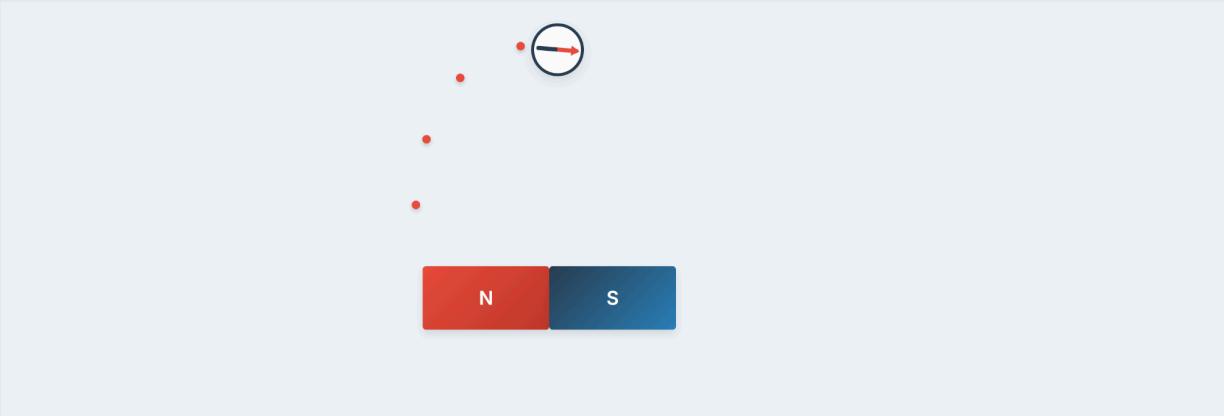


# Magnetic Fields

*Aim: To investigate the magnetic field pattern for a permanent bar magnet and between two bar magnets*

Single Bar Magnet    Two Magnets Attracting    Two Magnets Repelling    Draw Field Lines    Clear All



**N**      **S**

## Method:

1. Place a plotting compass next to the magnet, so that one end of the needle of the compass points away from the magnet.
2. Draw a dot at the other side of the compass needle.
3. Move the compass so that it points away from the new dot, and repeat the process above
4. Keep repeating the previous process until there is a chain of dots going from one end of the magnet to the other, or to the edge of the page.
5. Then remove the compass, and link the dots using a smooth curve (Draw Field Lines) – this will be the magnetic field line.
6. Repeat the whole process several times to create several other magnetic field lines.
7. Draw an arrow on each line to show the direction of the field.
8. Draw the field in the space below and repeat for two magnets attracting and repelling

*Results:*

