



# Learning Journey Map

## Year 11 – Physics Combined



# OCR

Oxford Cambridge and RSA

Move on to A level


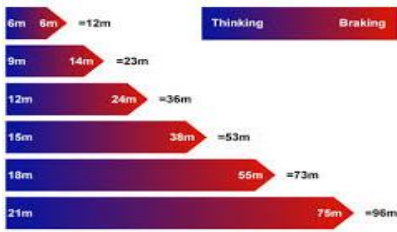


Year 11 Survival Top Tips	
<b>Tip 1</b>	Learn and revise vocabulary weekly, use glossaries given and - Quizlet/Seneca/Educake
<b>Tip 2</b>	Use ' Youtube- e.g. myGCSEscience, free Science lessons to help review key skills and concepts
<b>Tip 3</b>	Use GCSE Bitesize/Kerboodle resources/past OCR questions
<b>Tip 4</b>	Use the Pixl Resources on Firefly & therapy questions
<b>Tip 5</b>	Read online science news, watch science documentaries

**P6 Global challenges:**

**P6.2 Powering Earth**

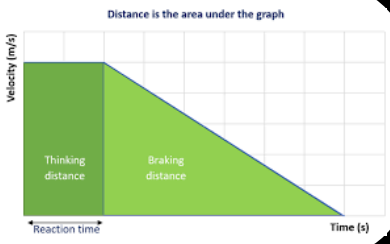
- Energy resources
- Using resources in everyday life
- The national grid
- Mains electricity

**P6 Global challenges:**

**P6.1 Physics on the move**

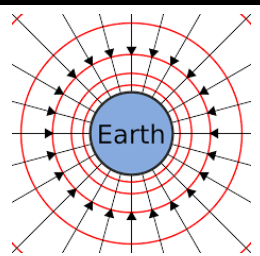
- Everyday motion
- Reaction time & thinking distance
- Braking & stopping distance
- Forces in collisions



**P5 Energy:**

**P5.2 Power and Efficiency**

- Energy & power
- Paying for electricity
- Energy in electric current
- Energy in heating
- Walls & insulation
- Efficiency



**P5 Energy:**

**P5.1 Work done**

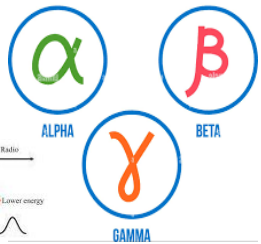
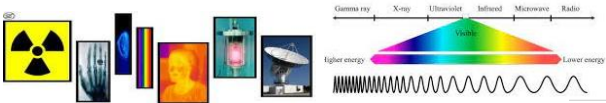
- Energy stores and energy transfers
- Analysing situations involving constant forces
- Analysing situations involving braking
- Analysing situations involving gravity



**P4 Waves and Radioactivity:**

**P4.2 The electromagnetic spectrum**

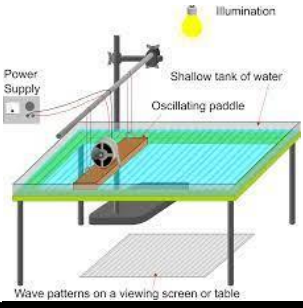
- Electromagnetic waves
- Uses & dangers of EM radiation



**P4 Waves and Radioactivity:**

**P4.3 Radioactive emissions**

- Atoms and Isotopes
- Alpha, beta and gamma radiation
- Nuclear equations for radiation
- Half-life of radioactive substances
- Radiation in and out of atoms

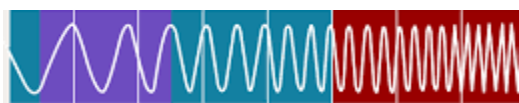


**Review of summer learning**

**P4 Waves and Radioactivity:**

**P4.1 Wave behaviour**

- Waves and their properties
- Wave velocity
- PAG- Using a ripple tank to calculate wave velocity



CURRICULUM OVERVIEW

**Development of key scientific skills: planning valid experiments, carrying out practicals safely, displaying & processing data, as well as analysing & evaluating results**

**Possible careers**

Research scientist, materials scientist, seismologist, mechanical engineer, architect, ship designer, theme park ride designer, audiologist, optician, photographer, Electrical engineer, civil engineer and many more!!

**CURRICULUM OVERVIEW**