**Unit 2 formulas- velocity and acceleration**

**V =** $\frac{∆x}{t}$

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| v | Velocity | m/s |
| ∆x | Change in distance (final - initial) | m |
| t | time | s |

**a =** $\frac{∆v}{t}$

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| a | Acceleration | m/s² |
| ∆v | Change in velocity (final - initial) | m/s |
| t | time | s |

x **= vit + ½ at2**

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| x | distance | m |
| vi | Initial velocity  | m/s |
| t | time | s |
| a | Acceleration | m/s² |

**Vf = vi + at**

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| Vf | Final velocity  | m/s |
| vi | Initial velocity | m/s |
| a | acceleration | m/s² |
| t | time | s |

**Vf2 = vi2+ 2ax**

|  |  |  |
| --- | --- | --- |
| Letters: | Stands for: | Measured in: |
| Vf | Final velocity  | m/s |
| vi | Initial velocity | m/s |
| a | acceleration | m/s² |
| x | distance | m |