

# Code-breaking

In war, both sides want to keep their plans secret. They send messages in code, using mixed-up words, letters, and numbers. To read them, people must unlock the code. Both sides used machines that could do this quickly. The Allies won because they “cracked” the Axis codes first.

## Enigma

German code machines were called Enigma, meaning “a puzzle”. Polish scientists found out how it worked. They made a copy and showed Britain. By 1940, the British code-breakers could understand most German secret radio messages.

German Enigma machine



**! WOW!**  
Code-breakers' jobs were top secret. They didn't tell anyone what they were doing.



Code breakers were good at science, maths, and puzzles.

## Station X

Station X was Bletchley Park, a big country house north of London. Here, more than 10,000 British code-breakers set to work. They read German radio messages and worked out codes, such as Enigma's.



## Bombe

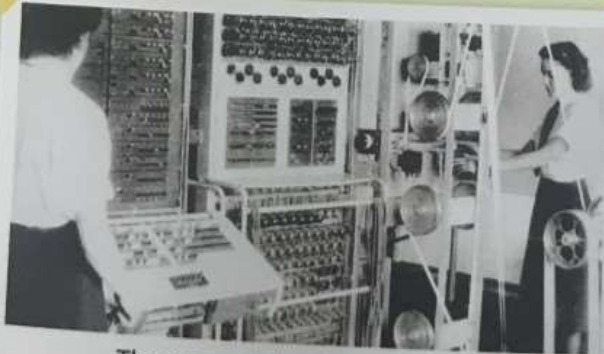
German codes changed every day. To keep up, a brilliant maths expert, along with other code-breakers at Bletchley, made a machine named the Bombe. Its spinning wheels, or rotors, could break a new code each day.

### Spinning wheels

One Bombe could crack codes from 36 Enigma machines.

## Colossus

The Germans also had an even better machine called Lorenz. The Bletchley code-breakers cracked it, but it was slow work, so they made the world's first electronic computer, called Colossus, to help. Colossus sorted 5,000 letters and numbers every second. Its data helped the Allies plan the D-Day landings in June, 1944.



The team at Bletchley Park built Colossus for the code-breakers.

## Secret radio

Spies and agents on both sides used secret codes. They sent messages in Morse code, by radio. They often hid the radio set in a suitcase to carry around.



Suitcase spy radio