Computer Science Disciplinary Literacy Framework

Think like a Computer Scientist

Reading	***Writing***	***Speaking and Listening***
• Move between texts and graphics • Ability to read multi-modal texts • Analytical perspective encompassing a range of viewpoints • Decipher word problems • Specific vocabulary that can be easily confused • Reading with precision • Contextualising	• Lack of personal presence • Objective stance • Precise vocabulary • Use of strong verbs • Method writing • Structured note taking • Factual accuracy • Evaluation	• Use subject specific vocabulary related to Computer Science • Question/Challenge/Support speaker with their vocabulary • Eye contact at all times (from speaker and audience) • Use key vocabulary with accuracy • Project loudly and clearly using full sentences

Strategies/pedagogy to support…		
• Reciprocal reading • Independent reading • Decoding • Word identification	• Sentence crafting • Modelling	• Accountable talk • ACE – Accept/Challenge/Extend • Talk for writing (structured talk) & paired writing • Paraphrasing • Upgrading learner responses • Reading text and being able to articulate it back to the class. • Students should be llistening attentively as questions may be asked which could be bounced off other questions.
Combining reading with writing: • Bedrock mapper sequenced to support the use of subject specific Tier 3 vocabulary in reading and writing • Reading combined with note taking and answering questions		

Curriculum opportunities (Year 9)

HT1	HT2	HT3	HT4	HT5	HT6
Reciprocal reading, modelling and sentence crafting - • Looking at Algorithms and Pseudocode and being able to	**Paired response, sentence crafting. Reading- (Decipher coding problems) combined with paired speaking** • Predicting code using PRIMM	**Using images to structure talk** • Looking at images related to data compression and sound and structuring writing to understand	**Predicting code - paired response, writing/sentence crafting** • Writing code using PRIMM	**Using images to structure talk. Guided teacher talk and modelling of Logic gates** • Looking at how computers use Logic with the use	**Predicting code - paired response, writing/sentence crafting. Reading combined with speaking then doing (writing) Upgrading learner responses through talk** • Writing code using PRIMM

replicate with a given scenario **Reciprocal reading combined with speaking -** • Reading and summarising live stories related to Technology – • Bedrock mapper- support the use of subject specific Tier 3 vocabulary for Algorithms	• Bedrock mapper- support the use of subject specific Tier 3 vocabulary for Fundamentals of Programming	differences in data compression techniques • Bedrock mapper- support the use of subject specific Tier 3 vocabulary for Data Representation	• Writing code using Precise vocabulary with Factual accuracy • Bedrock mapper- support the use of subject specific Tier 3 vocabulary for types of Programming Languages	of images to structure talk and then draw and solve logic problems • Bedrock mapper- support the use of subject specific Tier 3 vocabulary for Logic Gates	• Bedrock mapper- support the use of subject specific Tier 3 vocabulary for Robust Programming Design