

Another simple code which substitutes numbers for letters is made by building a square of 25 boxes into which the alphabet almost fits. The 26 letters of the alphabet can be fitted into 25 squares because some are used less frequently, and two such letters can be put together. When decoding, the other letters in the word will show which of the two letters to choose. Letters often put together are I and J; Q and R; W and X. In this example I and J are put together. The square with the alphabet in place looks like this:

	1	2	3	4	5
1	A	B	C	D	E
2	F	G	H	I/J	K
3	L	M	N	O	P
4	Q	R	S	T	U
5	V	W	X	Y	Z

With this system, the code number for A is 11 because it is in the first row, first column; for H, 23 (row 2, column 3); and for M, 32. The row and column number identifies each letter. The code is a bit clumsy but it has been used with success. Here is a hidden message disguised as a grocery order.

Joseph Bulochi & Sons, Grocers  
48 Liberty Street

Gentlemen:

Please accept my order for the following and deliver at once:

43 cans best sardines @15¢

33 boxes soap flakes @14¢

23 large boxes napkins @15¢

31 large cans peaches @35¢

Yours very truly,

Can you find the message hidden in this simple "order" to the grocer?

This isn't all there is to invented alphabet codes. There are still other ways to make them and still other types which include our most important, though not our most secret, codes.

*Find the Real message  
in this story!*

Today is the 54<sup>th</sup> year and 34<sup>th</sup> week of my life. I am thinking of having a birthday party. When I turned 45 I had a party and 42 people came. 24 of those people I have known since I was 32. That's a long time! 11 of them I have known since I was 22. At the party we had 24 different kinds of hors d'oeuvres. Can you imagine? But what is more absurd is that we also had 33 types of beverages. Only 11 of them were consumed. There were 44 streamers hanging and 24 balloons. It was really beautiful! Outside someone decorated the address to the house, which was 3433 West Central Blvd., to make sure everyone could see it. We played 24 hands of poker and at the end I came out \$43 dollars richer! I think my friends let me win because it was my birthday. When the party was over I was so tired that I wanted to sleep for 44 hours, but my cat only let me sleep for 23. The next night I slept for 15 hours. Now I feel all rested up. And that is a good thing to because I am sure I have about 31 hours of cleaning ahead of me! Realistically, I figure 24 hours from now I will not even be able to tell there was a party here, except for the 32 bags of recycling that were produced. Maybe I'll just move down the street instead, to 2444 West Central Blvd!

Start out by drawing two vertical lines and two horizontal lines across them, just as though you were playing ticktacktoe. If you fill the alphabet in the spaces, you will find you have room for nine letters.

A	B	C
D	E	F
G	H	I

A, for example, is  $\sqcup$ ; B,  $\sqcup$ ; C,  $\sqcup$ . The letter E,  $\square$ , is the only one completely enclosed. The code is easy to use.

HEAD is encoded as  $\square\square\sqcup\sqcup$ .

But this takes care of only nine letters. What about the rest? As soon as more lines are used you duplicate the pattern. One solution that makes a good and complete code is this one:

A	B	C	<del> <table border="1"> <tr> <td>K</td> <td>J</td> <td>L</td> </tr> <tr> <td></td> <td>M</td> <td></td> </tr> </table> </del>	K	J	L		M		<table border="1"> <tr> <td>N</td> <td>O</td> <td>P</td> </tr> <tr> <td>Q</td> <td>R</td> <td>S</td> </tr> <tr> <td>T</td> <td>U</td> <td>V</td> </tr> </table>	N	O	P	Q	R	S	T	U	V	<del> <table border="1"> <tr> <td>X</td> <td>W</td> <td>Y</td> </tr> <tr> <td></td> <td>Z</td> <td></td> </tr> </table> </del>	X	W	Y		Z	
K	J	L																								
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The use of dots makes it possible to use the same diagram pattern more than once. The alphabet is completely covered and the code works. The diagrams are so easy to memorize that once seen, the code can be copied down from memory and so you can have it ready for use in just a few seconds. This well-known code is called the Masonic cipher. During the Civil War it was used by Northern prisoners in Confederate prisons to communicate with friends on the outside. All that is now needed is some practice with it. Try to encode the following messages:

1. WHAT IS THE ANSWER TO THE THIRD PROBLEM
2. HAVE YOU DONE YOUR HOMEWORK
3. DO YOU THINK THE QUIZ WILL BE HARD

These are messages to decode:

4.  $\square\square\sqcup\sqcup > \square\square\sqcup\sqcup \square\square\sqcup\sqcup \square\square\sqcup\sqcup$

5.  $\square\square\sqcup\sqcup \square\square\sqcup\sqcup \square\square\sqcup\sqcup$   
 $\square\square\sqcup\sqcup \square\square\sqcup\sqcup \square\square\sqcup\sqcup$

6.  $\square\square\sqcup\sqcup \square\square\sqcup\sqcup \square\square\sqcup\sqcup$   
 $\square\square\sqcup\sqcup \square\square\sqcup\sqcup < \square\square\sqcup\sqcup$



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 - - ••  
 1 •- - - -  
 2 ••- - -  
 3 •••-  
 4 ••••-  
 5 •••••  
 6 -••••  
 7 - - -•••  
 8 - - - -••  
 9 - - - - -•  
 0 - - - - -

Morse Code can be tapped out or you can use a flashlight to "flash" it out. Do you have a neighbor that you can communicate this way with? How about a sibling in a nearby room? Pass messages without anyone else even knowing!