

COMPUTATIONAL THINKING

ENCRYPTED HIDDEN FRIEND

ACTIVITY DESCRIPTION: THE ENCRYPTED HIDDEN FRIEND ACTIVITY IS A FUN AND EDUCATIONAL WAY TO PRACTICE CRYPTOGRAPHY WHILE ENGAGING IN A TRADITION OF COLLECTION. HERE IS HOW IT WORKS:

PREPARATION:

- ALL STUDENTS WILL WRITE THEIR NAMES ON SEPARATE PIECES OF PAPER AND PUT THEM IN THE BAG.

- EACH STUDENT WILL DRAW A NAME FROM THE BAG/ENVELOPE, WHICH WILL BE THEIR "HIDDEN FRIEND".

***CREATION OF THE CODE ALPHABET:**

- ANTES DE ESCREVER O BILHETE PARA O AMIGO OCULTO, CADA ALUNO CRIARÁ SEU PRÓPRIO ALFABETO DE CÓDIGOS.

- ESTE ALFABETO DE CÓDIGOS CONSISTIRÁ EM UMA CORRESPONDÊNCIA ENTRE LETRAS E SÍMBOLOS, NÚMEROS OU OUTROS CARACTERES.

- POR EXEMPLO, "A" PODE SER REPRESENTADO PELO SÍMBOLO "&", "B" PELO NÚMERO "3", E ASSIM POR DIANTE.

- OS ALUNOS DEVEM MANTER SEUS ALFABETOS DE CÓDIGOS EM SEGREDO.

ESCREVENDO O BILHETE CRIPTOGRAFADO:

- AFTER CREATING THE ALPHABET OF CODES, EACH STUDENT WILL WRITE A NOTE TO THE HIDDEN FRIEND USING THEIR CREATED ALPHABET.

- THEY MUST USE THEIR CREATIVITY TO WRITE A FRIENDLY, ENCRYPTED MESSAGE TO THEIR HIDDEN FRIEND.

EXCHANGE AND DECIPHERATION:

- STUDENTS EXCHANGE THEIR ENCRYPTED TICKETS WITH EACH OTHER.

- EACH STUDENT WILL TRY TO DECIPHER THE TICKET THEY RECEIVED USING THE SENDER'S CODE ALPHABET.

- THE FUN IS IN TRYING TO DECIPHER THE MESSAGES AND FIND OUT WHO THE HIDDEN FRIEND IS.

THIS ACTIVITY PROMOTES CRITICAL THINKING, CREATIVITY AND TEAMWORK, IN ADDITION TO INTRODUCING BASIC CONCEPTS OF CRYPTOGRAPHY IN A PLAYFUL AND ENGAGING WAY. AT THE END OF

THE ACTIVITY, STUDENTS CAN SHARE THEIR ENCRYPTION AND DECRYPTION METHODS, PROMOTING COLLABORATIVE LEARNING.

SUGGESTION: FOR THIS FINAL MOMENT, A STANDARD SHEET CAN BE MADE WITH A TABLE WITH SPACE TO PLACE THE CODE BELOW THE CORRESPONDING LETTER.