

SUBJECT NAME COMPUTER SCIENCE



ALDER
Community High School

YEAR GROUP 8

Topic – Understanding Computers		
Autumn Term 1	Composites - Identify pieces of hardware and their purpose - Compare the different types of memory used by a computer system - Explain the different methods of data storage - Evaluate the effectiveness of a storage device - Instructions - Evaluate CPU Performance - Describe the roles of the operating system - Compare different types of apps available	Key Vocabulary Primary memory ROM RAM Secondary Storage Optical Magnetic Solid state Operating Software Fetch Execute Decode
	Assessment AFL used throughout lessons in the form of whiteboards and code calling. Mid-point MCQ test to inform planning and reteach of misconceptions also end of topic assessment.	ILS Revision - Knowledge drop, flash cards, condense it, mind map, mnemonics
	How to help at home Use ILS strategies to ask questions on what they have studied in lesson. Check retrieval of the knowledge using the knowledge organisers. Ensure revision is completed on the retrieval grids.	Use the web links to support with wider understanding Wider reading KS3 Computer Science - BBC Bitesize
	SMSC	Careers links Network manager, Software developer, technician



Data Representation

Autumn 2

Composites

Convert binary to denary and vice versa
Describe how computers represent characters
Explain how images are represented in binary
Explain how a computer stores sound
Be able to add together two binary numbers

Key Vocabulary

- Binary
- Denary
- Character set
- Pixel
- Bitmap
- Resolution
- Metadata
- Sampling
- File Size
- Analogue

Assessment

AFL used throughout lessons in the form of whiteboards and code calling.
Mid-point MCQ test to inform planning and reteach of misconceptions also end of topic assessment.

Homework /ILS

Revision - Knowledge drop, flash cards, condense it, mind map, mnemonics

How to help at home

Use ILS strategies to ask questions on what they have studied in lesson.
Check retrieval of the knowledge using the knowledge organisers.
Ensure revision is completed on the retrieval grids.
Use the web links to support with wider understanding

Wider reading

[KS3 Computer Science - BBC Bitesize](#)

SMSC

Careers Links

Network manager, Software developer, technician



Our curriculum overviews are currently being revised to align with recent updates to teaching sequences and assessment planning. Once published, they will outline the key composite knowledge in each topic subject. We expect to share these with parents shortly and thank you for your patience during this update.