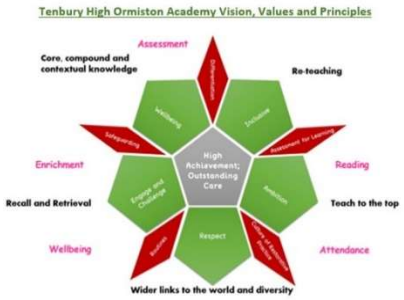
TENBURY HIGH
ORMISTON ACADEMY




# Curriculum Overview for Physics
# Year 10

| | | |
|---|---|---|
| **Half Term 1: Matter**<br><br>**Substantive**<br>❑ Name the states of matter<br>❑ Draw the states of matter<br>❑ Explain the properties of the states of matter (arrangement, energy, motion)<br>❑ recall the equation for density<br>❑ describe the difference between a chemical and physic change.<br>❑ state what specific heat capacity is.<br>❑ state what specific latent heat is.<br><br>**Disciplinary**<br>❑ Calculate Density<br>❑ Explain the different densities of objects<br>❑ Devise a practical to measure the density of a regular solid<br>❑ Devise a practical to measure the density of an irregular solid<br>❑ Devise a practical to measure the density of a liquid<br>❑ identify on a heating/cooling curve where changes of state occur<br>❑ |  | Decoding of key terminology<br>Skim reading<br>Etymology of key terms |
| |  | Energy, Matter, Solid<br>Liquid, Gas, State, Motion<br>Arrangement, Temperature<br>Density, Specific heat capacity<br>Specific latent heat, Chemical change, Physical change |
| |  | Recall tests<br>Review sheet<br>Termly exam |
| |  | Revision Card preparation<br>Recall test<br>Repetition of use of revision cards for review sheets and recall tests and for termly exams. |
| **Half Term 1: Matter**<br><br>**Substantive Knowledge:**<br>❑ define half-life.<br>❑ describe the difference between contamination and irradiation.<br>❑ Define background radiation and where it comes from.<br>❑ describe how the dosage of radiation can lead to different medical conditions.<br>Triple<br>❑ define nuclear fission and nuclear fusion.<br>❑ describe what a chain reaction is.<br>❑ describe how nuclear power is released.<br>❑ describe the process of nuclear fusion.<br>❑ describe the issues with nuclear fission<br>**Disciplinary Knowledge:**<br>❑ Calculate half life<br>❑ draw a half-life graph<br>▪ find the half life of a material from a radioactivity graph. |  | Decoding of key terminology<br>Skim reading<br>Etymology of key terms |
| |  | Alpha Beta Gamma<br>Ionisation<br>Penetration<br>Half-life<br>Fission (T)<br>Fusion (T) |
| |  | Recall tests<br>Review sheet<br>Termly exam |
| |  | Revision Card preparation<br>Recall test<br>Repetition of use of revision cards for review sheets and recall tests and for termly exams. |

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Tenbury High Ormiston Academy Vision, Values and Principles