



## Codes and code-breaking



### Activity

The teacher should begin by writing a statement on the blackboard using one of the four methods provided below. Students should then attempt to decipher the code. Show the students how the code works.

- Use numbers to represent letters of the 26-letter alphabet.
- Write words backward so they appear correct in a mirror. (Reverse imaging).
- Scramble the letters within the sentence.
- Develop a secret pattern using the alphabet. For example, for each letter of the sentence, move up one letter on the alphabet to develop the code. (i.e., Csfbl uif dpef = Break the code).

Next, the teacher should divide the class into four groups and have each group create a coded message of their own using one of the four methods provided above.

Finally, the teacher and students should discuss the importance of learning how to write and break codes. One discussion might center on code breaking during WWII and planning the D-Day invasion.

### Objective

Students will learn different methods of breaking codes.

### Materials

Pen/pencil and paper; *Cracking the code* briefing

### Supplemental materials

1. Articles on cia.gov:
  - *Break the code* game located in the games section of Spy Kids
  - [Navajo Code Talkers and the Unbreakable Code](#)
  - [The Son of a Navajo Code Talker Shares his Father's Story](#)
  - [The Enigma of Alan Turing](#)
  - [Kryptos](#)

GRADE LEVEL

SUBJECTS INVOLVED

TIME

Middle/High school

Math/History/English

30-45 min