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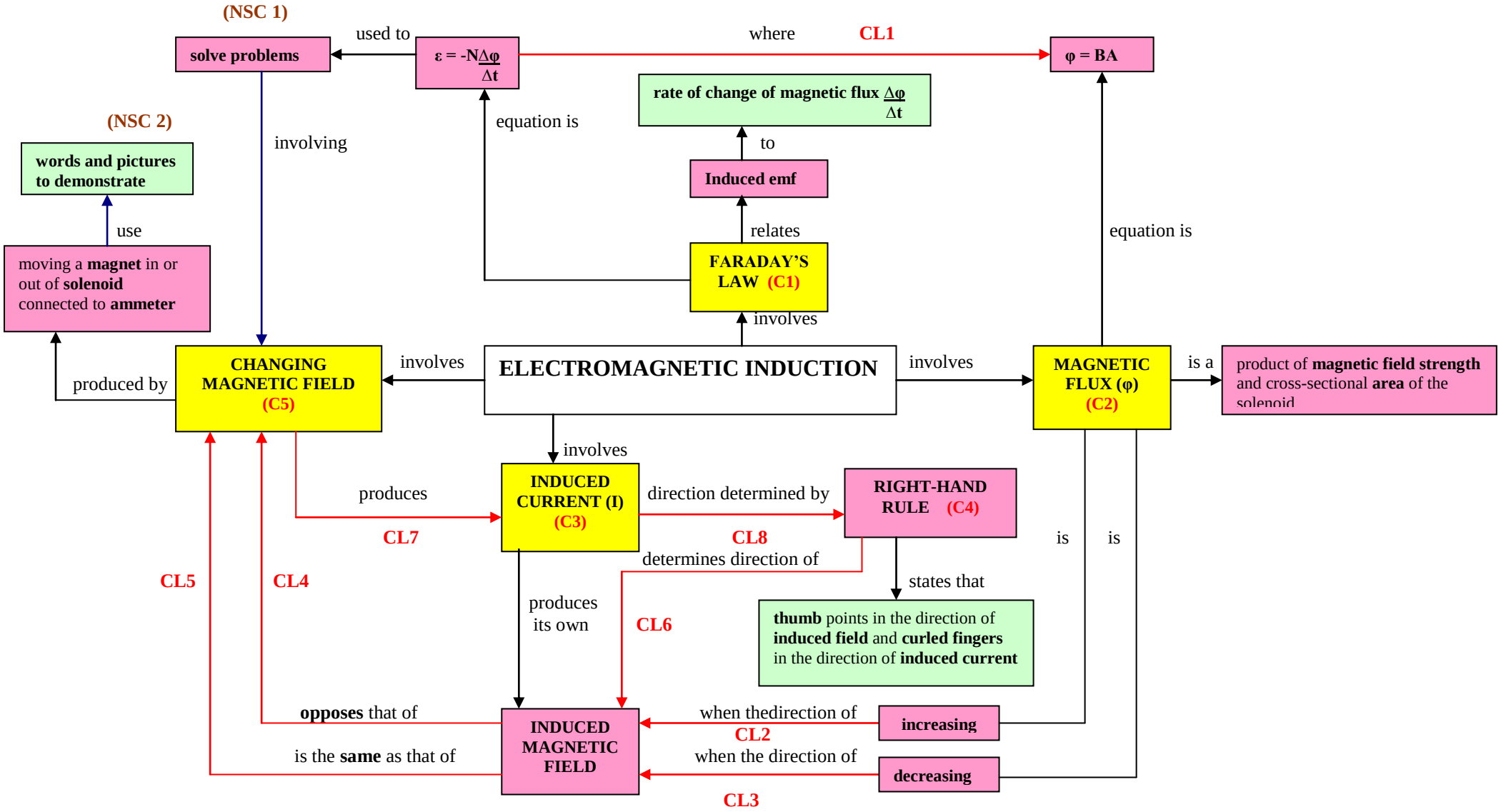
A self-study on learning and teaching electromagnetism in grade 11.

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CM 1: EMI


(NSC 1)
solve problems
used to
ε = -NΔφ/Δt
where
CL1
φ = BA
rate of change of magnetic flux Δφ/Δt
(NSC 2)
words and pictures to demonstrate
involving
equation is
to
Induced emf
use
relates
equation is
moving a magnet in or out of solenoid connected to ammeter
FARADAY'S LAW (C1)
involves
produced by
CHANGING MAGNETIC FIELD (C5)
involves
ELECTROMAGNETIC INDUCTION
involves
MAGNETIC FLUX (φ) (C2)
is a
product of magnetic field strength and cross-sectional area of the solenoid
involves
produces
INDUCED CURRENT (I) (C3)
direction determined by
RIGHT-HAND RULE (C4)
CL7
CL8
is
is
determines direction of
CL5
CL4
states that
produces its own
CL6
thumb points in the direction of induced field and curled fingers in the direction of induced current
opposes that of
INDUCED MAGNETIC FIELD
when thedirection of
increasing
CL2
is the same as that of
when the direction of
decreasing
CL3