Northolt High School
Scheme of Learning

Year group: 13	Term: Summer 2	Unit duration: 4 weeks	Number of lessons: 6	Unit title: Compression, Encryption and Hashing

Assessment outcome: How data is exchanged between different systems.	Fertile question? When is it most suitable to use Encryption rather than Compression ? What is the similarity between the 2 ?

Key skills/concepts/knowledge that students should cover	Start RAG	End RAG	Literacy. Key vocabulary/subject terminology that students should cover
(a) Lossy vs Lossless compression. (b) Run length encoding and dictionary coding for lossless compression. (c) Symmetric and asymmetric encryption. (d) Different uses of hashing.			Compression Lossy Lossless Encoding Hashing Symmetric Asymmetric Encryption

Stretch. Key skills/concepts/knowledge that students should cover		Suggested materials teachers could/should use
Understand (Cryptology) the development of Key to encrypt and decrypt data in both Symmetric and Asymmetric encryption.		**TeachICT, Isacc Computing, A Level Computing textbook** **Computer Science Powerpoints/Worksheets**
		Key home learning tasks students should complete **Worksheets**