

Magnetism

Enduring Understanding

All electric and magnetic phenomena are due to the motion of charged particles. Changing magnetic flux is the origin of all inductance phenomena.

Essential Questions

1. What are the similarities and differences between electric and magnetic fields?
2. How will a charge move in a magnetic field?
3. How can the motion of a charged particle be manipulated?
4. What determines the magnetic force on a charged particle?
5. How can the motion of a current carrying wire be manipulated?
6. How can the magnetic field around a wire be calculated?
7. How is an induced EMF produced?
8. What energy transformations are involved in the operation of a motor and generator?
9. What is affected and unaffected by a transformer?

