

## **PLUME ACADEMY - LEARNING OVERVIEW**

Year	9
Subject	Computing

## **Prior Learning**

The Year 9 curriculum builds on prior learning in Year 8 by building upon their text-based programming skills in Python, introducing new programming techniques. Students will develop their presentation of information skills by selecting appropriate software. Students will be introduced to new Business terminology building on the marketing and branding delivered in Year 8. Students will develop their block-based programming knowledge, by building an app using app inventor.

## Curriculum Intent – What are the curriculum aims?

The Year 9 Computing curriculum aims to develop students' knowledge and understanding of the next phase of their education, so that they can make informed decisions about their options by providing taster lessons in each of the 3 subjects the faculty has to offer (Business, IT and CS). The topics selected are designed to increase proficiency in key aspects of our subject whilst teaching students using real world scenarios. The curriculum is designed to give students the opportunity to develop their skills in selecting the correct technological tools for the purpose of the task. Students are given the opportunity to develop their sophistication in programming techniques whilst consolidating techniques learned in Year 8.

# Curriculum Implementation – What my child will be learning?

Term 1	Half Term 1	Computer Science taster – Programming and theory	
	Half Term 2	IT taster – Project Lifecycle – Information Presentation	
Term 2	Half Term 3	Business taster – Cashflow, Finance and Recruitment	
	Half Term 4	E-safety – web design Wix	
Term 3 Half Term 5		Problem Solving – Abstraction and Decomposition	
	Half Term 6	Preparing for KS4 – Questionnaires, spreadsheets, internet	
		searching, folder management and mind mapping.	

# Curriculum Impact - How will progress be assessed?

Informally, every lesson culminates in a knowledge recall quiz also receive feedback in lesson via class discussion and questioning.

Formal assessment is via a series of half termly end of topic assessment which are marked and feedback provided. Students have an opportunity to improve their assessment results.



# Super-Curricular Opportunities – Extending Learning

Useful study resources:	If a student is really passionate about this subject, they could:	As a parent/carer, I can assist my child in this subject by:		
https://www.codecademy.com/	Learn a new	Asking your child		
	programming language	about their use of		
https://www.bbc.co.uk/bitesize/subjects/zvc9q6f		technology		
	Read related news			
https://www.w3schools.com/	articles in the media.	Supporting your		
		child with revision		
		prior to the end		
		of half term		
		assessments		
Pa call				

#### Recall

Students could recall previous lessons in learning through starter tasks in lessons, end-of-lesson Kahoot's which usually include questions from previous parts of the curriculum, and 'no hands-up' questions by the Teacher. Additionally, students can engage in various other recall activities such as:

- **Low-stakes quizzes:** Short, frequent quizzes (paper-based or digital) that focus on recently covered material, designed more for checking understanding than for grading.
- Think-Pair-Share: Students first think individually about a question, then discuss their thoughts with a partner, and finally share with the class. This encourages individual recall and peer discussion.

**Peer teaching/explaining:** Students explain a concept to a classmate, which forces them to retrieve and articulate their understanding.

# **Subject-specific terminology**

- 1. **Iteration:** Repeating a process or set of instructions multiple times (programming concept).
- 2. **Selection:** Choosing different actions based on whether a condition is true or false (programming concept).
  - 3. **Project Lifecycle:** The stages a project goes through from start to finish, including planning, execution, and completion.
  - 4. **Abstraction:** Hiding complex details to focus on the essential features of something.
  - 5. **Relational Database:** A type of database that stores and provides access to data points that are related to one another (relevant to IT).
    - 6. **Bandwidth:** The maximum amount of data that can be transmitted over an internet connection in a given amount of time (relevant to IT).
      - 7. **Production:** The process of creating goods or services (business term).
- 8. **Recruitment:** The process of finding and hiring suitable people for a job (business term).
  - 9. **Copyright:** The legal right to be the only one to reproduce, publish, and sell a literary, musical, or artistic work (relevant to Intellectual Property/IT).
  - 10. **Stakeholder:** A person or group with an interest or concern in a business or project.