Projectile Motion SPH4C

| A projectile is any object upon which the only force acting is | |
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| The acceleration of the object is always [|] even while it is moving upwards. |
| And all objects experience the | acceleration. |
| The path of a projectile (also called the |) will always be a |
| Vertical Motion Only | Gravity-free Projectile Motion |
| Why? Because as a projectile falls, the horizontal displacement increases | |
| with time – there is | · |
| This is true even if the projectile is launched at | an the horizontal: |
| | Gravity-free Path Parabolic Trajectory (resulting from gravity's influence) |
| Projectiles are often launched at an angle above their horizontal to their | |
| , the horizontal distance travelled before they hit the ground. | |