

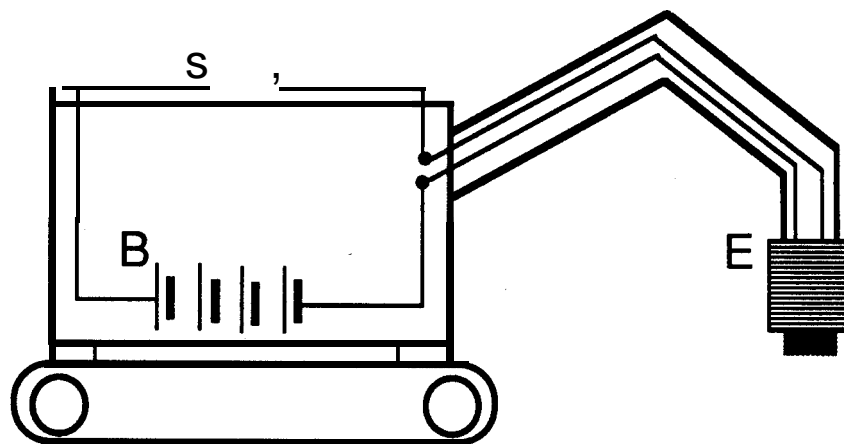
Homework 35e Using electromagnets

1. Use the words in the HELP-BOX to copy and complete the paragraph below.

current	bells	coil
stronger	electromagnet	greater

An is a magnet which can be turned on and off. It is made from a of wire and an iron core. When an electric flows in the coil it produces a magnetic field. The iron core makes the field The strength of an electromagnet can be increased by using a current. More turns on the coil also increases the strength of the magnetism produced by the electromagnet. Electromagnets are used in some relay switches and electric

2.



The diagram shows a toy crane which can pick up and drop small iron and steel objects.

- (a) Name the parts labelled B, S and E.
(b) Explain how the toy crane works.
3. Draw diagrams for the following electromagnetic devices and explain in your own words how they work.
- (a) The electric bell
(b) The relay switch