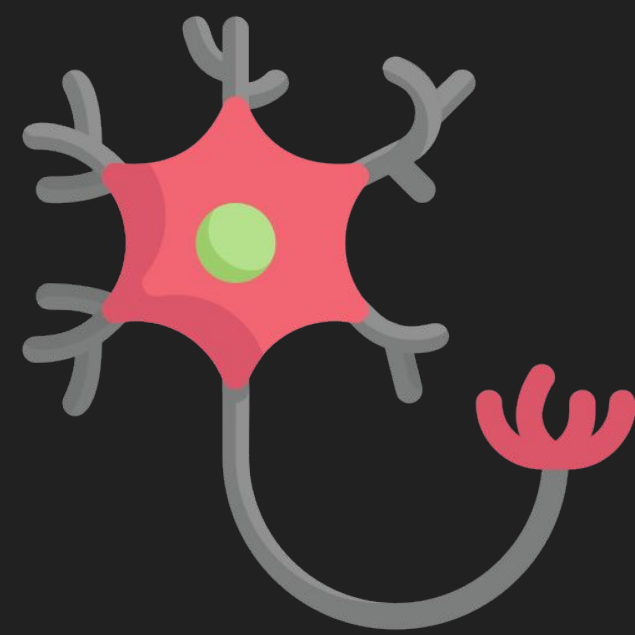
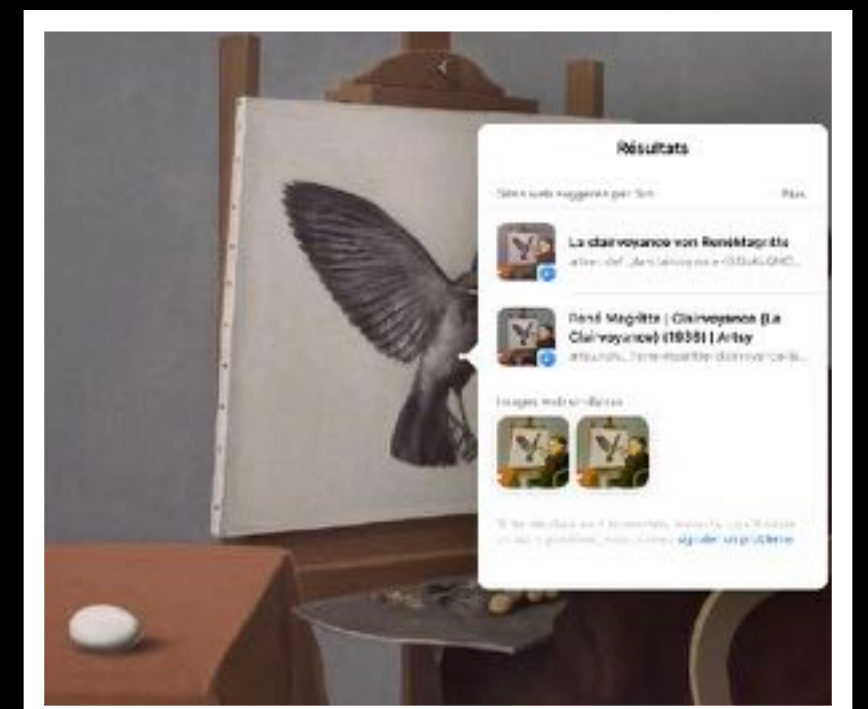
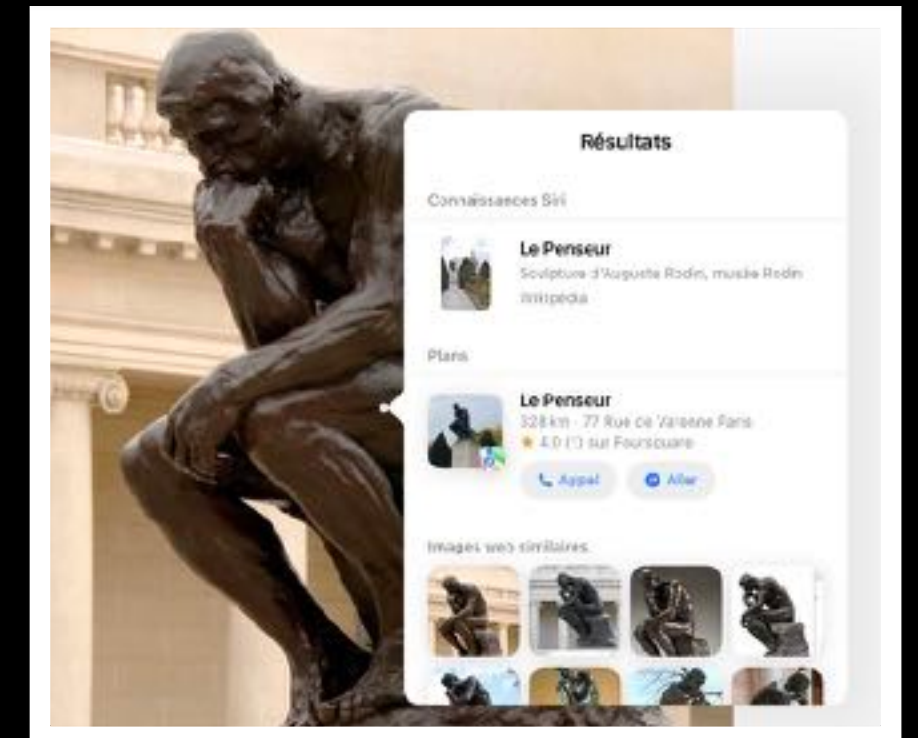
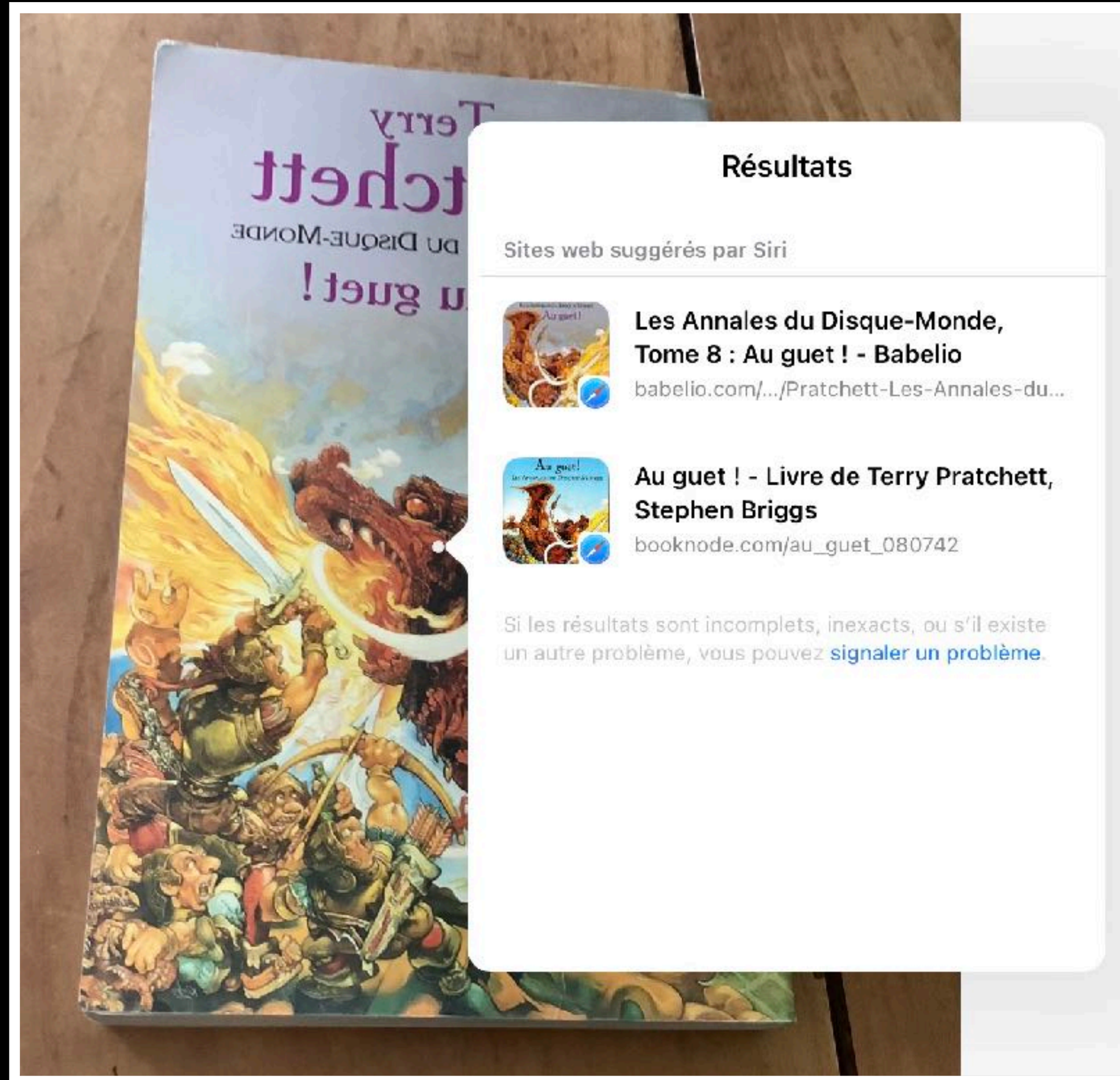
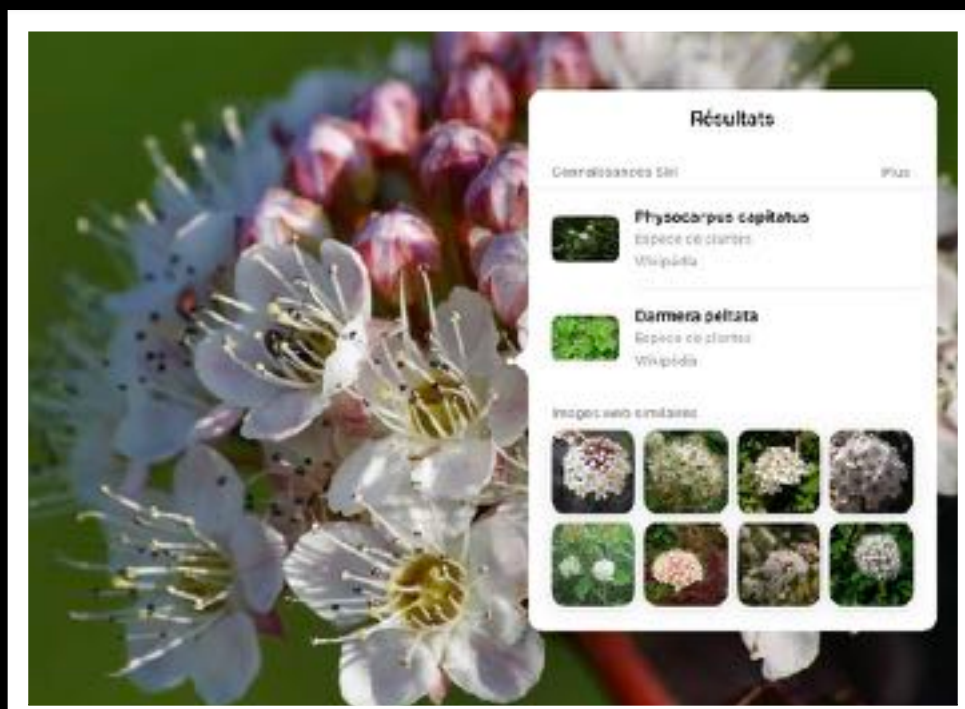
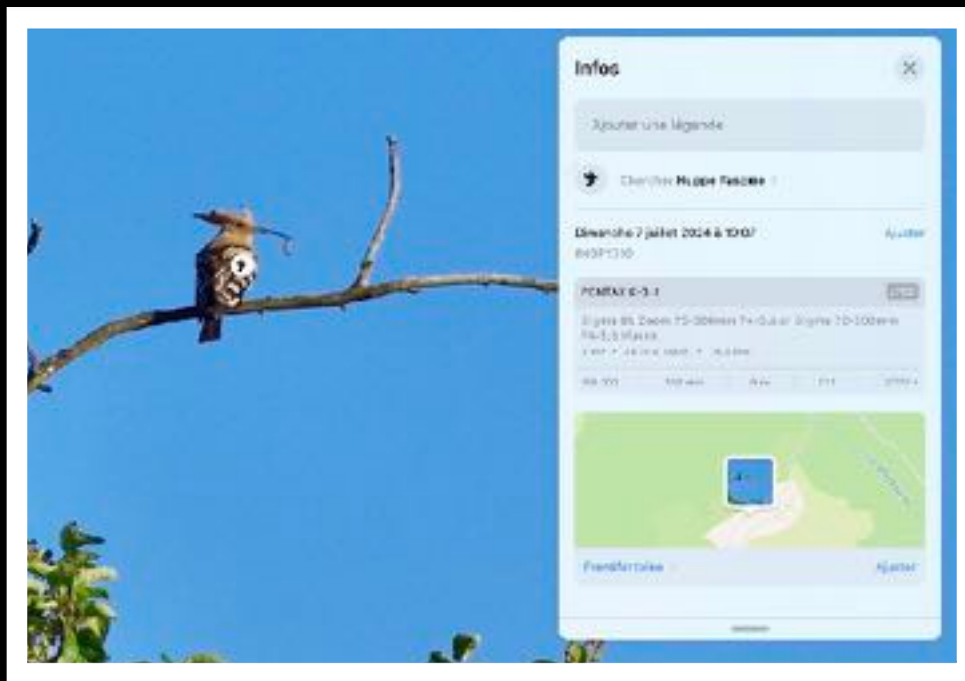


