

THROUGH MAGNETISM



ACTIVITY 5

Making an Electromagnet

What you'll need:

- copper wire (insulated)
(Door bell or similar. Approx. 24 gauge)
- iron nail
- paper clip
- wire stripper
- electric tape
- C or D battery



What to do:

1. Wind the small copper wire around the iron nail 10 or more times leaving at least 4 inches of wire at each end.
2. Use the wire strippers to remove a little insulation from each end of the wire.
3. Hold the bare ends of the wire to the battery terminals for a couple of seconds. (NOTE: Don't hold the wire to the battery too long because the wire will get hot.)

4. Try to pick up the paper clip using the "magnetized" nail.

If you hold the paper clip close to the nail, does it repel or attract it? _____

What happens if you disconnect the wire from the battery? Is the magnetism permanent or temporary? _____

