

1. Be familiar with the latest assignment and chapters 4 and 5 of the text.
2. Explain how the Poles cracked the Enigma. Mention the roles of Ciezki, Rex, Schmidt, Rejewski. Explain the data that the Poles collected, and how they collected it, in building their Enigma replica.

Explain in detail the steps necessary for them to crack an intercepted Enigma-encrypted German radio message, and what if any machines were being used.

3. Explain how the British were cracking the Enigma at the start of the war. Mention the roles of the Poles, Denniston, cillies, Turing.

Explain in detail the steps necessary for them to crack an intercepted Enigma-encrypted German radio message, and what if any machines were being used.

4. Explain how the British were cracking the Enigma by the end of the war. Mention the roles of Turing and Churchill.

Explain in detail the steps necessary for them to crack an intercepted Enigma-encrypted German radio message, and what if any machines were being used.

5. Explain the significance of cryptic crossword puzzles, pinching, and gardening to cracking of the Enigma.

6. Give an example where the British learned some information by cracking German messages that they did not act on. Why did they not act?

7. Before expressions such as *fighter plane*, *observation plane*, *torpedo plane* were translated into Navajo, they were first replaced with words such as *hummingbird*, *owl*, *swallow*. Why?

8. Roughly how many words were in the Navajo codeword lexicon? How was the list of words kept secure? How were words translated that were not on the lexicon? What precautions were taken to prevent frequency analysis? About how many code talkers were there? In what kinds of military operations was use of the codetalkers particularly effective?

9. Describe the cracking of the hieroglyphs. Explain the role played by Kircher, Young, Champollion, Cleopatra and Ramses.

Explain in detail Champollion's *eureka* moment.

10. Describe the cracking of Linear B. Explain the role played by Minos, Evans, Kober, Ventris, Chadwick. Why was it guessed that the language was syllabic?

Table 19 of the text shows 6 words from Linear B. What was Kober's guess about these 6 words?

She guessed that symbols 37 and 41 shared the same vowel: why?

She guessed that symbols 05 and 12 shared the same vowel: why?

She guessed that symbols 37 and 05 shared the same consonant: why?

She guessed that symbols 41 and 12 shared the same consonant: why?

How did Ventris conclude that some symbols were pure vowels?

Explain in detail Ventris's *eureka* moment.