HookED SOLO SCIENCE DISCUSSION

CO-CONSTRUCTED SELF ASSESSMENT RUBRIC	Prestructural	Unistructural	Multistructural	Relational	Extended Abstract
	Learning outcomes show unconnected information, no organisation.	Learning outcomes show simple connections but importance not noted.	Learning outcomes show connections are made, but significance to overall meaning is missing.	Learning outcomes show full connections made, and synthesis of parts to the overall meaning	Learning outcomes go beyond subject and makes links to other concepts - generalises
Using data to make a claim	I need help to use data	I use data from one trial or one example.	I use data from multiple trials or examples.	I use data from multiple trials or examples I manipulate my data e.g. find the average/ mean for my trials.	I use data from multiple trials or examples. I manipulate my data e.g. find the average/ mean for my trials. I discuss variance, error, bias and uncertainty in the data.
Using evidence to support a claim	I need help to use evidence	I report only one form of evidence.	I report multiple forms of evidence. For example: controlled experiment or multiple sources.	I compare multiple forms of evidence and/or counterevidence.	I compare multiple forms of evidence and/or counterevidence. I evaluate the reliability and validity of the evidence

Explaining a phenomena	I need help to explain what happened	I can describe what happened [the event/phenomenon].	I can describe what happened and how it happened.	I can describe what happened and how it happened.	I can describe what happened and how it happened.
(something detectable - see measure)		No connection to any science understanding.	Incomplete connection to a science understanding.	I can explain why something happened (give reasons) using scientific understanding.	I can explain why something happened (give reasons) using scientific understanding.
					I can make a generalisation/claim about the phenomena by referring to a scientific concept.
Scientific Argument	I need help to make a claim.	I can make a claim and give one relevant reason for and one relevant objection to the claim.	I can make a claim and give several relevant reasons for and several relevant objections to the claim.	I can make a claim and give several relevant reasons for and several relevant objections to the claim.	I can make a claim and give several relevant reasons for and several relevant objections to the claim.
				I can explain why they are reasons for and against the claim.	I can explain why they are reasons for and against the claim.
					I can give evidence/ grounds for my reasons and objections. [variance/ error/ reliability/ validity/ expert opinion/considered plausible etc]
					I can judge the overall strength of my reasons and objections and thus my argument