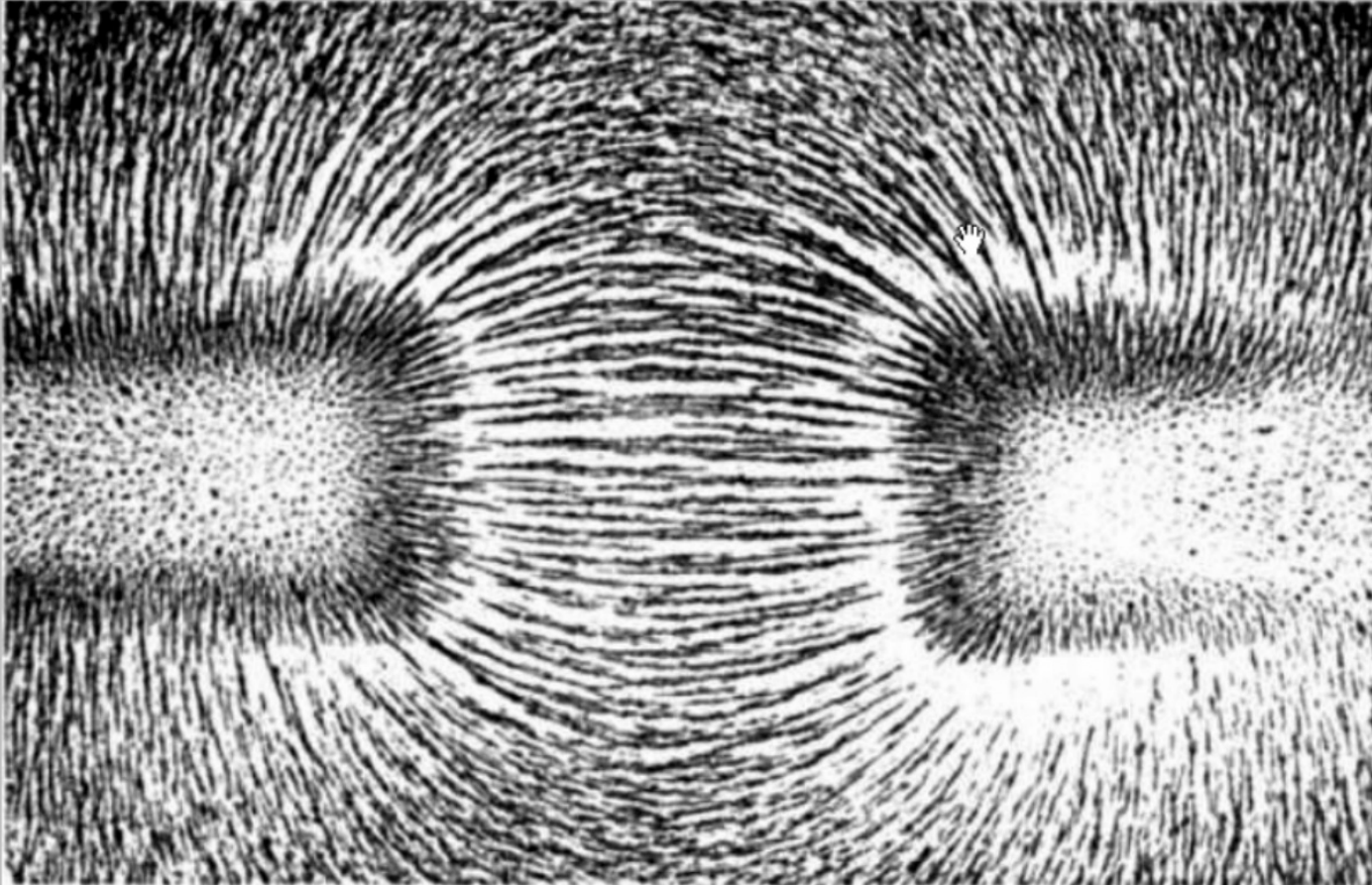




Like Poles repel
(push away) each
other.



"Opposites Attract"



So...What are the properties of magnets?

- A magnet attracts objects made of iron or steel.
- The force of a magnet is greatest at its poles.
- Like poles of two magnets repel each other.
- Unlike poles of two magnets attract each other.