

## Magnetic Field Sunprints

Around every magnet is its magnetic field. You can see the magnet, but its field is invisible. You know it is there when you see or feel the magnet pull things towards it. Your Sunprint paper can be used to make a permanent record of a magnetic field.

### What you need

- A magnet: bar magnets and horseshoe magnets are particularly good
- Teaspoon of iron filings or other magnetic material
- Flat board
- Sunprint paper
- Tape (optional)
- Pan of water

### Making the Sunprint

1. Find a place out of the sun to prepare the materials.
2. Place the magnet on the board.
3. Set the Sunprint paper on top. It may help to tape the edges down.
4. Sprinkle the magnetic material on top of the paper. The magnetic field will make patterns in the distribution of the magnetic material.
5. Carefully take the whole thing into the sun, and let it expose for a minute or two, until the paper around the fillings is light blue to white.
6. Pour the magnetic filings back into their container, and rinse the sunprint paper in water. Let the print develop, and watch as the patterns caused by the field appear.

### **Going further**

- Try different magnet shapes.
- Try using more than one magnet. Does this change the pattern at all?
- What happens when the magnet is on top of the paper, instead of underneath?

