During open school, we learnt about Codes and enigmas. We learnt how to code and decode three different codes: Polybe, Caesar cipher and Morse. We do a competition with prices at the end.
-MONDAY: From 10am to 12 am we and the others students do our homeworks.
From 2 pm to 4 pm we started to learn different codes.
-TUESDAY: From 10am to 12am we finished our homework.
From 2 pm to 4 pm , we begined to code for the competition.
-WEDNESDAY: From 9am to 12am, we go to the ice rink to help others and learnt to skating.
From 2 pm to 4 pm we continued to code for the competition.
-THURSDAY: From 10am to 12am we started the competition.
From 2 pm to 4 pm , we decide between three student for the third place in the ranking classement between : Emmanuelle ( $5^{\circ} 4$ ), Fahira ( $5^{\circ} 3$ ) and Alycia ( $5^{\circ} 3$ ). Then , we give prices to students and after we begin the article for the college site.
-FRIDAY: From 10am to 12am we finish our article for the college site and teachers present us the machine Enigma.

THE CAESAR CIPHER is an old method of cryptography. It consist to replace the letters with others letters to bring forward with key

Exemple : Key 3: A = D - B = E ...
LW LV WKH FDHVDU FLSKHU = It is the Caesar cipher


The participants were :
Maeva, Ines .A, Alycia, David, Alexandru, Sokona, Noame, Oceane, Sekou, Abdelkader, Ibrahim , Daniel , Ines Mia, Celia, Louna, Bourama, Aness , Emmanuelle, Aymen, Abigail , Fahira, Orleane , Princesse , Ismael (5²) , Noelye , Morgane, Naye, Cheikene.

Here is the official ranking:
1-Sokona $5^{\circ} 4$
2-Aness $\mathbf{5}^{\circ} 4$
3-Fahira $5^{\circ} 3$
4-Emmanuelle $\mathbf{5}^{\circ} \mathbf{4}$
5-Alycia $5^{\circ} 3$

At the end of the competition, there were prizes for everyone. For winners Headphones, Speakers and earphones.

Alycia and Fahira.

## SCHOOL IN THE HOLIDAYS

During open school we did code. We started with Morse code. It is a code which has dashes and dots. To separate words you must put a slash. Each letter has a different combination of dots and or dashes.


Here is the international
Morse code

Exemple : Emma et Nayé = . - - -/. - /-. .- -•-- .

Speak about Polybe code there are two ways to write this code. In all Polybe code there are five columns and five lines this which do twenty-five lettres and in alphabet there are twenty-six lettres. So we must take one lettre which serve have nothing. Firstly easy Polybe code is like this that we come to explain. Secondly difficult Polybe code at start instead of starting with A we can put a word with less than five lettres.

Tableau 1 DIFFICULT Polybe code

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


| \} $&{1} &{2} &{3} &{4} &{5} \\ {\hline 1} &{\mathrm{Y}} &{\mathrm{O}} &{\mathrm{U}} &{\mathrm{A}} &{\mathrm{B}} \\ {\hline 2} &{\mathrm{C}} &{\mathrm{D}} &{\mathrm{E}} &{\mathrm{F}} &{\mathrm{G}} \\ {\hline 3} &{\mathrm{H}} &{\mathrm{I}} &{\mathrm{J}} &{\mathrm{K}} &{\mathrm{L}} \\ {\hline 4} &{\mathrm{M}} &{\mathrm{N}} &{\mathrm{P}} &{\mathrm{Q}} &{\mathrm{R}} \\ {\hline 5} &{\mathrm{~S}} &{\mathrm{~T}} &{\mathrm{~V}} &{\mathrm{~W}} &{\mathrm{X}} \\ {\hline}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

