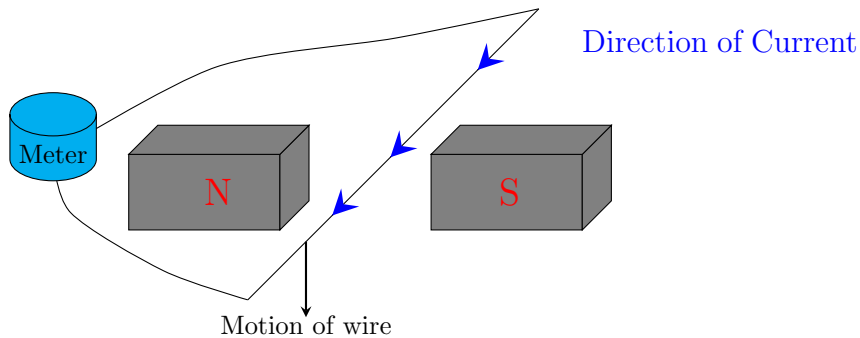


# Electromagnetic Induction

## 1 Generating Electricity



When a conductor is moved through a magnetic field an emf is **induced** across the ends of the conductor

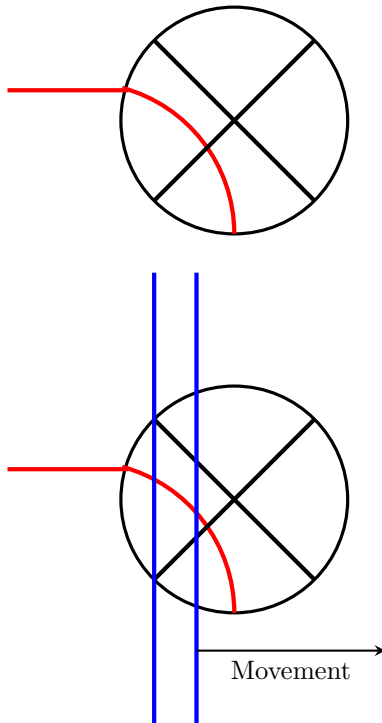
The emf will be greater when:

- The conductor is moved more quickly
- The magnetic field is stronger
- There is a longer length of conductor in the magnetic field

No emf will be induced if the conductor is parallel to the field lines

A current will flow if the conductor is part of a complete circuit

### 1.1 Explaining electromagnetic induction



## 2 The laws of electromagnetic induction