**Meet Cryptography**

**A branch of both mathematics and computer science, cryptography is the study and practice of obscuring information**

Illustration of simple encryption.

Cryptography refers almost exclusively to encryption, the process of converting ordinary information (plaintext) into unintelligible gibberish (i.e., cipher text). Decryption is the reverse, moving from unintelligible cipher text to plaintext.

A cipher (or cypher) is a pair of algorithms which creates the encryption and the reversing decryption. The detailed operation of a cipher is controlled both by the algorithm and, in each instance, by a key. This is a secret parameter (ideally, known only to the communicants) for a specific message exchange context.

This site aims to provide a practical approach to cryptography. We attempt to provide javascript examples and detailed diagrams where possible, in order to make the learning process much smoother.

**What is there to know?**

* [**Ciphers**](http://practicalcryptography.com/ciphers/)

Understand the fine details of a wide range of cryptographic ciphers. Find information on block ciphers, symmetric ciphers, public key encryption, and many more.

* [**Cryptanalysis**](http://practicalcryptography.com/cryptanalysis/)

Discover how often under public scrutiny, holes are poked and cracks begin to form, in algorithms which were once considered secure.