**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 informationDecoding termsEtymology of key terms |
| Speech | **Scalar, Vector, Speed, Velocity** **Acceleration, Force, Contact Force, Noncontact Force, Force diagram**  |
| Checklist RTL | Recall questions to start every lessonRecall testReview sheetEnd of unit assessment |
| Home | Revision Card preparation for every lessonRecall testReview sheetRepetition 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 informationDecoding termsEtymology of key terms |
| Speech | **Newtons laws, Mass, Weight,** **Stopping distance, Thinking distance, Braking distance****Momentum (H), Collision** |
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