

Working with AI

Explicit learning

- I can code Scratch to respond to user input
- I can output text in response to user input
- I can create decision statements
- I create a chatbot
- I can question an AI program
- I can use AI to help me learn
- Recognise use of AI in SMART Cities



Implicit learning

- Comprehension of requirements
- Creating materials suited to age, religion, status, interests
- Identifying demographics
- Recognising cultural differences

Term 1.1

Implicit learning

- Awareness of the advantages and disadvantages of AI
- need for GDPR
- Enhancing learning using AI support
- Keeping up to date with technology

Term 1.2

Advanced Spreadsheets & Project planning

- I can use spreadsheets to analyse data
- I can create materials to inform
- I can identify a target audience using demographics
- I can create materials for a specific audience
- I can complete a task using a client brief
- I can meet set success criteria with in a timeframe

Explicit learning

Explicit learning

Binary

- I can explain why computers use binary
- I can convert between binary and denary
- I can convert into Hexadecimal
- I can use ASCII
- I can create binary artwork
- I can explain how sound is represented in binary



Implicit learning

- Working collaboratively responding to feedback following instructions
- working to tight deadlines
- considering needs of others
- Stretching own learning

Term 2.1

Implicit learning

- Understand that not all things process information in the same way
- appreciate the maths involved in computing
- Learn about coding in history

Term 2.2

Graphics and Project Design

- I can state how bitmaps are different to vector graphics
- I can use layers to combine images
- I can create original digital artwork
- I have explored AI and image creation
- I can interpret and implement a client brief
- I can respond to feedback and improve work
- I can work to a deadline

Explicit learning

Explicit learning

Python Coding

- I can identify data types in Python
- I can create and use variables
- I can code logic decisions
- I can create a simple game in Python
- I can create definitions in Python
- I can debug my code



Implicit learning

- Critical thinking
- Responsible digital citizenship
- Appreciation for security and privacy
- Building a security mindset

Term 3.1

Implicit learning

- Independent learning
- understanding another language
- using trial and error
- resilience
- Being creative
- Enjoyment

Term 3.2

Cyber security and networking

- I am aware of the risks to computers and data
- I can discuss viruses, worms and trojans
- I know how to keep a computer and data safe
- I know about firewalls.
- I can state the benefits and disadvantages of networking
- I can identify LAN and WAN
- I can use terminology for networking correctly

Explicit learning



2025 -2026

YEAR 8 COMPUTER SCIENCE

Name: _____

Class: _____