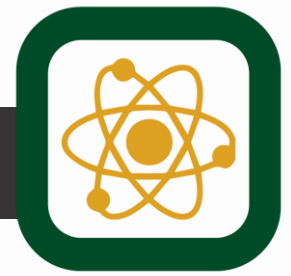


LEARNING JOURNEY

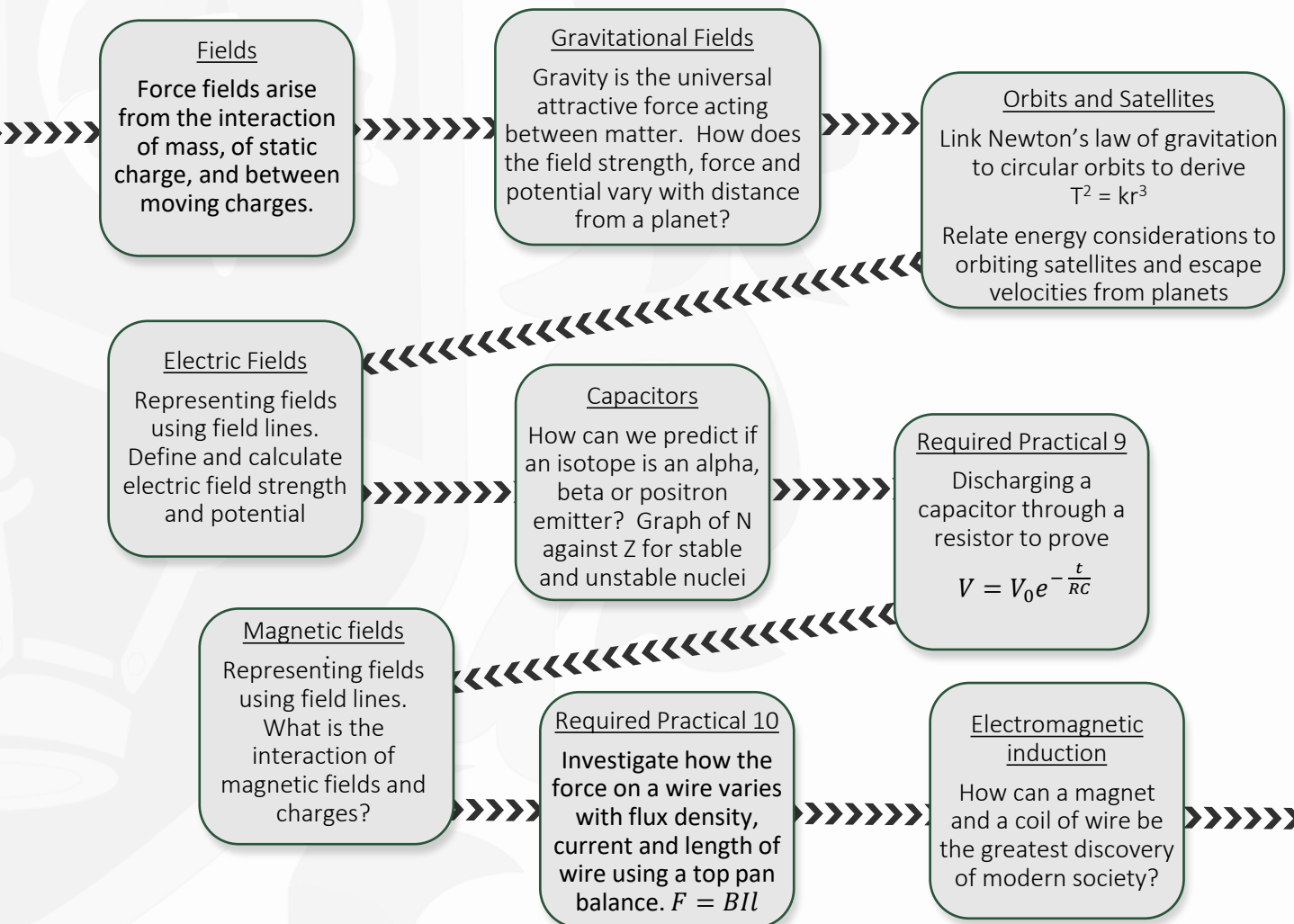
Physics



FIELDS

Year 13 Physics Autumn Term

The concept of field is one of the great unifying ideas in physics. The ideas of gravitation, electrostatics and magnetic field theory are developed within the topic to emphasise this unification. Many ideas from mechanics and electricity from earlier in the course support this and are further developed. Practical applications considered include: planetary and satellite orbits, capacitance and capacitors, their charge and discharge through resistors, and electromagnetic induction. These topics have considerable impact on modern society.



TUDOR HABITS AND VALUES: Show grit and courage as you attempt increasingly complex calculations using various formulae and units to solve challenging questions.

VOCABULARY; uniform, radial, potential, field strength, polar, geosynchronous, escape velocity, permittivity of free space, equipotential, capacitance, dielectric, relative permittivity, time constant, charge, cyclotron, flux, flux linkage, induced EMF, peak pd, rms pd