# L'IA par réseau de neurones

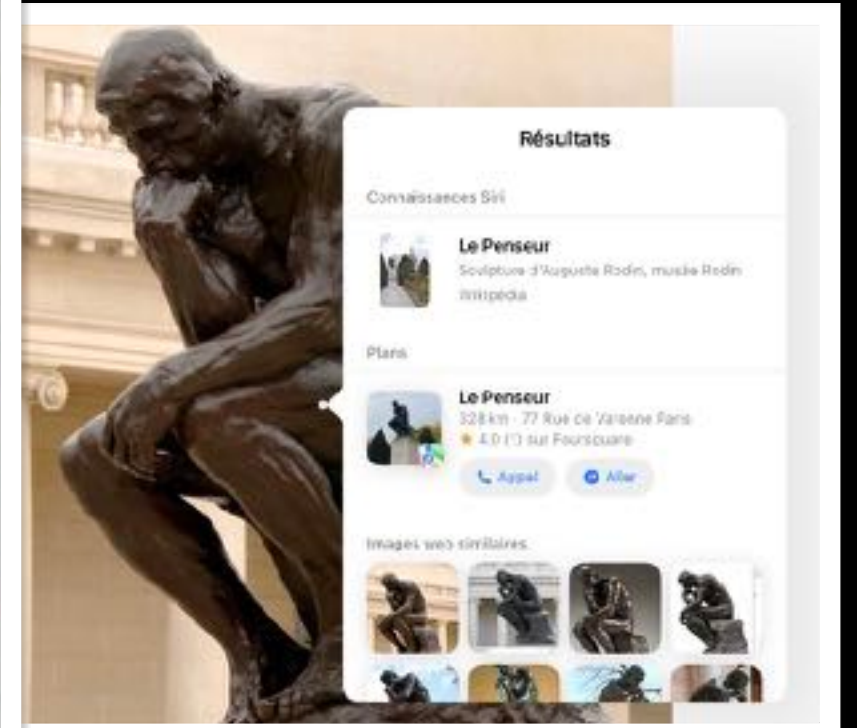
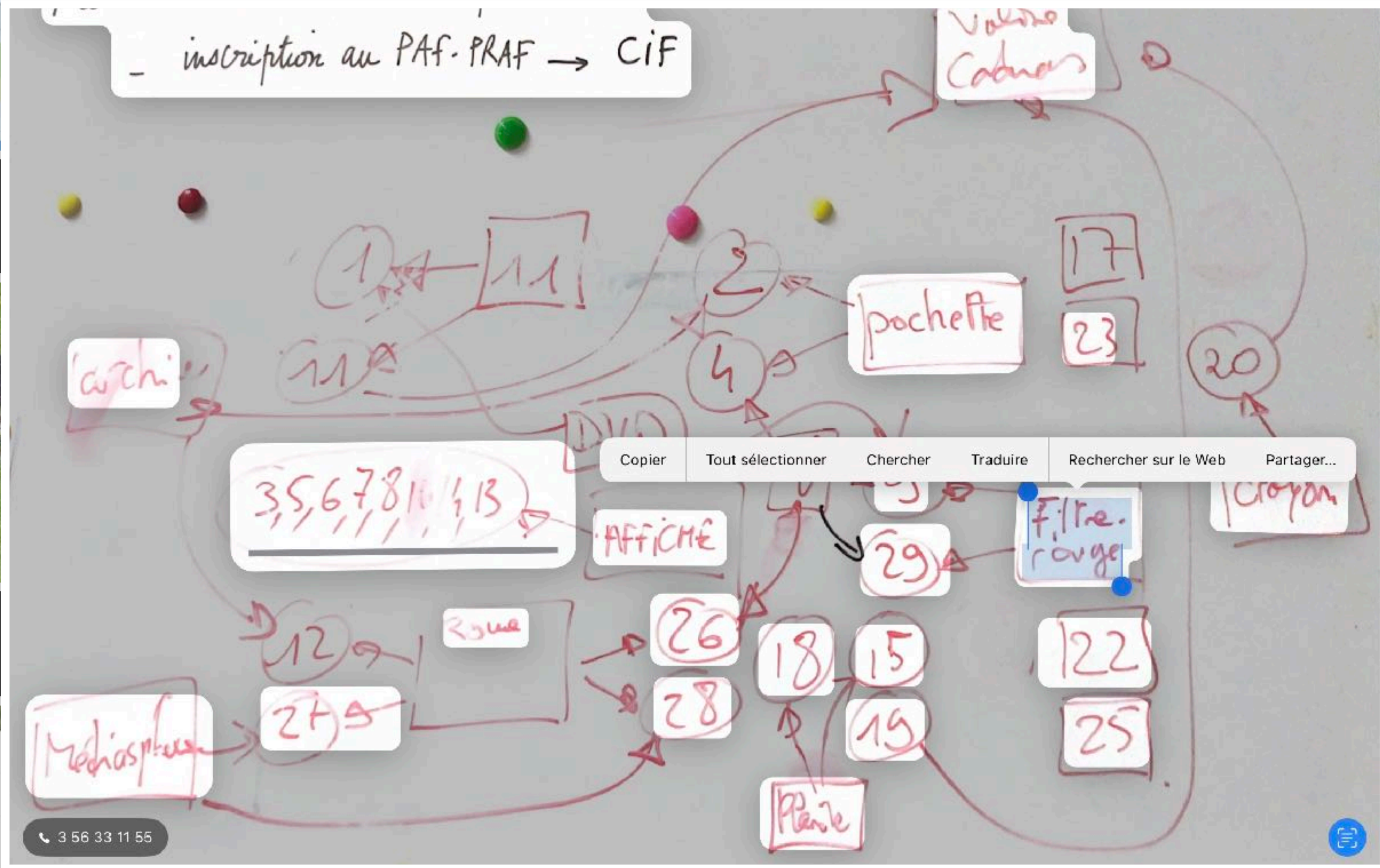
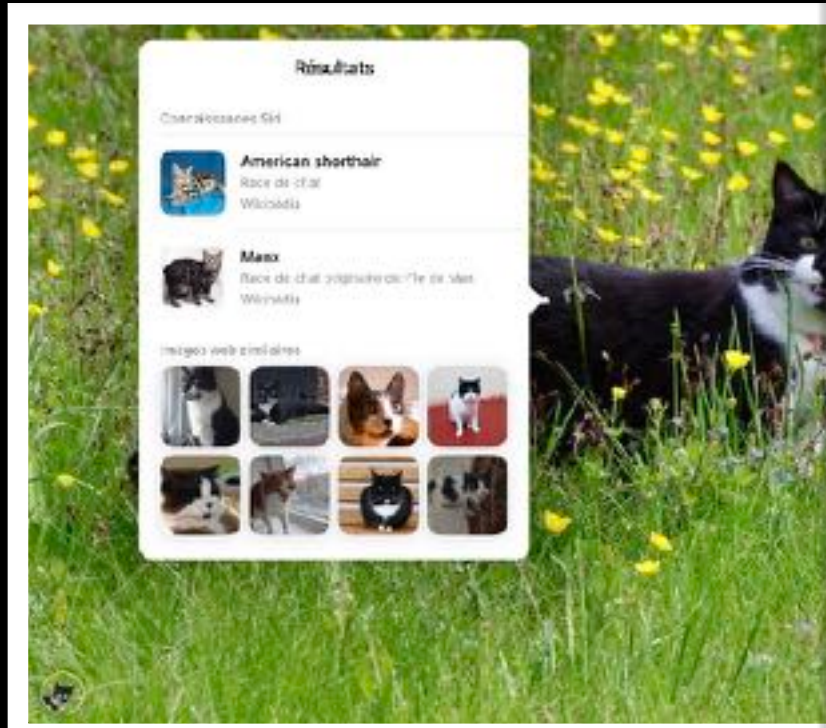
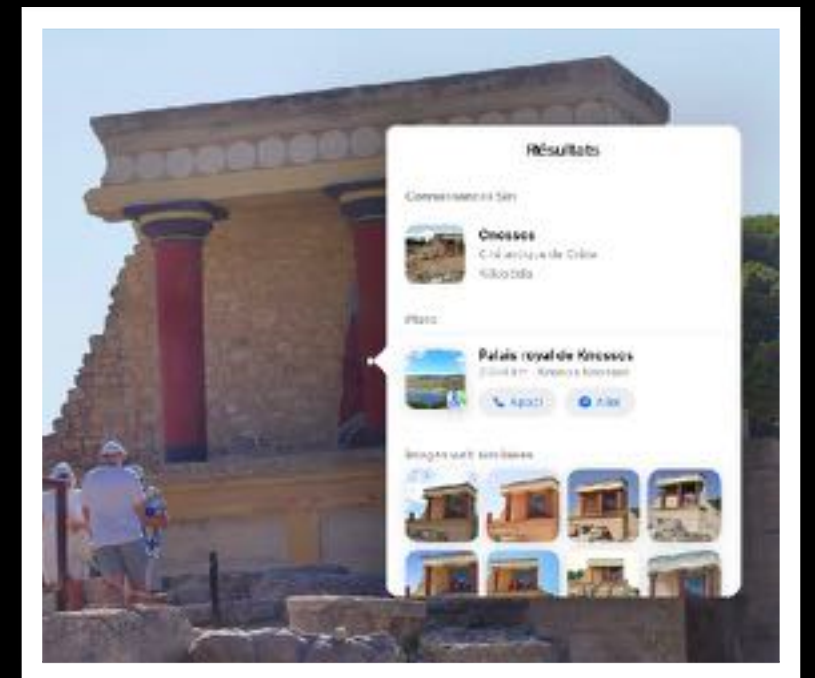
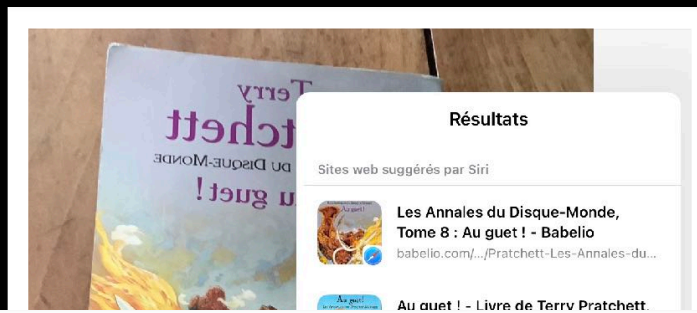
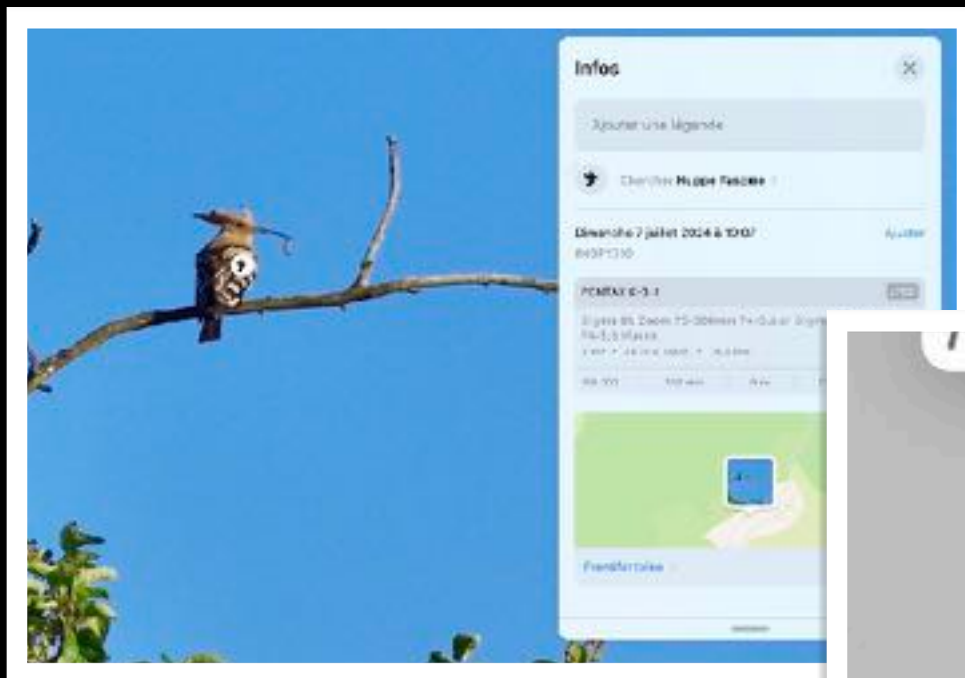
Science informatique débranchée

