|  |  |  |
| --- | --- | --- |
| **What will we be learning?**  GCSE Course: AQA Combined & Separate Science - Physics  Forces 3 | **Why this? Why now?**  Forces 3 | **Key Words:**  Make sure you know the definitions of these keywords and use them in your answers.  Extension  Elastic potential energy  Scalar  Vector  Resultant force  Free-body diagram  Newton’s Laws  Centre of mass |
| **What will we learn?**  W = mg (Weight = mass x gravitational field strength)  Work done = Force x distance  F = ke (Force = spring constant x extension)  Ee = ½ ke2 (Elastic potential energy = ½ x spring constant x extension squared – this equation is given on the formulae sheet)  **Common Misconceptions:** Weight and mass are the same thing | |
| **What opportunities are there for wider study?**  **Collins Revision guide relevant pages for this unit:**  Triple: 8-13 Higher:158-161 Foundation: 154-157  Structural Engineer Extreme Sports Designer Fairground-ride Designer  Architect Car Designer Cycle Designer Product Design | |
| **How will I be assessed?**  Hooke’s Law  **Required Practical(s) for this unit:** Investigate the relationship between force and extension of a spring | |