**Guide to the Suitability Test**

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| **Skill** | **What to do** | **Done?** |
| **Collect and use secondary data** | Explain and describe: What tests can be used? What is the purpose of the test and how is it used in our lives or work? Make sure you **reference** your sources. |  |
| **Detailed plan to compare suitability** | **Plan** out your experiment with a method and decide what results you will collect. Write this up in detail for prep. |  |
| **Risk assessment** | Complete a risk assessment for your plan – include all the **apparatus** and **chemicals** that you will use. Use the student safety sheets to help you. |  |
| **Collect data** | Record all the data you collect in an appropriate manner such as a **table**. **Calculate means** from your repeats and include these in the table. Give the **units**.  Make sure you think about what you are hoping to be able to do with the data. |  |
| **Compare data using charts, graphs or mathematical methods** | Draw a suitable **graph** if you can: use an appropriate **scale**, label the **axes** and draw accurately with **range bars** and a **line of best fit**. Show **outliers** if appropriate.  Can you use any mathematical methods to illustrate or analyse your results? |  |
| **Analyse; Patterns, trends, anomalous results and explain using scientific knowledge.** | Describe any patterns or trends in you results, try to **explain the scientific reasons** behind your results.  Are your **range bars** large or small?  Do the **ranges overlap**?  Is it easy to see the **results** of the test from the data? |  |
| **Write a conclusion to explain which was the best method for the task** | Can you now recommend the **most suitable method**? Remember what the purpose of the test was; can you link your results to the purpose of the test?  How **accurate** was your experiment? E**xplain** how you know this. |  |
| **Evaluate method** | Now that you have completed the work think about the method; how good was it or could it be improved? Would you include any **other information**? Are there **other tests** that you could do? |  |
| **Evaluate the quality of evidence** | How **valid** were your results, how close were the **repeats** (were your range bars small or large?), did you have any **outliers**? Can you explain why? |  |
| **Evaluate how you controlled risks** | How did you manage the **risks**? |  |
| **Spelling, punctuation and grammar** | Make sure your report is spell-checked, has sub headings, uses scientific words and has appropriate diagrams. |  |