# Connecte tes neurones !







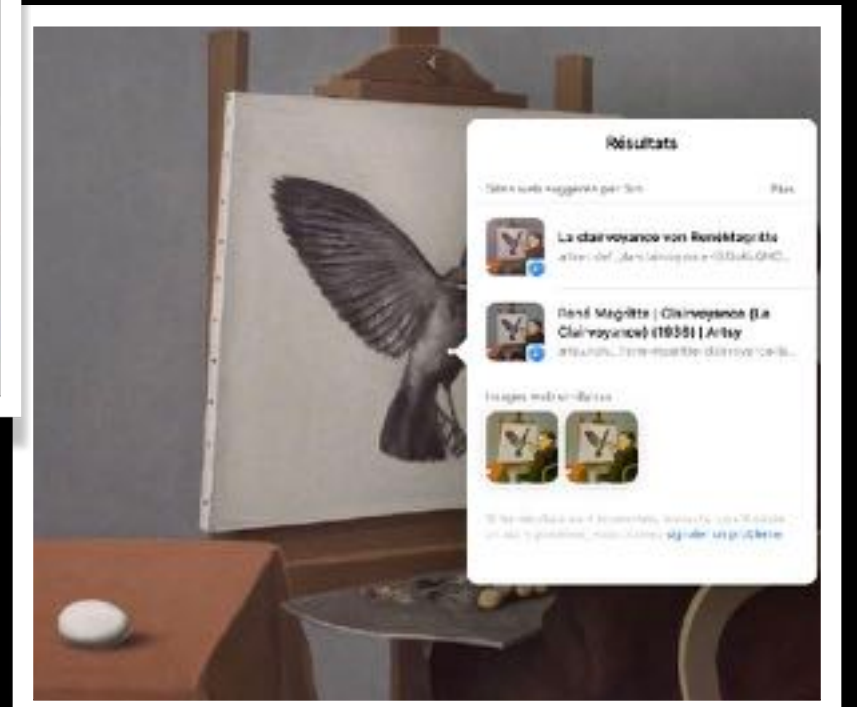


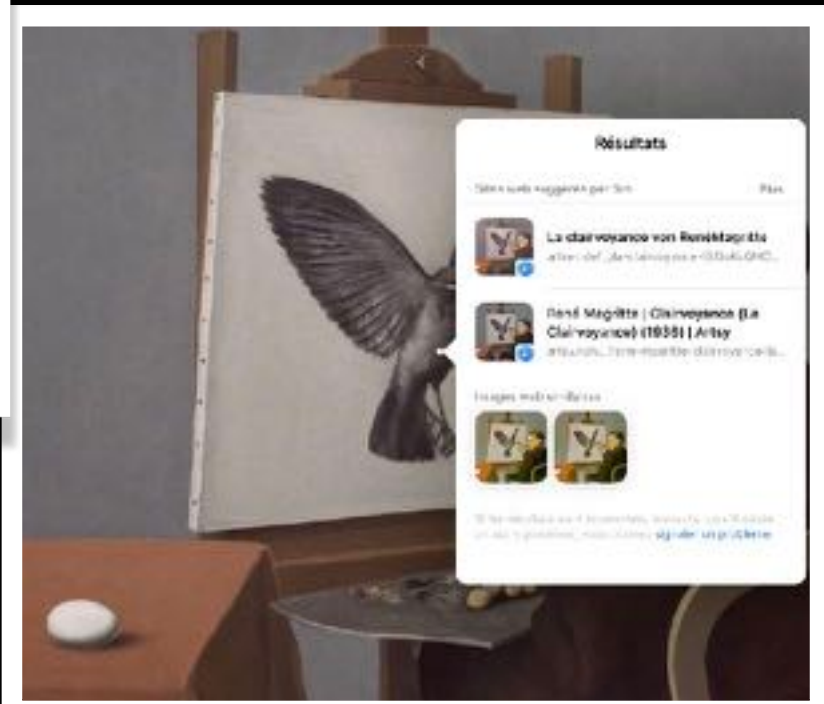
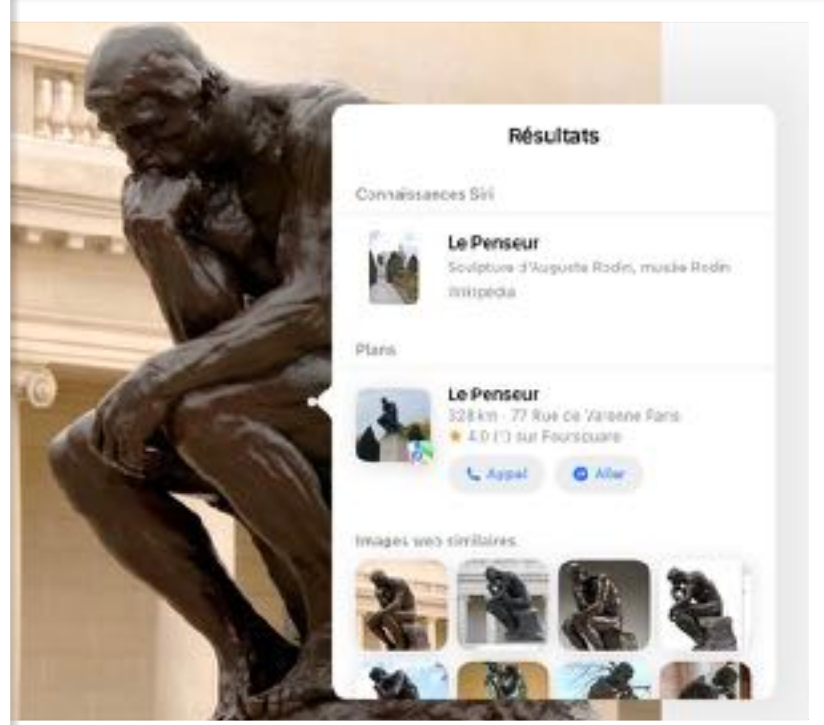
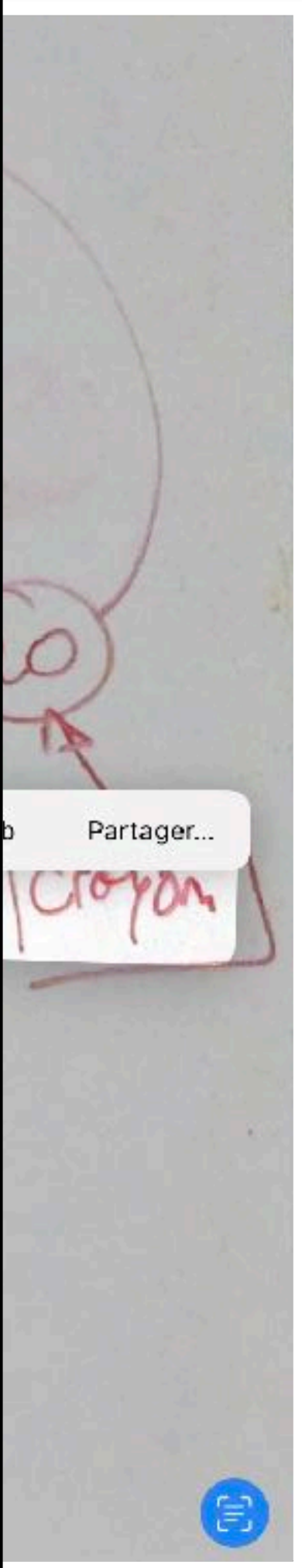
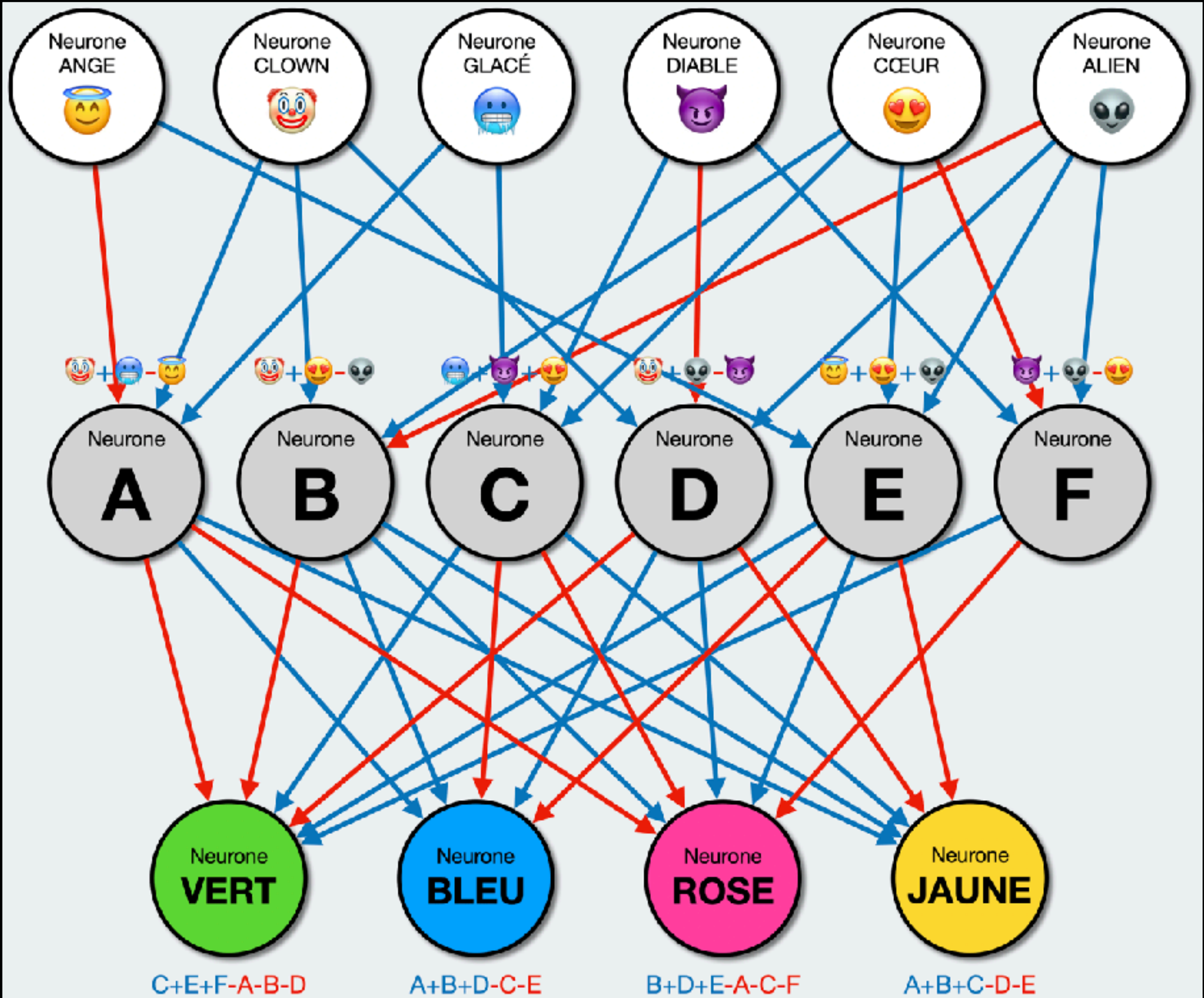
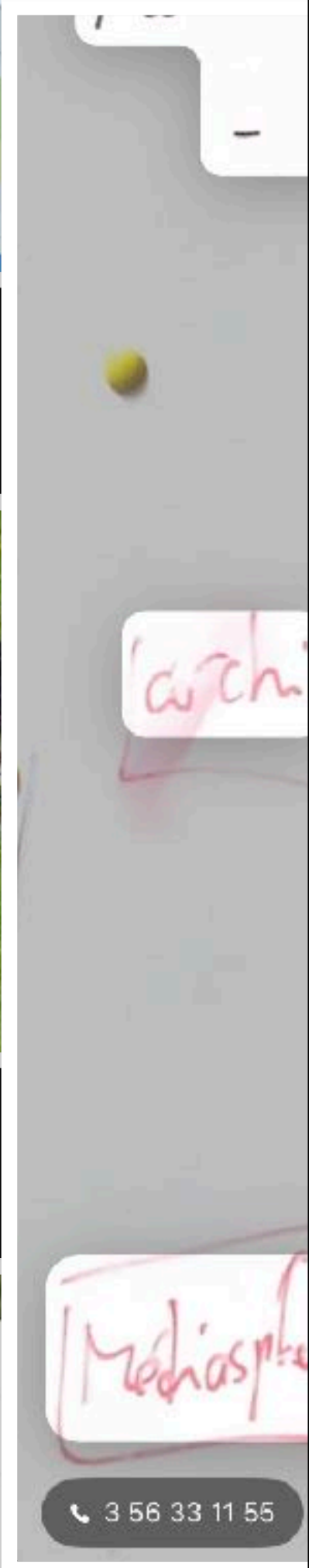
