

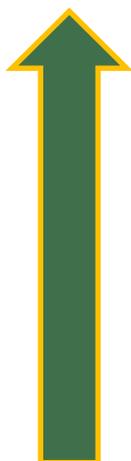


Key Stage 3 progress grid

Subject Science **Year** 9

Topic / skill area Evaluation

Trajectory	I am able to.....
T9, T8	<ul style="list-style-type: none"> <input type="checkbox"/> Devise statistical analysis (eg error bars) or uncertainty to comment on the confidence with which a significant difference exists between the means <input type="checkbox"/> Decide how to treat any anomalous results. <input type="checkbox"/> Consider conflicting evidence in detail and decide which is more likely to be correct <input type="checkbox"/> Plan further experiments or research strategies to extend the investigation
T7	<ul style="list-style-type: none"> <input type="checkbox"/> Evaluate data showing awareness of potential sources of random and/ or systematic errors and suggest possible improvements to the method <input type="checkbox"/> Explain how data can be interpreted in different ways, and how unexpected outcomes could be significant <input type="checkbox"/> Justify whether the strength of the evidence is sufficient to support the hypothesis <input type="checkbox"/> Explore further ranges and/ or intervals of data that would improve the accuracy and precision of the results
T6	<ul style="list-style-type: none"> <input type="checkbox"/> Explain using the data whether results are repeatable and reproducible <input type="checkbox"/> Suggest problems (limitations or inconsistencies) with data and explain them using scientific reasons <input type="checkbox"/> Consider apparatus that may not have been available that could improve the accuracy and/ or resolution of the data collected <input type="checkbox"/> Consider a variable that is difficult to control and suggest how to reduce this variation as much as possible
T5, T4	<ul style="list-style-type: none"> <input type="checkbox"/> Describe whether data is either repeatable or reproducible giving reasons <input type="checkbox"/> Calculate mean averages <input type="checkbox"/> Identify anomalies in data <input type="checkbox"/> Deduce the chances of human error in the investigation and suggest improvements. <input type="checkbox"/> Discuss if an appropriate interval and range of data was used
T3	<ul style="list-style-type: none"> <input type="checkbox"/> Suggest how the method used could be improved, stating a reason <input type="checkbox"/> Calculate the range of the independent variable <input type="checkbox"/> State the intervals used in the investigation <input type="checkbox"/> Describe simply how to improve the resolution of the data collected



Progress

T2, T1

- Identify an error that could have occurred in the investigation
- Give a suggestion on how the method used could be improved
- State the resolution of the dependent variable measurements
- State any control variables that were not kept the same