



Science Disciplinary Literacy Framework
Think like a Scientist

<i>Reading</i>		<i>Writing</i>		<i>Speaking and Listening</i>	
<ul style="list-style-type: none"> • Move between texts and graphics • Ability to read multi-modal texts • Analytical perspective encompassing a range of viewpoints • Seeks out trends and patterns • Decipher word problems • Specific vocabulary that can be easily confused • Reading with precision • Contextualising 		<ul style="list-style-type: none"> • Lack of personal presence • Objective stance • Precise vocabulary • Use of strong verbs • Method writing • Structured note taking • Analytical writing • Factual accuracy and tentative language • Evaluation 		<ul style="list-style-type: none"> • Use formal vocabulary related to analytical writing at all times: describing trends, describing quantities, establishing a relationship or contrast and conclusion/other connecting phrases • Eye contact at all times (from speaker and audience) • Use key vocabulary with accuracy • Project loudly and clearly using full sentences • Replace fillers with precise, academic language • Listen attentively: paraphrasing may be required! 	
<i>Strategies/pedagogy to support...</i>					
<ul style="list-style-type: none"> • Reciprocal reading • Close reading of texts supported and assessed via text dependent questions 		<ul style="list-style-type: none"> • Sentence crafting • Modelling analytical writing, explanations, arguments and descriptions. 		<ul style="list-style-type: none"> • Accountable talk • ABC feedback • Talk for writing (structured talk) & paired writing • Paraphrasing • Upgrading learner responses • Using images to structure talk 	
<p>Combining reading with writing:</p> <ul style="list-style-type: none"> • Bedrock mapper sequenced to pre-teach vocabulary needed to support reading and writing • Providing reading texts that support expectations for scientific writing • Reading combined with note taking, answering questions about texts and summarising (guided reading) 					
<i>Curriculum opportunities (Year 9)</i>					
HT1	HT2	HT3	HT4	HT5	HT6
<ul style="list-style-type: none"> • Comparing atomic models and separating mixtures (using images to structure writing, sentence crafting and modelling) • Energy resources 	<ul style="list-style-type: none"> • The Heart (using dissection and images to structure writing and identifying explicit vocabulary instruction and sentence crafting) • Immunity & 	<ul style="list-style-type: none"> • Discovery of Drugs (reciprocal reading and combining reading with writing) • Crystallisation: method writing and following written 	<ul style="list-style-type: none"> • Predator-prey cycle (using formal vocabulary related to analytical writing to help describe trends and quantities in writing and speaking) 	<ul style="list-style-type: none"> • Current in a circuit & Circuit symbols (descriptive dialogue used to identify circuit symbols) • Periodic table and Mendeleev (reciprocal 	<ul style="list-style-type: none"> • Microscopy: comparing microscopes reciprocal reading and method writing (combining reading/talk with writing/sentence

comprehension (reciprocal reading and combining reading with writing)	Vaccination (providing wider context for students to form and vocalise their opinions through structured debate)	instructions (combining reading with writing)	<ul style="list-style-type: none">Genetic Engineering (structure debate to lead to paraphrasing content)	reading and combining reading with writing)	crafting) <ul style="list-style-type: none">Active transport, Stem Cell and Meristem comprehension (reciprocal reading with writing)
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