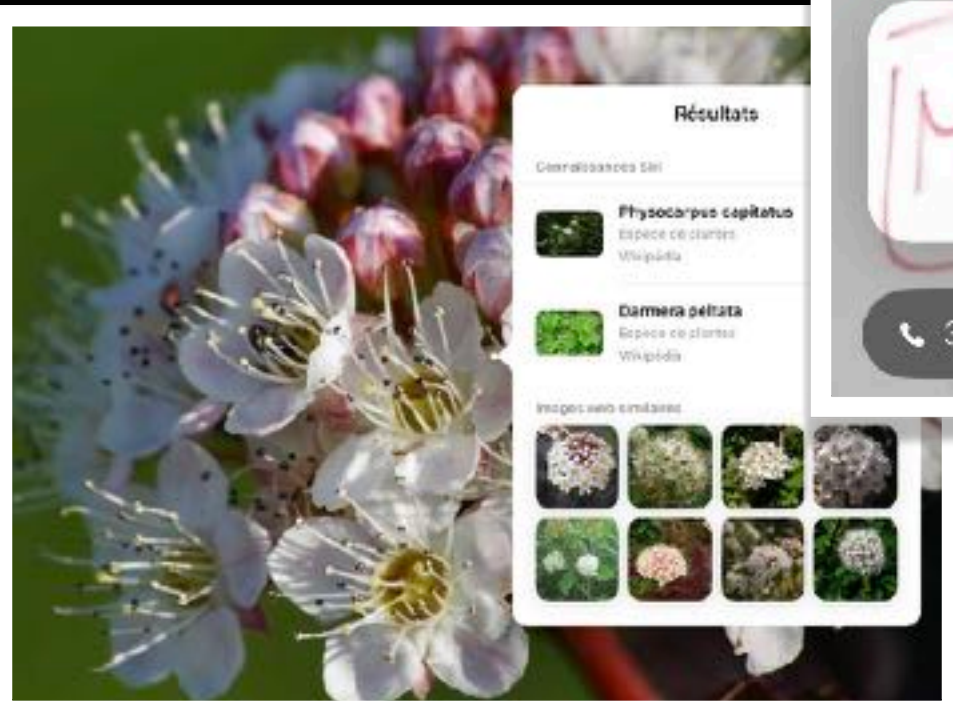
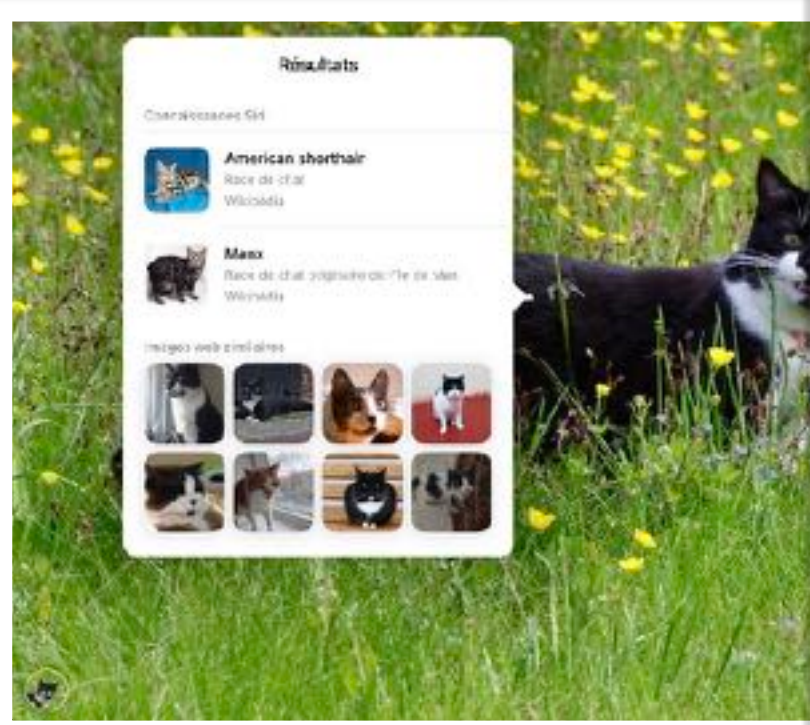
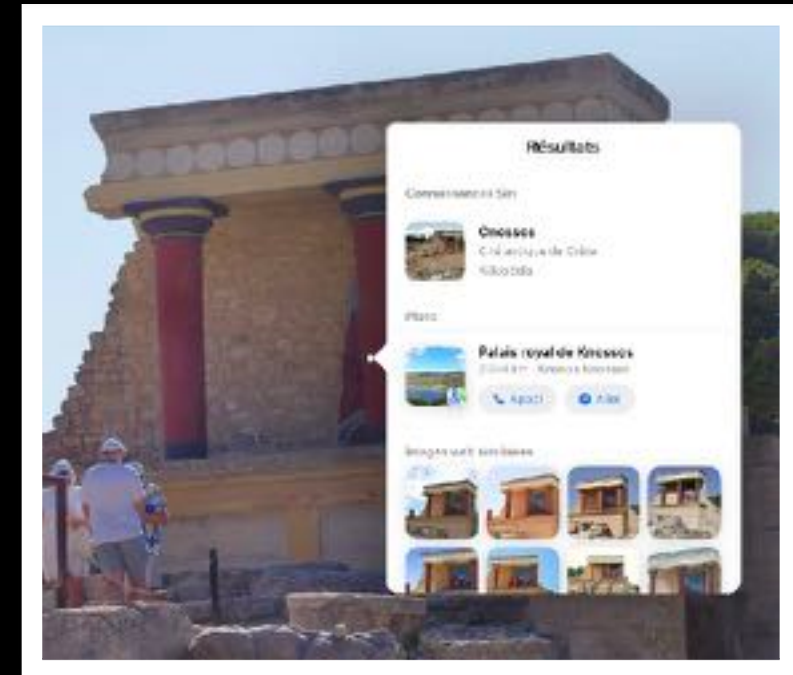
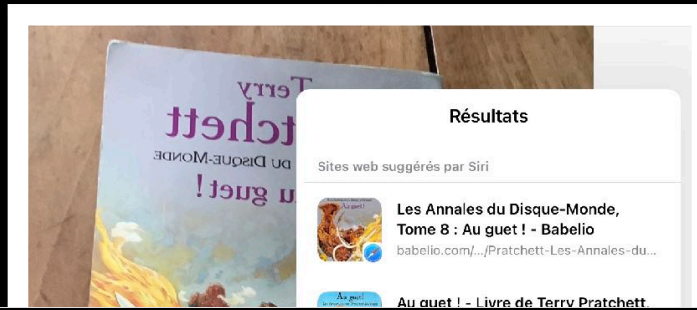
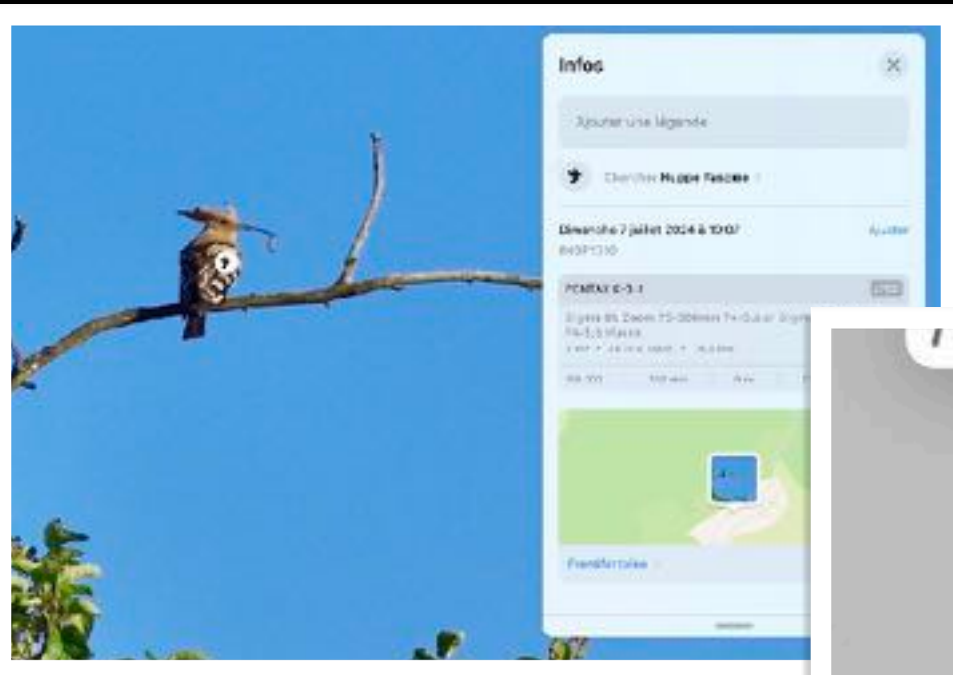
**AUTOCARAVANAS**  
(1 DE JUNIO AL 30 DE SEPTIEMBRE)

