

13 Faraday's and Lenz's laws – Part 2 —Answers

Answers

Work through these after you have tried the questions yourself.

2.1 how fast the magnetic flux changes (and the number of turns).

2.2 $20 \times 0.30 = 6.0 \text{ V}$.

2.3 the induced current flows in the direction that opposes the change that produced it.

2.4 you must do work to push against the opposing induced effect, and that work is converted into the electrical energy –so energy is conserved.

2.5 a coil is spun in a magnetic field, constantly changing the flux through it, which induces a current.