



Encrypting and Decrypting Vocabulary Terms



In this teacher-led team activity, teams of students will use algorithms to encrypt Web vocabulary terms. Then they will exchange their lists of encrypted terms and decipher (or decrypt) each other's encryptions.

1. Divide the class into two teams, Team A and Team B. Distribute the Team Activity worksheets as indicated to students on Team A and Team B (see the following pages).
2. Give each team one of the lists of vocabulary terms provided below (or create two lists of your own). Tell the students not to share their terms with the other team.
3. Direct each team to encrypt their list of terms using a simple algorithm. They can use the algorithms provided with their lists below, or you can devise your own algorithms and provide them to students with their lists. For more advanced students, you can assign each team to devise their own algorithm.
4. Direct each team to write their encryption results in the Encrypted Terms column on their worksheets.
5. When both teams have encrypted all the terms on their lists, the teams should exchange their worksheets with the other team. Each team can then decipher (or decrypt) the terms.

Team A

bandwidth
blog
collaboration
compatibility
compression
copyright
domain name
encryption
fair use
File Transfer Protocol (FTP)

Algorithm

Increase each letter by two characters (e.g., "a" becomes "c", "y" becomes "a" and so on).

Team B

metadata
page weight
usability
streaming
Secure Shell (SSH)
Secure Sockets Layer (SSL)
upload
validators
Web host
wiki

Algorithm

Increase each letter by four characters (e.g., "a" becomes "e", "y" becomes "c" and so on).



Encrypting and Decrypting Vocabulary Terms — Team A



Your teacher has provided your team with a list of vocabulary terms. Do not to share your terms with Team B.

1. **TEAM A:** Encrypt your team's vocabulary terms using a simple algorithm. Use the algorithm provided by your teacher or devise your own algorithm if directed to do so. Be sure to record the algorithm you are using on the sheet with your list of terms (do not write it on this worksheet).
2. Write the results of your encryptions in the Encrypted Terms column.
3. When both teams have encrypted all terms in their lists, exchange this worksheet of encrypted terms with Team B. Each team will decipher (or decrypt) the other team's vocabulary terms.
4. **TEAM B:** Decipher each encryption written in the Encrypted Terms column, and write the decrypted vocabulary term in the Decrypted Terms column.
5. At the bottom, write the algorithm that Team A used to encrypt the terms (or the algorithm that you used to decrypt them).

Encrypted Terms

Example: ygd fgukip

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Decrypted Terms

Example: Web design

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Algorithm Used to Encrypt/Decrypt



Encrypting and Decrypting Vocabulary Terms — Team B



Your teacher has provided your team with a list of vocabulary terms. Do not to share your terms with Team A.

1. **TEAM B:** Encrypt your team's vocabulary terms using a simple algorithm. Use the algorithm provided by your teacher or devise your own algorithm if directed to do so. Be sure to record the algorithm you are using on the sheet with your list of terms (do not write it on this worksheet).
2. Write the results of your encryptions in the Encrypted Terms column.
3. When both teams have encrypted all terms in their lists, exchange this worksheet of encrypted terms with Team A. Each team will decipher (or decrypt) the other team's vocabulary terms.
4. **TEAM A:** Decipher each encryption written in the Encrypted Terms column, and write the decrypted vocabulary term in the Decrypted Terms column.
5. At the bottom, write the algorithm that Team B used to encrypt the terms (or the algorithm that you used to decrypt them).

Encrypted Terms

Example: aif hiwmkr

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Decrypted Terms

Example: Web design

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Algorithm Used to Encrypt/Decrypt
