## **Triple Physics Higher**

- Draw the electric field of a point charge.
- Explain how an insulator can become positively charged.
- Explain how insecticides use static electricity to spread over a large area.
- Calculate the resistance in a simple circuit using Ohms Law.
- Calculate Power in a circuit.
- Explain how the brightness of a lamp changes when more lamps are added in series.
- Explain how to determine the resistance of a component like a lamp or resistor.
- Calculating density of an irregular object
- Describe what sublimation is
- Be able to calculate pressure from force.
- Describe how area affects pressure.
- Explain how pressure changes with depth
- Draw magnetic fields including arrows
- Calculating magnetic flux density using the equation F = BII
- Calculate moments
- Describe the principle of moments, explaining that clockwise moments will balance anti clockwise moments when an object is in equilibrium.
- Calculating GPE
- Calculating Kinetic energy
- Describe what 'work done' is
- Draw the symbol for a thermistor.
- Describe how a thermistor changes with temperature
- BE able to draw tangents to a curve on a graph
- State what specific latent heat is
- State what specific heat capacity is
- Describe how a student could use a circuit, with a joulemeter, heater and power supply to calculate the specific heat capacity of a material
- Explain how the kinetic energy of a particles will change with increasing temperature
- Explain a magnet can cause a current to flow in a solenoid
- Calculate current in a transformer
- Explain steps taken to increase the efficiency of the national grid