BREAKING CODES

Alan Turing and his team used mathematics and a computer to break the Enigma code. What other codes are there and how easy are they to break?

GREEK SQUARE

Codes have existed throughout history. The Ancient Greeks were always fighting wars and sending secret messages. Messengers on horseback rode out from Athens to the Greek armies in the field. They used a Code Square.

OUEEN'S CODE

Elizabeth I was Queen of England in 1586. Her cousin, Mary Queen of Scots, was in prison. Mary wanted to be gueen, so she created a code to write to her friends. She

replaced letters with symbols, like this:



$$A = HU$$
 $E = 8$ $0 = C$
 $R = \Phi$ $T = \Theta$

Things did not end well for Mary Queen of Scots. Her code was broken by Queen Elizabeth's men and Mary's head was cut off in 1587.

Tips for breaking Mary's code:

- Some letters are used more often. in English than others. The most used letters are E, T and A. Look for the most used code symbols.
- Look for short words, like 'the' and 'and'.

Break the code!

ημίζο 2ςφ αθφ μέδ θίζες αθφ.

HACKING

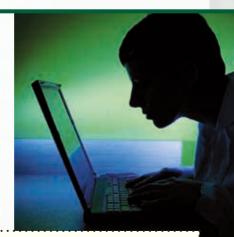
Today programs to run computer software are written in code and codes are also used to protect information online. When a person breaks a computer code from the outside, it's called hacking and it's usually against the law.



One of the world's most famous hackers is Mark Zuckerberg. He hacked into Harvard's online student records and used photos to create Facemash. He put two student faces together with the question, "Which one is more attractive?" The site had 450 visitors in the first 24 hours. He had to say sorry to all the students, but now he had his big idea. A few months later, he was ready to launch Facebook.

It doesn't always work out so well. Two British teens hacked into the computers of the London police. They recorded conversations about possible criminals and posted them on YouTube. The London police sent them to prison.

Can you write computer code? What do you use it for?



What do these words mean? You can use a dictionary.

messenger replace symbol software launch