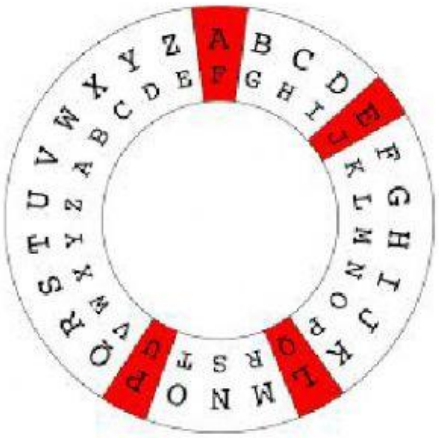
Cryptology



1. Dbo zpv sfbe uijt? Ju't b tfdsfu dpef! If you don't understand that, it is because I wrote it in a secret code. It isn't a very complicated code. I just changed every letter for the one following it in the alphabet. So, 'b' is 'c', 'c' is 'd' and so on. Fbtz

2. Secret codes are not a new idea. We know that the Ancient Egyptians and Greeks used them, as did the Arabs of a thousand years ago. They were especially important in war. Commanders didn't want the enemy to capture their messages and understand their plans, so they wrote them in code. Of course, the enemy wanted to understand the messages, so they would try to find the code, or 'break' it.

The Enigma code

3. As a result, codes became more and more complicated. One of the most famous is the Enigma code, invented by the Germans and used in the Second World War. People believed that it was impossible to break, because it was always changing. In one message, the letter 'e' could be 'f', but in another message it could be 'z'. So, there were millions of possibilities in every coded message.

4. The Polish were the first people who tried to break the code because they were concerned about Hitler's rise to power. They found out a lot about how it worked, but they couldn't understand it. When Hitler attacked in 1939, the Poles told the British everything that they knew about the code.

Alan Turing, code-breaker

5. Most of the British code-breakers thought that Enigma was unbreakable. However, one man managed to break it. He was a brilliant young mathematician called Alan Turing. He believed that he could break the code with advanced logic and statistics. To do that, he needed to make a machine that could do a very large number of calculations very quickly. So he built a machine called the 'Bombe'.

6. It worked and he broke the Enigma code. The British and Americans could read the messages that were sent to and from Hitler's submarines. This greatly helped the allies to liberate Western Europe from Hitler and the Nazis.

From code-breaking to computer-building

7. Turing continued working with machines and electronics and in 1944 he talked about 'building a brain'. Turing had an idea for an electronic 'universal machine' that could do any logical task. In 1948, while he was working at Manchester University, he created the 'Manchester Baby'. It was Turing's second great invention and the world's first digital computer. When he sent a message from his computer to a telex machine, Alan Turing wrote the first e-mail in history.

Find words or phrases in the text that mean:

1. something that cannot happen, not possible (par. 3)_____
2. the past form of the modal verb can (par. 3) _____
3. chances that something may happen or may be true (par.3) _____
4. unable to comprehend (par. 4) _____
5. discovered (par. 4) _____
6. the past simple of the verb know (par. 4)_____
7. the past simple of the verb think (par. 5) _____
8. manage to solve (par. 5)_____
9. a series of mathematical processes (par. 5) _____
10. to help someone be free (par. 6)_____