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| **What will we be learning?**GCSE Course: AQA Combined & Separate Science - PhysicsForces 3 | **Why this? Why now?** Forces 3 | **Key Words:**Make sure you know the definitions of these keywords and use them in your answers.ExtensionElastic potential energyScalarVectorResultant forceFree-body diagramNewton’s LawsCentre of mass |
| **What will we learn?**W = mg (Weight = mass x gravitational field strength)Work done = Force x distanceF = 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: 154-157Structural Engineer Extreme Sports Designer Fairground-ride DesignerArchitect 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 |