PRIMER MINUTO	3,2540 €
RESTO DE MINUTOS	0,09496 €/min
MÁXIMO DIARIO	60,10 €

Tráfico 1 octubre 2024 1 jun 2024

Trá acreditar la propiedad o autorización de uso del vehículo.





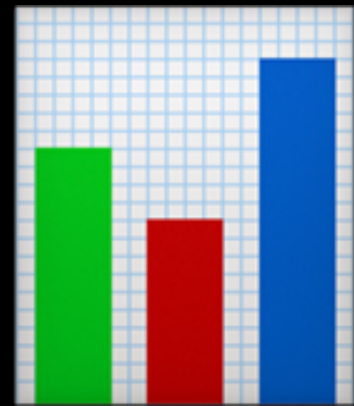
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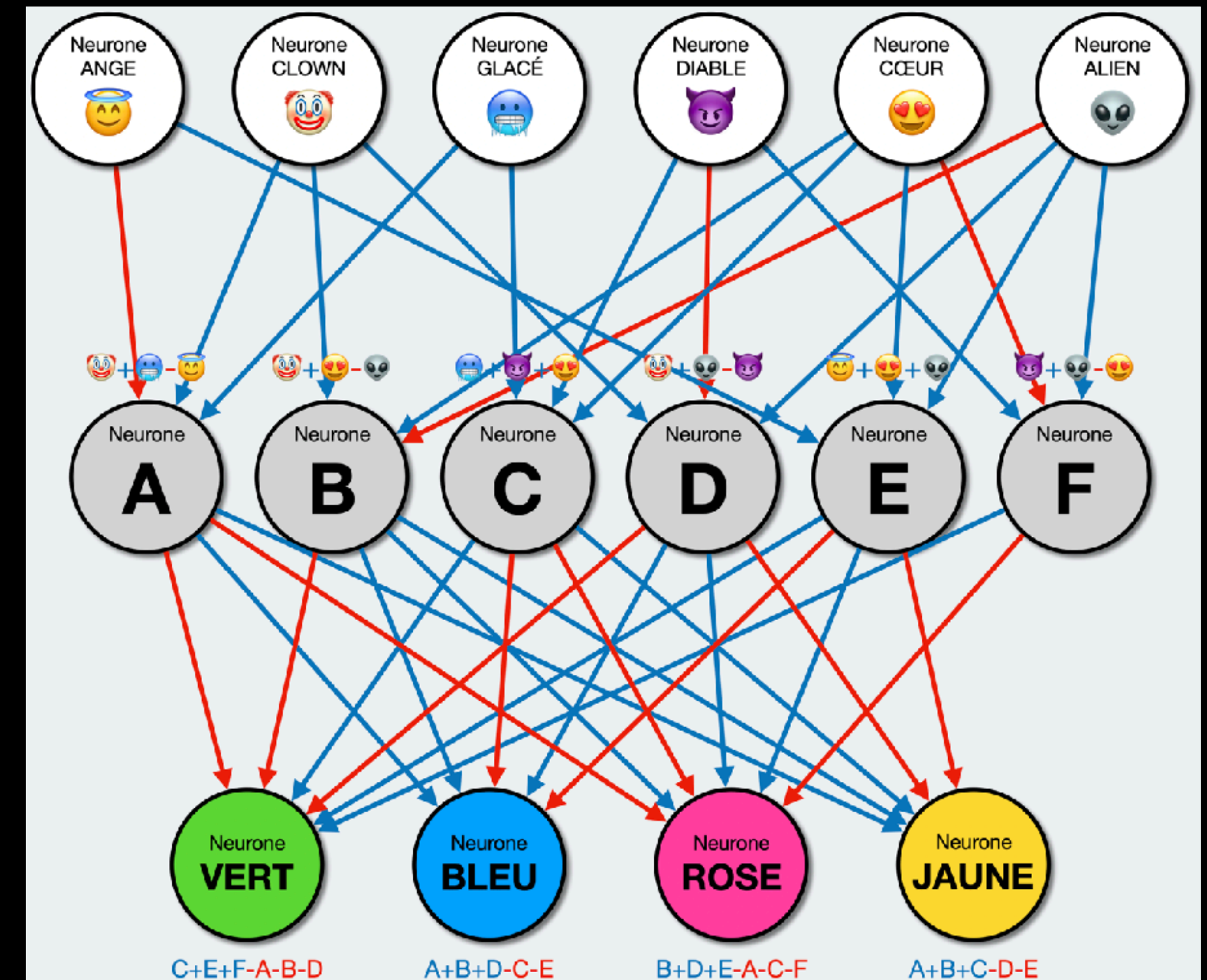
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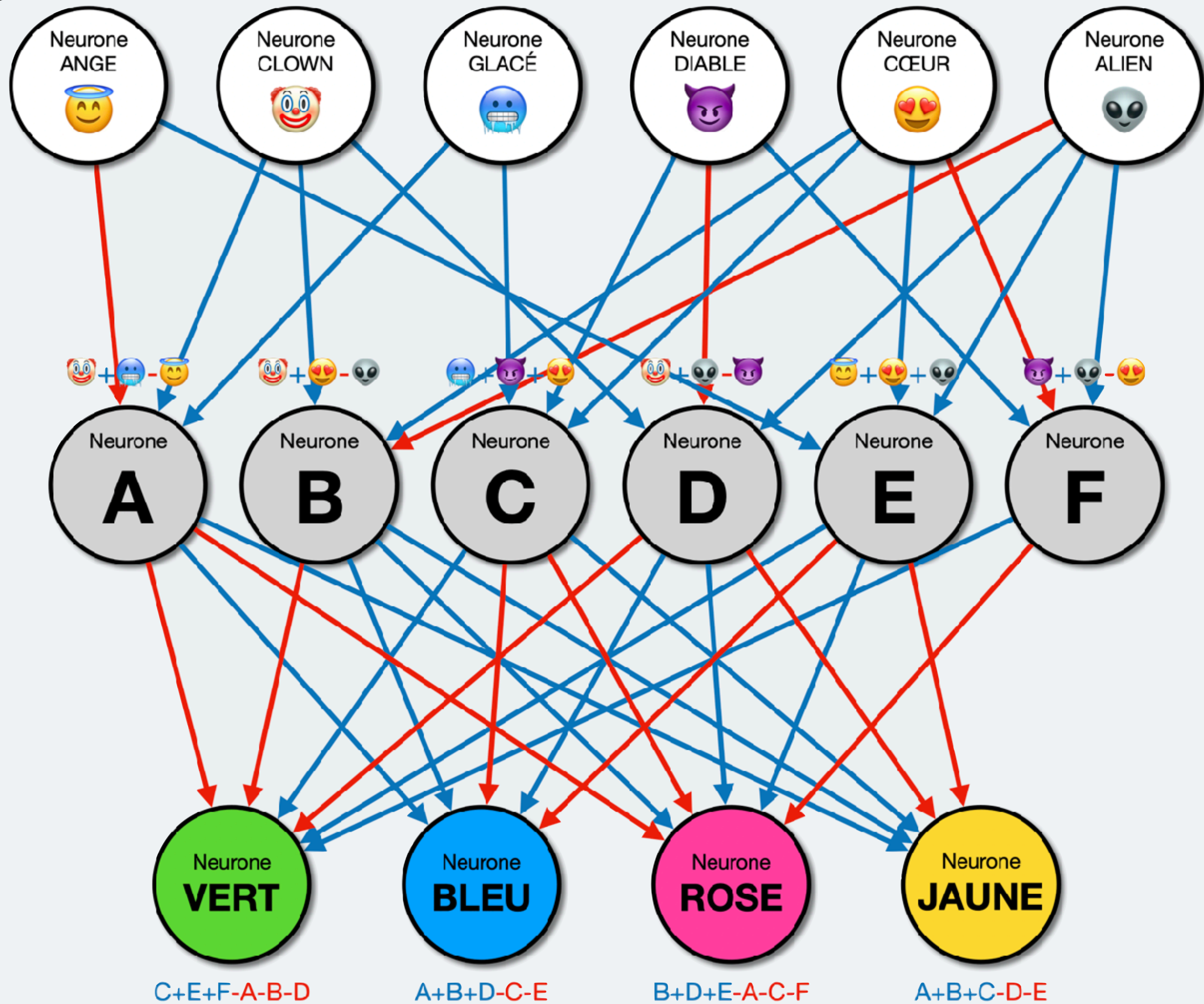
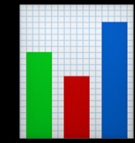


