## Ottendorf Cipher

In an Ottendorf Cipher, each letter of the original text (plaintext) is substituted with three numbers (ciphertext) that correlate with a letter on a single-page document that serves as the key. The first number represents the line, the second number relates to the word from that line, and the last number relates to the letter from that word.


To encode - that is, to convert the plaintext message into ciphertext - find the letters of your original message (plaintext) and replace them with the letters from a "key" document.

Using a copy of the Gettysburg Address (attached), the following message would look like this: "Two guys walked into a bar. The third guy ducked."

| 2.1 .4 | 4.2 .1 | 5.1 .1 | 6.4 .1 | 11.6 .4 | 2.7 .7 | 10.5 .1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2.3 .3 | 1.5 .3 | 2.7 .1 | 15.10 .4 | 1.4 .2 | 10.9 .1 | 4.5 .1 |
| 4.1 .1 | 4.10 .1 | 6.2 .1 | 4.3 .1 | 10.1 .1 | 6.3 .1 | 3.1 .2 |
| 9.1 .1 | 4.10 .2 | 1.2 .5 | 2.1 .4 | 4.11 .2 | 4.5 .1 | 3.1 .2 |
| 5.5 .9 | 4.4 .5 | 11.6 .4 | 1.5 .1 | 5.5 .9 | 9.3 .4 | 3.6 .1 |
| 18.5 .3 | 3.7 .1 | 5.8 .3 |  |  |  |  |

## Ottendorf Cipher

Decode the following messages:

What do you call it when a snowman throws a tantrum? 2.2.1, 6.1.1, 4.2.2, 2.7.1, 6.5.3, 2.9.1, 3.1.3, 4.2.1, 5.3.1

What happens when a strawberry gets run over crossing the street?
2.1.4, 3.1.2, 3.3.1, 1.8.1, 1.1.1, 8.1.4, 2.1.1, J, 4.4.4, 6.1.1

What do you call a hotdog on wheels?
7.4.1, 8.3.3, 7.5.2, 9.1.1, 12.7.1, 1.2.3, 2.1.2, 4.4.7

What did the coffee report to the police? 9.1.3, 3.4.1, 5.11.4, 4.4.3, 10.4.4, 10.2.1, 10.8.1, 4.4.5

## Ottendorf Cipher

Your turn! Answer the following questions using the attached Gettysburg Address as your key (remember, the title does not count as line 1).

How would your name look encoded using the Ottendorf Cipher?

Would your rather be able to fly or be invisible?

Would you rather be a cartoon character or a super hero?

Would you rather have a car that could fly or go under water?

Would you rather be really fast or really strong?

## Thy (bettushurg Adurss

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we can not dedicate -- we can not consecrate -we can not hallow -- this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us -- that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion -- that we here highly resolve that these dead shall not have died in vain -- that this nation, under God, shall have a new birth of freedom -- and that government of the people, by the people, for the people, shall not perish from the earth.

Abraham Lincoln
November 19, 1863

