**Curriculum Overview for Physics**

**Year 11**

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| **Half Term 1: Forces and motion**  **Substantive Knowledge:**  **Define vectors and scalars**  **label the motion on a distance time graph**  **recall equation for speed**  **recall acceleration equation**  **label the motion on a velocity time graph**  **identify common forces.**  **Describe and identify contact and non-contact forces.**  **define mass and weight**  **recall newtons three laws**  **Disciplinary Knowledge:**  **Calculate speed from a distance time graph**  **calculate acceleration from a velocity time graph**  **draw a force diagram**  **calculate the resultant force in a situation**  **calculate weight.** | Books | Skim and Scan of source information  Decoding terms  Etymology of key terms |
| Speech | **Scalar, Vector, Speed, Velocity**  **Acceleration, Force, Contact Force, Noncontact Force, Force diagram** |
| Checklist RTL | Recall questions to start every lesson  Recall test  Review sheet  End of unit assessment |
| Home | Revision Card preparation for every lesson  Recall test  Review sheet  Repetition of use of revision cards for end of unit assessment |
| **Half Term 2: Motion and forces**  **Substantive Knowledge:**  **describe the method to measure the acceleration of a object when you change the mass or force on the object.**  **recall the definition of stopping distance**  **describe what affect braking and thinking distance.**  **describe how the time of a collision affects the force exerted.**  **recall the equation for momentum.**  **Disciplinary Knowledge:**  **calculate the force the causes acceleration.**  **calaulate moment of and object**  **calculate the momentum of an object in a collision.** | Books | Skim and Scan of source information  Decoding terms  Etymology of key terms |
| Speech | **Newtons laws, Mass, Weight,**  **Stopping distance, Thinking distance, Braking distance**  **Momentum (H), Collision** |
| Checklist RTL | Recall questions to start every lesson  Recall test  Review sheet  End of unit assessment |
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