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| Know  1  Individual skills | | |  | Integration | | Apply  2  Understand principles | |
| Skills | | | | Strategy | |  | |
| K3  K4  K2  K1 | Choose a suitable range for the independent and dependent variable  Gather sufficient data for the investigation and repeat if appropriate  Prepare a table with space to record all measurements  Apply sampling techniques if appropriate | K11 | | | Choose range, interval, readings | A2  A1 | Explain why having a large range or many readings leads to accurate data  Describe the factors that influence the choice of range and interval for the variables |
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| A3 |  |
|  |  |
|  |  |  | | |  |  |  |
| K6  K5 | Check that the measuring instrument can measure the complete range of the independent variable  Check you can detect differences in the dependent variable | K12 | | | Test suitability of measuring instruments |  |  |
| A4 |  |
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|  | |  | | | |  |  |
| K9  K10  K8  K7 | Use the measuring instrument correctly  Carry out the method carefully and consistently  See if repeated measurements are close  Remove outliers and calculate mean of repeats | K13 | | | Gather data, minimising errors |  |  |
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| Key words | |  | | |  | |  |
| K15  K14 | **Range** The maximum and minimum values of a variable  **Interval** The gap between the values of the independent variable | K17  K16 | | | **Control group** Those that are not exposed to the factor being tested  **Repeatable** When repeat readings are close together | |