## Crack the Code

After the outbreak of war in August 1914 the Admiralty's secret intelligence unit, Room 40, rapidly began to undertake codebreaking operations against Germany. This provided British armed forces and their allies with essential information about what they enemy had planned.

A message can be turned into a Cypher (a type of Code) by substituting each letter in the message with another letter or number. There are lots of different ways of creating cyphers as shown in Tables 1,2 and 3 .

## Table 1

This table replaces each letter in the alphabet with a number.

| 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 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |

## Table 2

This table is similar to table 1 but the here the letters aren't in alphabetical order

| D | K | Q | Y | V | Z | C | F | J | R | M | P | U | L | A | W | I | S | X | G | T | E | N | O | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | H |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Table 3

In this table some numbers have been replaced with letters. If you had a message made of numbers, you could convert it into words using the letters that have replaced the numbers in the table.

| 1 | V | 3 | 4 | 5 | 6 | 7 | W | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | A | 14 | 15 | 16 | P | 18 | O | 20 |
| 21 | 22 | 23 | U | 25 | F | 27 | 28 | 29 | E |
| 31 | R | 33 | 34 | J | 36 | K | 38 | 39 | 40 |
| L | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | Q | 54 | 55 | S | 57 | 58 | C | T |
| 61 | 62 | 63 | B | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | G | 76 | 77 | 78 | 79 | D |
| 81 | H | 83 | 84 | 85 | 86 | 87 | N | 89 | 90 |
| M | 92 | Z | 94 | I | 96 | 97 | 98 | X | Y |

## HMS CAROLINE

1．Can you encrypt this message using Table 1？
HOSTILE CRUISER AHEAD
Answer： $\qquad$
$\qquad$
$\qquad$ －

2．Use Table 2 to convert this into a message．
$\begin{array}{llll}8 & 13 & 14 & 14\end{array}$
$18 \quad 12$
22
221
$\begin{array}{lllll}15 & 26 & 22 & 15 & 1\end{array}$
Answer： $\qquad$
$\qquad$
$\qquad$

3．Can you encrypt this message using Table 3？Find where each letter appears on Table 3. What number should be in each letter＇s place on the table？We＇ve done the first letter to get you started．

## ACTION STATIONS

Answer： 13

4．Use Table 1 to convert this message．

```
9}14
```

Answer： $\qquad$

5．Can you convert this message into words using Table 3？Find where each number should be on Table 3 and note down the letter that is in its place．


Answer： $\qquad$
$\qquad$

| † LS 81 |  |  |
| :---: | :---: | :---: |
|  | YNกS ЭาqV｜IVJヨGNi： |  |
|  |  |  |
|  | Q⿴囗十⺝甘 OヨヨdS 77nョ：てO |  |
|  | 8l ¢616IZ8L \＆ | SてL60Z6L SL 8：LO |
|  |  | s．əəMsu甘 |

