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| **What will we be learning?**Apple with solid fill**Gravity** | **Why this? Why now?**Previous Learning Key stage 2 Science SpeedFuture Learning Current, Voltage and Resistance, Energy transfers and Energy costsEnquiry ProcessesIdentify variables, Collect data, Present data, Analyse Patterns, Draw conclusions, Justify opinions and conclusions | **Key Words:**MassWeightCentripetalGravityForce |
| **What will we learn?**Calculate weight using W=mg Describe how weight varies on a journey to the moonExplain unfamiliar observations where weight changesSuggest implications, of how gravity varies, for a space missionDescribe how gravitational force is affected by distance Draw forces diagrams involving gravityCompare weight on Earth to other planets using the equationDraw conclusions from data about orbitsDescribe the difference between mass and weightDescribe how mass and weight is affected by gravityDeduce how gravity varies for different masses/distancesCompare and contrast gravity with other forces**Misconceptions in this topic**Mass and weight are the sameWeight and mass units mixedThere is no gravity in spaceGravity increases with height. Gravity cannot exist without air. There is a definite up and down in space.  |
| **What opportunities are there for wider study?**Careers - Engineer, Astronaut, Astrophysicist, Aero-Engineer, Marine EngineerSTE(A)M – For details of courses and opportunities look at:<https://highcliffe.sharepoint.com/sites/LearnSTEM> |
| **How will I be assessed?****End of topic assessment** |