



# Letter Exchange

Swapping letters of the alphabet for other letters is a simple but effective way of writing a code. (Zk ivrccp zj mvip vrjp - if you know what I mean!)

If you also use a keyword - a word that helps you arrange the order of the letters - your message is even safer.

Just let your secret agent partner know the keyword, and you are ready to begin secret communications.



## Equipment

The great thing about writing codes like this is that you don't really need any equipment at all.

A pen and a piece of paper helps, but you can use a computer, or even do it all in your head, if you're really clever!

## Safety Stuff

Becoming a secret agent can be fun, but check with an adult before you begin these projects as you might need their help. Working with items such as scissors can be dangerous, so be very careful when you use them, and make sure that you never leave them open or lying around where smaller children can reach them.

Before starting, cover the work surface with newspaper or an old cloth and make sure that you are wearing an apron or some old clothes.

Gather together all the items you'll need before you begin. You can probably find most of what you need simply by hunting around the house, but remember to check with an adult before you take anything. After all, you don't want to be an unpopular secret agent!

# Steps

## Step One

First, think of a keyword to use. It needs to be between five and nine letters long, with each letter occurring only once. Pick something that people might not easily guess - but which you can easily remember. The example below uses the word 'pyramid'.

Write out the alphabet in one long line. Then write your keyword under the first few letters, with the letters lining up. Then add the rest of the alphabet - remembering to leave out any letters that you've already written in your keyword. Like this:

```
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z  
P Y R A M I D B C E F G H J K L N O Q S T U V W X Z
```

## Step Two

Use your new alphabet (that's the one on the second line) to write a message. To write your message in code, find each letter that you want to use in the top row, and swap it for the one underneath it. So, for example, the word 'hello' would be written as 'bmggk'.

```
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z  
P Y R A M I D B C E F G H J K L N O Q S T U V W X Z
```

As long as the person receiving the message knows the keyword, they'll be able to read your message to them.

## Coded Message

Because you're likely to get a message back from your secret agent partner, you will need to be able to decode messages like this yourself. Use the keyword PYRAMID to read the following.

```
IKGGKV PDMJS W SK SBM YKPS.  
SMB HKJMX VCGG YM AMGFUMOMA SBMOM.  
HMMS HM KJ AMRF R.
```

The answer is on the next page.

## Tips and Tricks

Make sure your keyword doesn't fall into enemy hands.

Always send your keyword separately from your message. If possible, encode it as well to be extra careful. For example, use the newspaper code to give your partner the keyword used in your letter exchange code.

The most successful spies will only give their partner a clue about the keyword, rather than the word itself. They can then use this to work out the actual word. So you might say 'The name of my pet dog'. If your partner knows the name of your dog, then they have the keyword. It's a good idea to change your keyword quite often as well, just in case it's ever discovered. Just remember to let your secret agent partner know!

## Decoded Message

FOLLOW AGENT X TO THE BOAT.

THE MONEY WILL BE DELIVERED THERE.

MEET ME ON DECK C.