# Analyse

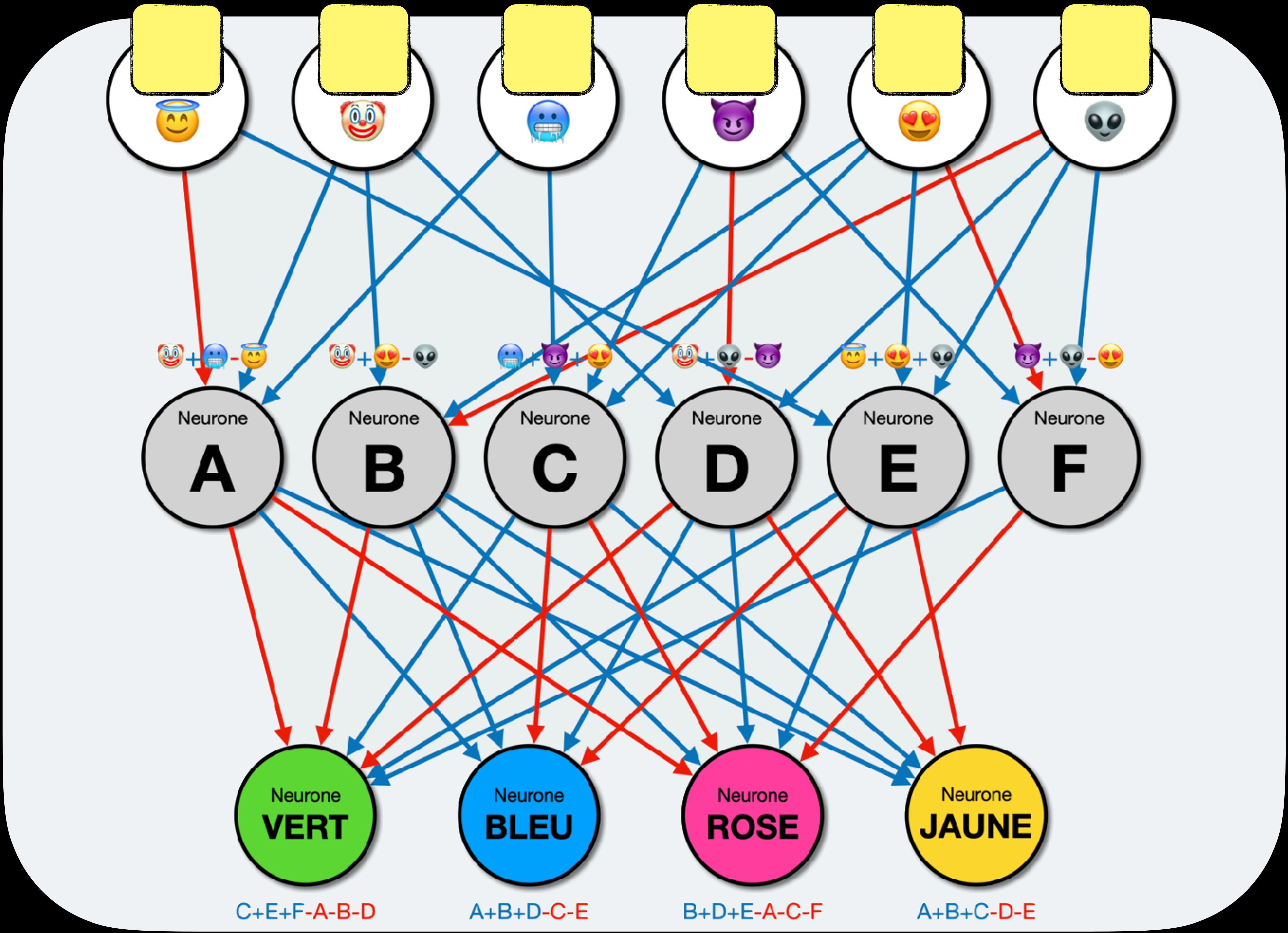
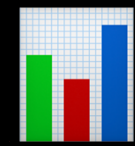


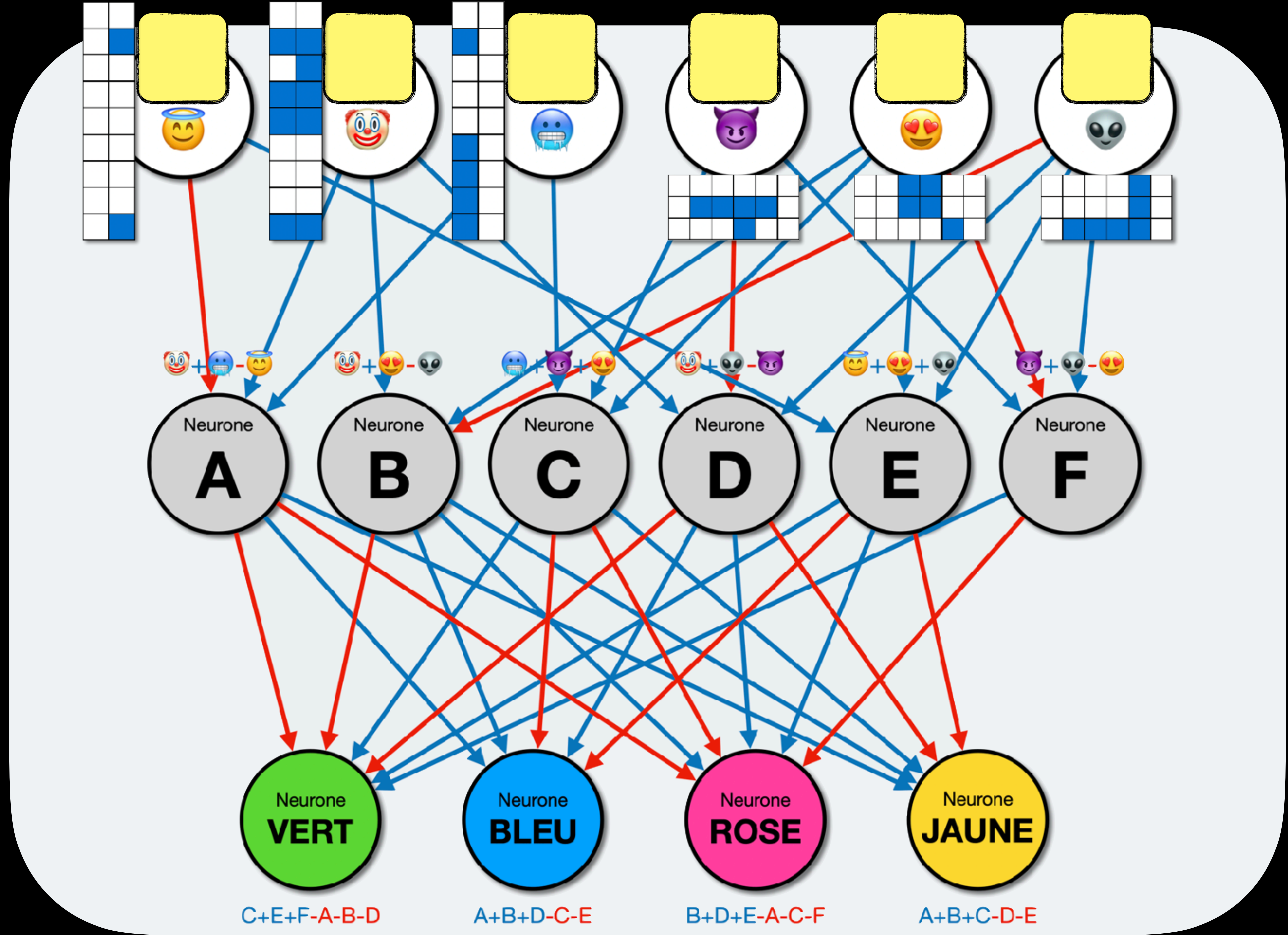
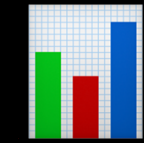
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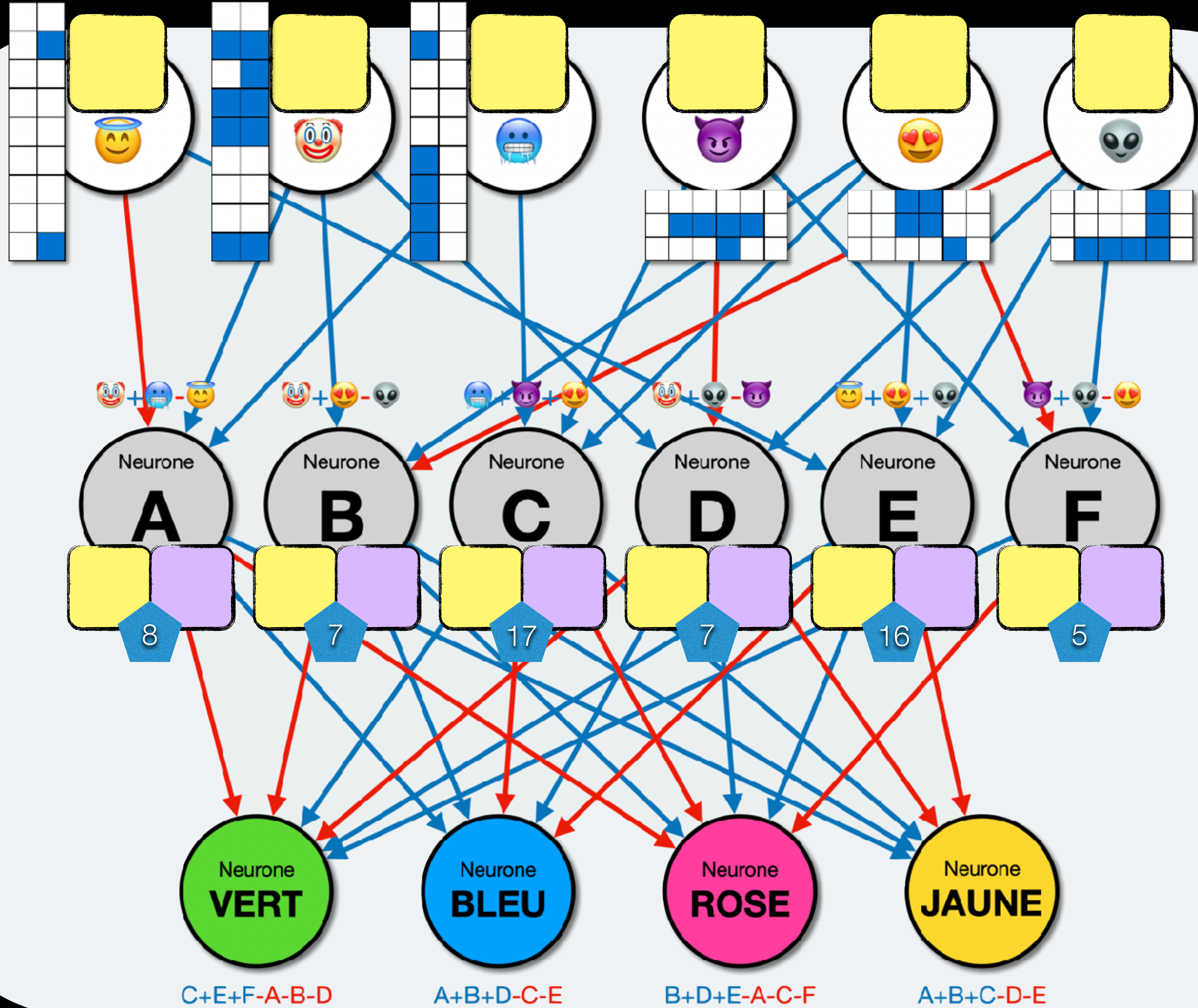
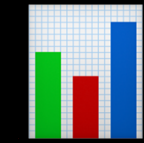


