Uncertainty in Physics

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| Description of error / uncertainty | Type (systematic / random) | Mitigation | Value | Percentage |
| *e.g. Measuring length with a ruler* | *Random* | *Ensure the equipment has the smallest divisions possibly – e.g. 1mm (for standard ruler).*  *Technique during measurement* | *½ the smallest division (0.5mm)*  *X 2 as measured at both ends (1.0mm)* | *At 0.5m;*  *1.0 X 10-3 / 0.5*  *= 0.2%* |
| *e.g. Ammeter not set to 0.00 when used (zero-error)* | *Systematic* | *Ensure the device is correctly calibrated*  *Ensure that contacts are moisture free*  *Connect-disconnect-reconnect* | *e.g. 0.06 read* | *At 2.15A*  *0.06 / 2.15*  *= 2.79%* |
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