Planning Investigations - KS2 Working Scientifically Progress Matrix

Year Group	Week One	Week Two	Week Three	Week Four	Week Five	Week Six	Week Seven	Week Eight	Week Nine	Week Ten
3	Can define the 3 Types of Variable.	Can name at least 3 Independent Variables.	Can name at least 3 Independent, 1 Dependent Variable and 1 Control Variable.	Can name 3 each of Independent, Dependent and Control Variables.	Can construct questions from chosen variables.	Can identify variables in questions.	Can make a prediction.	Can justify a prediction.	Can list the equipment needed to carry out an investigation	Can write a method for an investigation.
4	Can define the 3 Types of Variable.	Can name 3 Independent Variables and 3 Dependent Variables.	Can name 3 each of Independent, Dependent and Control Variables.	Can construct questions from chosen variables.	Can identify variables from questions.	Can make a prediction.	Can justify a prediction.	Can list the equipment needed to carry out an investigation.	Can write a method for an investigation.	Can identify risks and mitigation procedures associated with an investigation.
5	Can define the 3 Types of Variable.	Can name 3 Independent, 3 Dependent and 3 Control Variables.	Can construct questions from chosen variables.	Can identify variables from questions.	Can make a prediction.	Can justify a prediction.	Can list the equipment needed to carry out an investigation.	Can write a method for an investigation.	Can identify risks and mitigation procedures associated with an investigation.	Can produce a full plan for an investigation.
6	Can define the 3 Types of Variable.	Can name 5+ of the 3 types of Variable.	Can construct questions from chosen variables.	Can identify variables from questions.	Can justify a prediction.	Can list equipment needed to carry out an investigation.	Can write a method for an investigation.	Can identify risks and mitigation procedures associated with an investigation.	Can produce a full plan for an investigation.	Can produce a full plan for an investigation.

Gathering Data and Analysis - KS2 Working Scientifically Progress Matrix

Year Group	Week One	Week Two	Week Three	Week Four	Week Five	Week Six	Week Seven	Week Eight	Week Nine	Week Ten
3	Can list the types of data that can be gathered in investigations.	Can decide the type of data being gathered in investigations.	Can complete provided results tables.	Can complete provided results tables.	Can complete provided results tables.	Draw and complete own results tables.	Draw and complete own results tables.	With help, draw a graph with an appropriate scale on the axes.	With help, draw a graph with an appropriate scale on the axes.	Identifying trends in the data gathered from investigations.
4	Can list the types of data that can be gathered in investigations.	Can complete provided results tables.	Can complete provided results tables.	Draw and complete own results tables.	Draw and complete own results tables	Draw and complete own results tables	With help, draw a graph with an appropriate scale on the axes.	With help, draw a graph with an appropriate scale on the axes.	Identifying trends in the data gathered from investigations.	Writing Conclusions.
5	Can list the types of data that can be gathered in investigations.	Complete provided results tables.	Complete provided results tables.	Draw and complete own results tables	Draw and complete own results tables	With help, draw a graph with an appropriate scale on the axes.	Draw own graphs from data gathered in investigations.	Identifying trends in the data gathered from investigations.	Writing Conclusions.	Writing Conclusions.
6	Can list the types of data that can be gathered in investigations.	Complete provided results tables.	Draw and complete own results tables.	Choose the most appropriate graph for the data gathered.	With help, draw a graph with an appropriate scale on the axes.	Draw own graphs from data gathered in investigations.	Identifying trends in the data gathered from investigations.	Writing Conclusions.	Writing Conclusions.	Produce a full data report.

Critical Evaluation of Investigations - KS2 Working Scientifically Progress Matrix

Year Group	Week One	Week Two	Week Three	Week Four	Week Five	Week Six	Week Seven	Week Eight	Week Nine	Week Ten
3	State the trend in the results.	State whether the trend matched the prediction.	Explain how the trend matched, or didn't match, the prediction.	Explain how the trend matched, or didn't match, the prediction.	List the criteria needed to decide whether results gathered are valid or not.	Explain whether results gathered were valid or not.	Spot anomalies in the results gathered.	Explain the reason for any anomalies in the data.	Suggest how the method could be improved to obtain valid data.	Suggest new questions that are related to the original investigation.
4	State the trend in the results.	Explain how the trend matched, or didn't match, the prediction.	Explain how the trend matched, or didn't match, the prediction.	List the criteria needed to decide whether results gathered are valid.	Explain whether results gathered were valid or not.	Spot anomalies in the results gathered.	Explain the reason for any anomalies in the data.	Suggest how the method could be improved to obtain valid data.	Suggest new questions that are related to the original investigation.	Design an investigation that could produce similar results.
5	Explain how the trend matched, or didn't match, the prediction.	Explain how the trend matched, or didn't match, the prediction.	Describe the criteria needed to decide whether results gathered are valid or not.	Explain whether results gathered were valid.	Spot anomalies in the results gathered.	Explain the reason for any anomalies in the data.	Suggest how the method could be improved to obtain valid data.	Suggest new questions that are related to the original investigation.	Design an investigation that could produce similar results.	Produce a full scientific report, including planning, data and evaluation.
6	Explain how the trend matched or didn't match the prediction.	Explain the criteria needed to decide whether results gathered are valid or not.	Explain whether results gathered were valid or not.	Spot anomalies in the results gathered.	Explain the reason for any anomalies in the data.	Suggest how the method could be improved to obtain valid data.	Suggest new questions that are related to the original investigation.	Design an investigation that could produce similar results.	Produce a full scientific report, including planning, data and evaluation.	Produce a full scientific report, including planning, data and evaluation.