





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	Week One	Week Two	Week	Week Four	Week Five	Week Six	Week Seven	Week Eight	Week Nine	Week Ten
Group			Three							
3	Can list the	Can decide	Can	Can	Can	Draw and	Draw and	With help,	With help,	Identifying
	types of data	the type of	complete	complete	complete	complete own	complete own	draw a graph	draw a graph	trends in the
	that can be	data being	provided	provided	provided	results tables.	results tables.	with an	with an	data gathered
	gathered in	gathered in	results	results	results			appropriate	appropriate	from
	investigations.	investigations.	tables.	tables.	tables.			scale on the	scale on the	investigations.
								axes.	axes.	
4	Can list the	Can complete	Can	Draw and	Draw and	Draw and	With help,	With help,	Identifying	Writing
	types of data	provided	complete	complete	complete	complete own	draw a graph	dra <mark>w a gr</mark> aph	trends in the	Conclusions.
	that can be	results tables.	provided	own results	own results	results tables	with an	with an	data gathered	
	gathered in		results	tables.	tables		appropriate	appro <mark>priat</mark> e	from	
	investigations.		tables.				scale on the	scale o <mark>n the</mark>	investigations.	
							axes.	axe <mark>s.</mark>		
5	Can list the	Complete	Complete	Draw and	Dra <mark>w an</mark> d	With help,	Draw own	Identifying	Writing	Writing
	types of data	provided	provided	complete	complete	draw a graph	graphs from	trends in the	Conclusions.	Conclusions.
	that can be	results tables.	results	own results	own results	with an	data gathered	data g <mark>ather</mark> ed		
	gathered in		tables.	tables	tables	appropriate	in	from		
	investigations.					scale on the	investigations.	investigations.		
						axes.				
6	Can list the	Complete	Draw and	Choose the	With help,	Draw own	Identifying	Writing	Writing	Produce a full
	types of data	provided	complete	most	draw a	graphs from	trends in the	Conclusions.	Conclusions.	data report.
	that can be	results tables.	own	appropriate	graph with	data gathered	data gathered			
	gathered in		results	graph for	an	in	from			
	investigations.		tables.	the data	appropriate	investigations.	investigations.			
				gathered.	scale on the					
					axes.					

Critical Evaluation of Investigations - KS2 Working Scientifically Progress Matrix

Year	Week One	Week Two	Week Three	Week Four	Week Five	Week Six	Week Seven	Week Eight	Week Nine	Week Ten
Group										
3	State the	State whether	Explain how the	Explain	List the	Explain	Spot	Explain the	Suggest how	Suggest new
	trend in the	the trend	trend matched,	how the	criteria	whether	anomalies in	reason for	the method	questions
	results.	matched the	or didn't match,	trend	needed to	results	the results	any	could be	that are
		prediction.	the prediction.	matched,	decide	gathered	gathered.	anomalies in	improved to	related to
				or didn't	whether	were valid or		the data.	obtain valid	the original
				match, the	results	not.			data.	investigation.
				prediction.	gathered are					
					va <mark>lid or n</mark> ot.					
4	State the	Explain how	Explain how the	List the	Explain	Spot	Explain the	Suggest how	Suggest new	Design an
	trend in the	the trend	trend matched,	criteria	whether	anomalies in	reason for	th <mark>e met</mark> hod	questions	investigation
	results.	matched, or	or didn't match,	needed to	results	the results	any	c <mark>ould b</mark> e	that are	that could
		didn't match,	the prediction.	decide	gathered	gathered.	anomalies in	imp <mark>roved</mark> to	related to	produce
		the prediction.		whether	were valid or		the data.	obt <mark>ain v</mark> alid	the original	similar
				results	not.			data.	investigation.	results.
				gathered				/ /		
				are valid.				//		
5	Explain how	Explain how	Describe the	Explain	Spot	Explain the	Suggest how	Suggest new	Design an	Produce a
	the trend	the trend	criteria needed	whether	anomalies in	reason for	the method	questions	investigation	full scientific
	matched, or	matched, or	to decide	results	the results	any	could be	that are	that could	report,
	didn't	didn't match,	whether results	gathered	gathered.	anomalies in	improved to	related to the	produce	including
	match, the	the prediction.	gathered are	were valid.		the data.	obtain valid	original	similar	planning,
	prediction.		valid or not.				data.	investigation.	results.	data and
										evaluation.
6	Explain how	Explain the	Explain whether	Spot	Explain the	Suggest how	Suggest new	Design an	Produce a	Produce a
	the trend	criteria needed	results gathered	anomalies	reason for	the method	questions	investigation	full scientific	full scientific
	matched or	to decide	were vali <mark>d or not</mark> .	in the	any	could be	that are	that could	report,	report,
	didn't	whether	/ /	results	an <mark>omalie</mark> s in	improved to	related to the	produce	including	including
	match the	results		gathered.	the <mark>data</mark> .	obtain valid	original	similar	planning,	planning,
	prediction.	gathered are				data.	investigation.	results.	data and	data and
		valid or not.							evaluation.	evaluation.