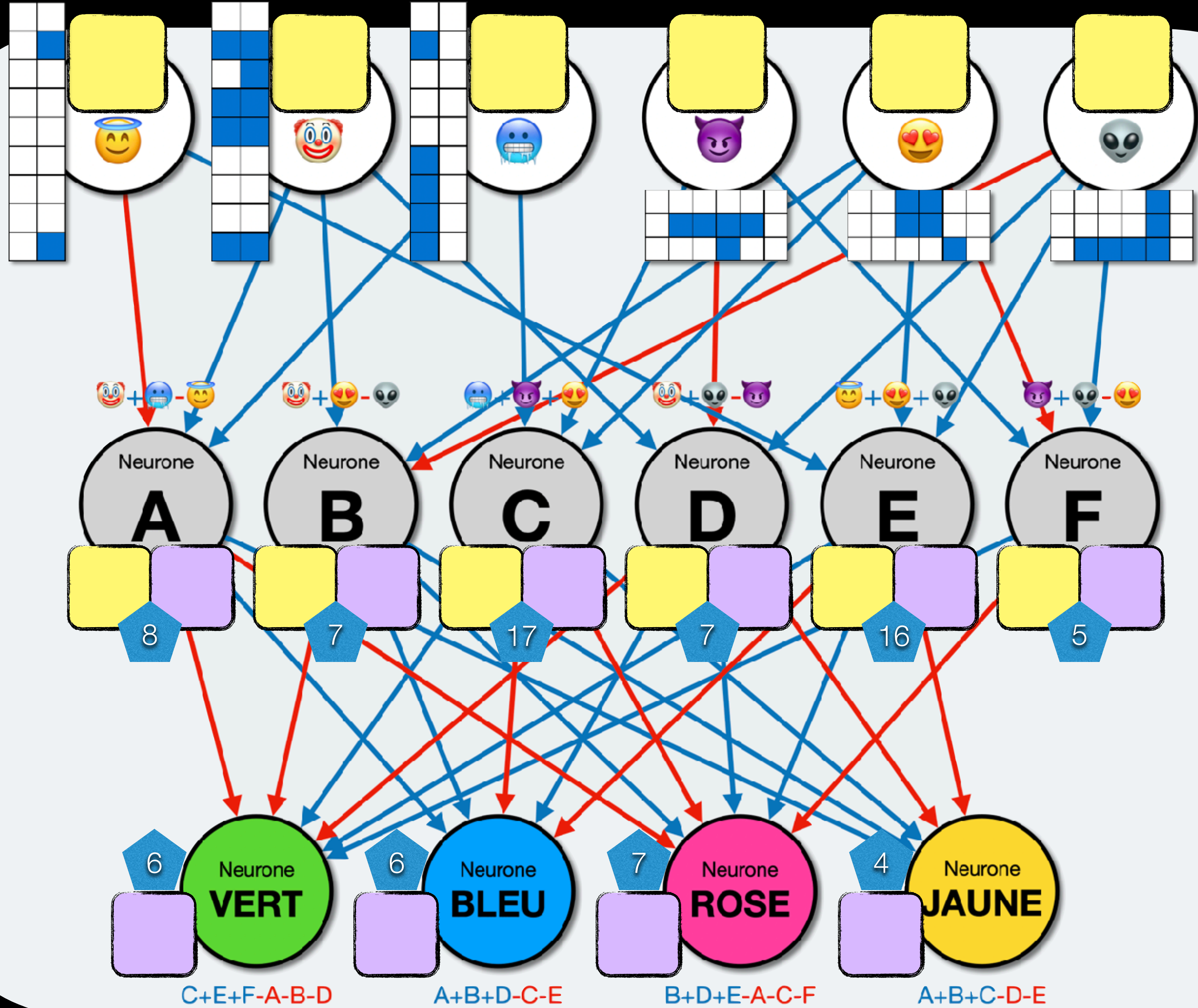
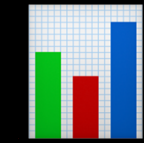


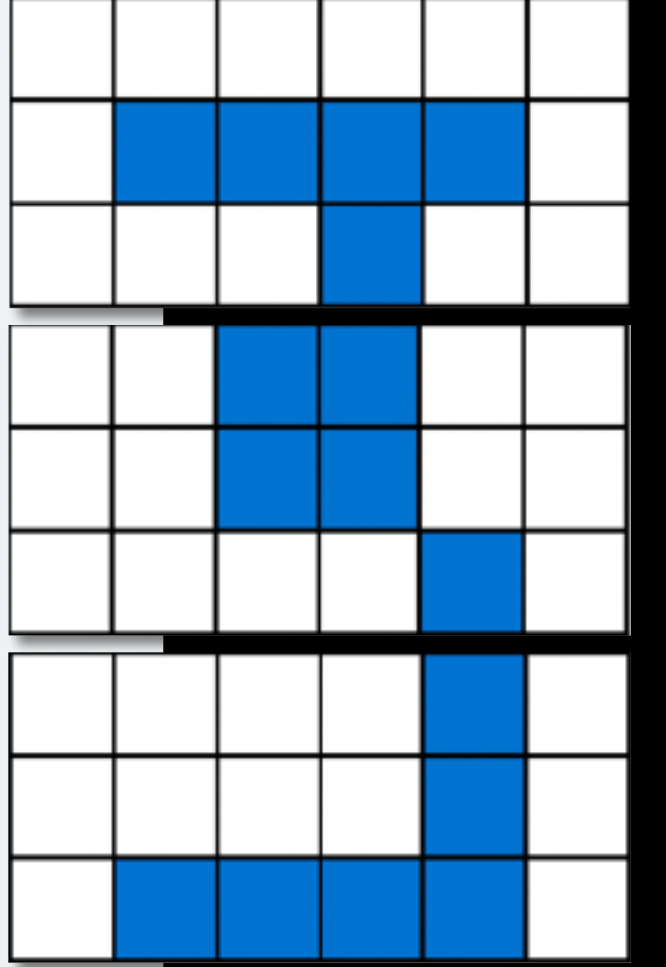
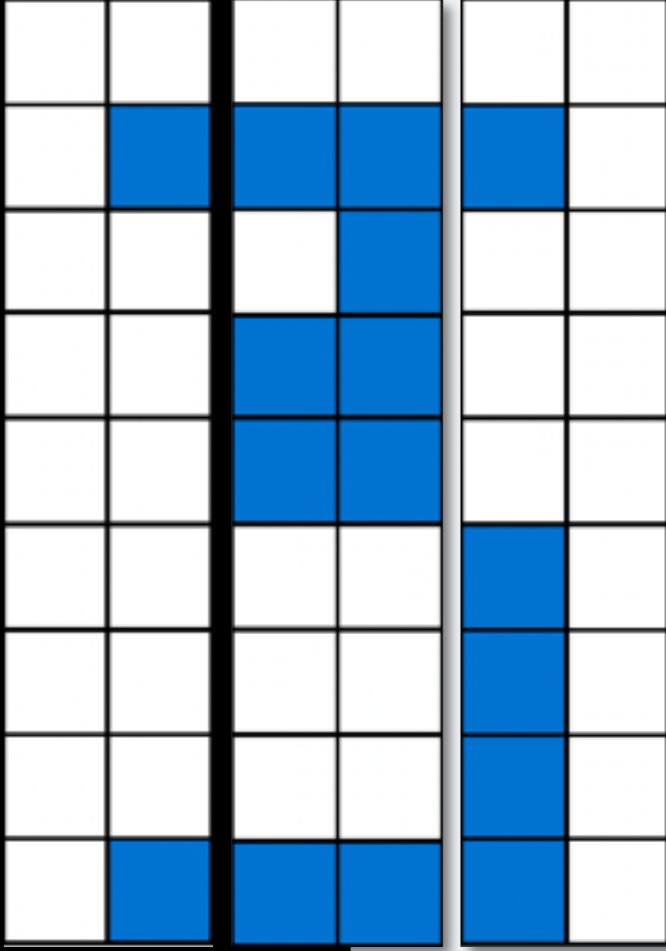
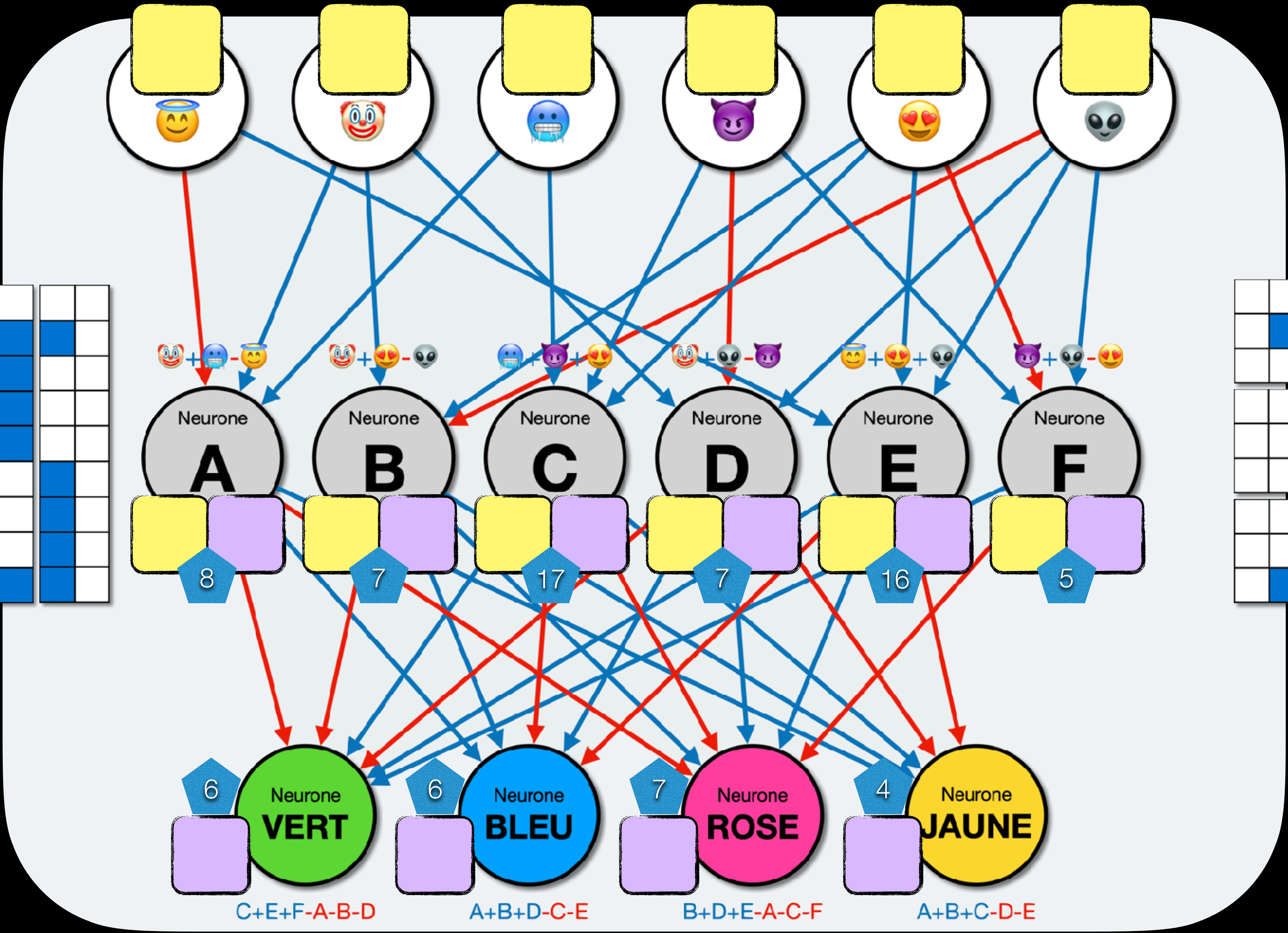
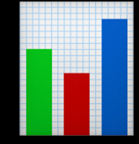










