



(Year 9 Physics) Learning Journey Map

Year 9 Maths Skills

- Recognise and use expressions in decimal form
- Recognise and use expressions in standard form
- Use ratio's fractions and percentages
- Construct and interpret frequency tables and diagrams, bar charts and histograms
- Understand and calculate the mean, mode and median
- Understand the symbols =, <, <<, >>, >, ~
- Change the subject of an equation
- Substitute numerical values into algebraic equations using appropriate units for physical quantities
- Translate information between graphical and numerical form
- Plot 2 variables from experimental or other data
- Calculate the area of triangles and rectangles and the volume of cubes.

Finish content from Energy with either CS or Triple Content

YEAR 10

Reteach of content depending on question Level Analysis of the physics assessment

Physics Assessments for Triple Science

Gravity Weight and Mass

Distance / Time Graphs

Stopping Distances

Contact and Non-contact forces

Velocity / Time Graphs

Reaction Times

Velocity and speed

Scalar and Vector

Internal Energy

Distance and Displacement

Forces

Changes of State

Density Required Practical

Patterns of Energy Use

Particle Model

Density

Energy Resources

Energy Efficiency

Energy Changes

Energy stores

YEAR 8

Thermal Insulation

Energy Transfer

Energy Systems

Energy Systems

Year 9 Disciplinary Skills

- Observing: Carefully using your senses to gather information about the natural world.
- Planning: Designing and organizing experiments or investigations to test hypotheses.
- Collecting Data: Accurately recording and gathering data through various methods, such as measurements, observations, and surveys.
- Interpreting Data: Analysing and making sense of collected data, including identifying patterns, trends, and relationships.
- Analysing: Applying scientific principles and concepts to interpret and explain experimental results or observations.
- Evaluating: Assessing the reliability, validity, and limitations of scientific evidence and sources of information.
- Drawing Conclusions: Formulating logical conclusions based on evidence and scientific reasoning.
- Problem Solving: Applying scientific knowledge and skills to address and resolve scientific problems or challenges.
- Communicating: Effectively conveying scientific information, concepts, and findings through written, oral, and visual means.
- Critical Thinking: Applying logical and analytical thinking to evaluate scientific claims, arguments, and evidence.