



# Cyber Security Lesson Plan

**Lesson Title: Crypto Club Cryptology Lesson**

**Grade Level: 9-12**

**Learning Objectives/Outcomes, Upon completion student will be able to:**

Students will be able to describe the difference between a Caesar Cipher and a Keyword Cipher.  
Students will demonstrate their knowledge of encryption to complete two online cryptology activities.

**How will you facilitate learning? Warm up activity, focused activity closure, reflection?**

Warm up activity: students will add the following vocabulary words to their notebooks: Caesar Cipher, Keyword Cipher, Vigenere.

Reflection: Students will be asked to describe any challenges they encountered with this activity, and how they solved the problems they encountered.

**Description of Activity:**

Introduce new vocab words, students will add vocab words to their notebooks. Students will go to the Cryptoclub website. Teacher will demonstrate to students the Cipher tools, and students will complete several examples. After students successfully complete the Cipher tools, Students will choose one of the Games, and solve all of the encrypted messages. Students will save screen shots of each successful activity to submit on Google Classroom.

**Summary:**

In this lesson, Students will be introduced to several types of simple encryption. Students will then complete several online activities to learn about encryption.

**Learning Types: Presentation, Project, Writing Assignment, Observation, Oral Questioning, Other Online Activity**

**Materials List:**

Class notebook  
Computer with internet access  
<https://www.cryptoclub.org/>

**Accommodations:**

Students will be provided with accommodations as needed.  
Example: Directions translated in to another language.