Independent Learning Project

Department:	MATHS	Start Date:	Summer 1st Half term	Due Date:	June half term

Title of Task:		**How should I submit my work?**	
Aims/Learning Outcomes: 1. What is cryptography and history 2. Breaking codes 3. Specific code research 4. Making codes		Success Criteria: (On ppt)	My Target Level:
What you need to do		**Extension Task**	**Useful Topic Related Words**
Guidelines: You are going to research different types of codes that have been used around the world. You will learn how to understand these codes and use them. **You Must:** - Research some methods of coding. - Use some of the coding methods to code and decode messages. **You Should:** - Show evidence of your research. - Present your research and coding examples neatly and be ready to share them with the class at the end of the project.		**You Could:**	

What steps can I use to help along the way? These steps will be helpful when completing the project.	Are there any supporting documents – PowerPoint's, images, pictures, website links, etc?	Equipment that I may need

Checkpoint 1 (due in week 1)
Homework task
  • What is Cryptography and why is it important?
  • Give an example of when it was used?
  • What does Cryptography look like today and why is it important?
  • Remind students to reference any source
	Ppt in folder	Internet
		Pen
		Caeser shift wheel (homemade)

Checkpoint 2 (due in week 2) Homework task Differentiated code breaking task (can include Morse code, Caesar code, pigpen, substitution, coordinates, etc)		
Checkpoint 3 (due in week 3) Homework task Students to research a specific type of Cryptography (which they'll eventually code in) Examples Core Caesar's Alphabet Substitution Ciphers Reciprocal Ciphers Symmetric Ciphers Asymmetric Ciphers Enigma (Stream Cipher) Advanced Secure Sockets Layer PGP (Pretty Good Privacy) The Data Encryption Standard ... and many more		
Checkpoint 4 (due in week 4) Homework task Use a coding system to code what you did last weekend and include an explanation on how to decode it (class could decode each other's codes next lesson?)		

Please remember to plan out your time carefully and ask your subject teacher if there is anything that you do not understand.