**Unit 3- Projectile Motion Formula Break down sheet**:

**HORIZONTAL MOTION**

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| Δx | Change in distance | m |
| v | velocity | m/s |
| t | Time | s |

 **Δx = vt**

 **v = Δx/t**

 **t = Δx/v**

**VERTICAL MOTION**

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| Δy | Vertical displacement | m |
| vi | Initial vertical velocity | m/s |
| a | Acceleration (vertical) | -9.8m/s2 |
| t | time | s |

**Δy = vit + ½ gt2**

**Δy = ½ gt2**

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| vf | Final vertical velocity | m/s |
| vi | Initial vertical velocity | m/s |
| a | Acceleration (vertical) | -9.8m/s2 |
| t | time | s |

**Vf = vi + gt**