How is Mathematics used? - encryption

Have you ever wondered how information transmitted over computer networks is kept safe and private?

Here's how!
Any secure information like pin codes and passwords are encrypted (converted into code), transmitted over the Internet in code, then decrypted (changed back) at its destination.
Only the organisation using the method knows the special code needed to encrypt and decrypt the message.

Here's an example:

The encrypted message is transmitted over the Internet.

A user enters their pin code. Their code is encrypted.

The message is decrypted back.

Task:
With a partner:
Create a code for encryption.
Send an encrypted message (on paper) to your partner. They then use the code you both created to decrypt the message back.

Challenge:
How secure is your code?
Can someone else break your code?