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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