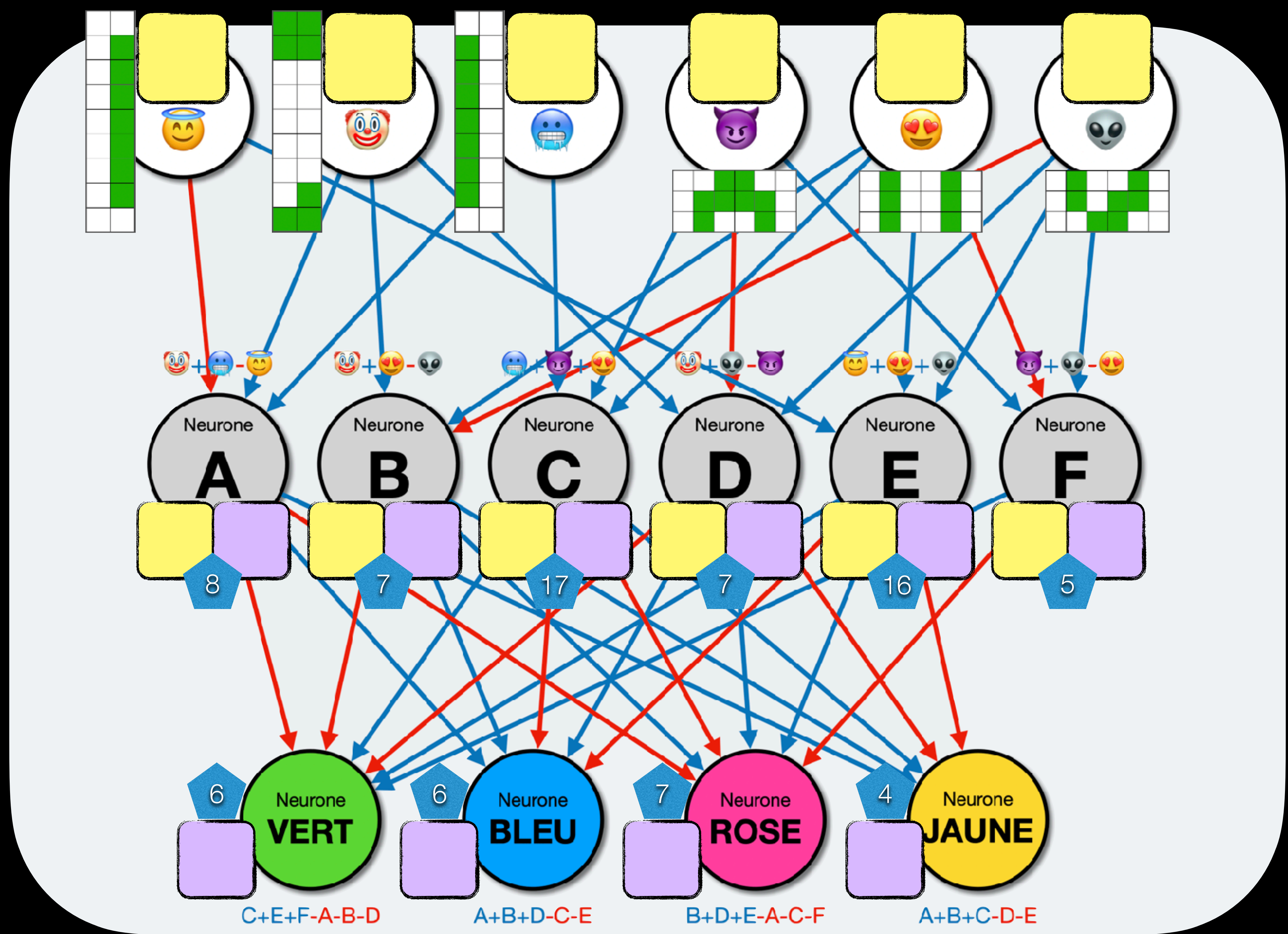
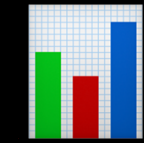


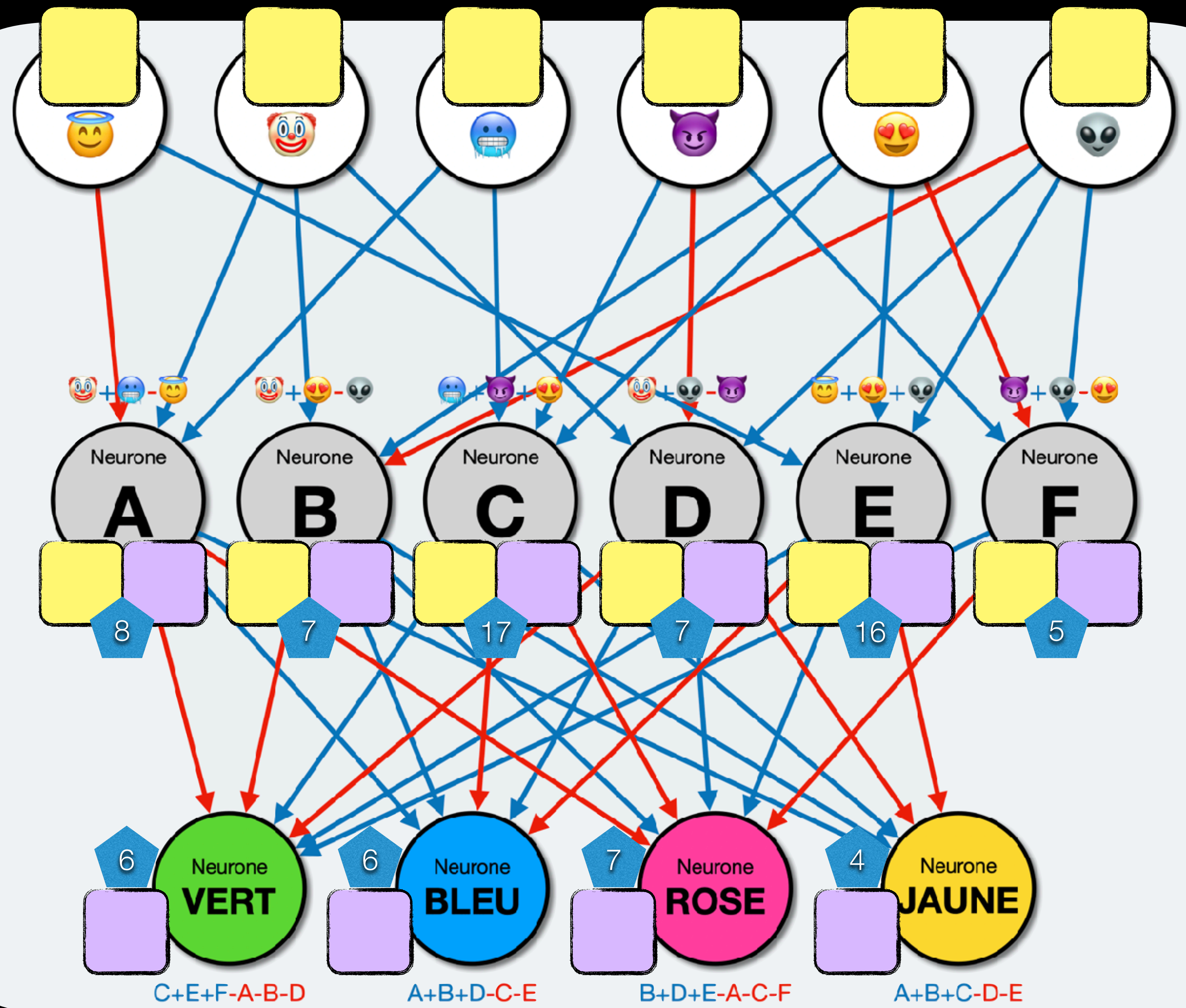
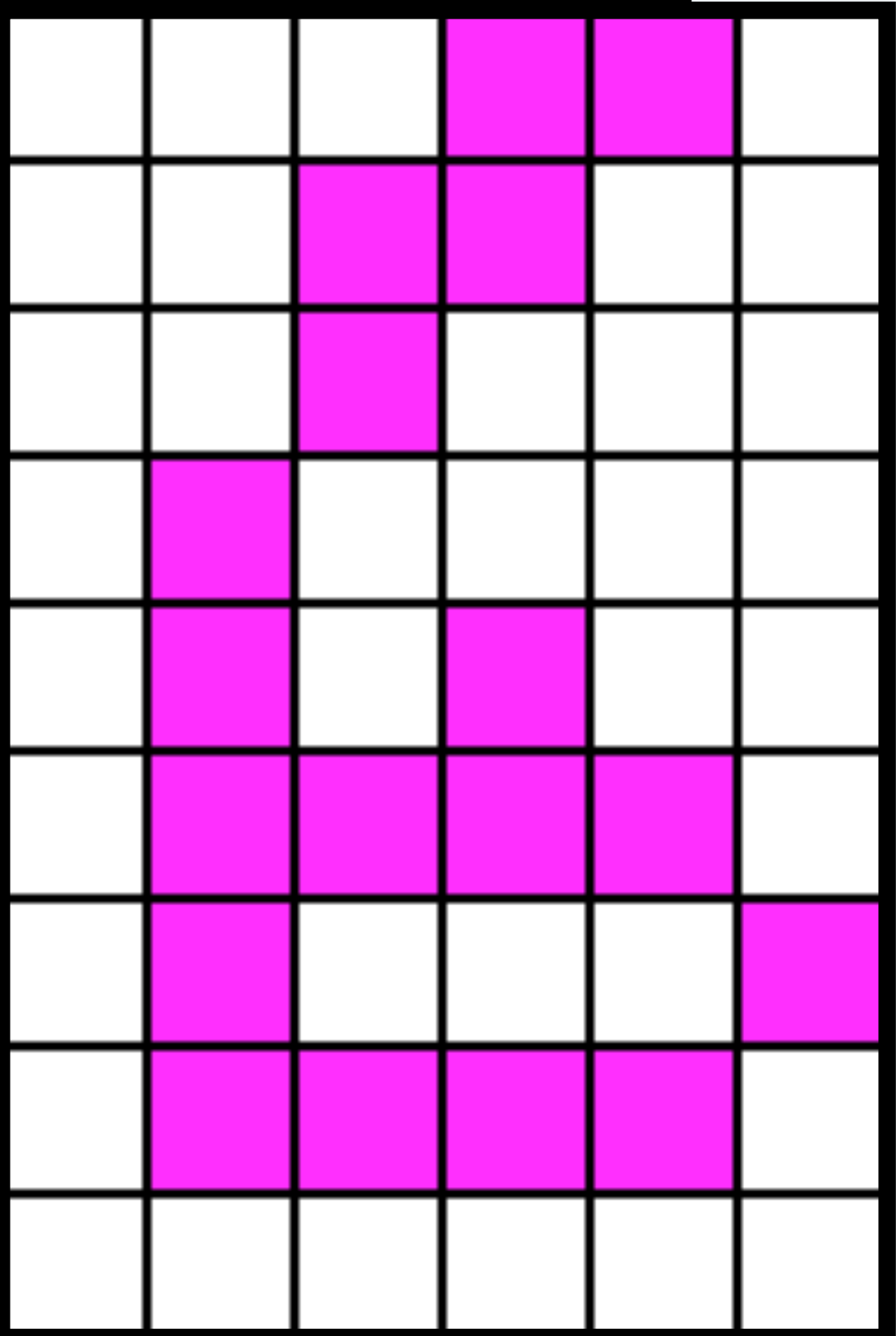
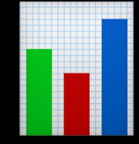
$$C+E+F-A-B-D$$

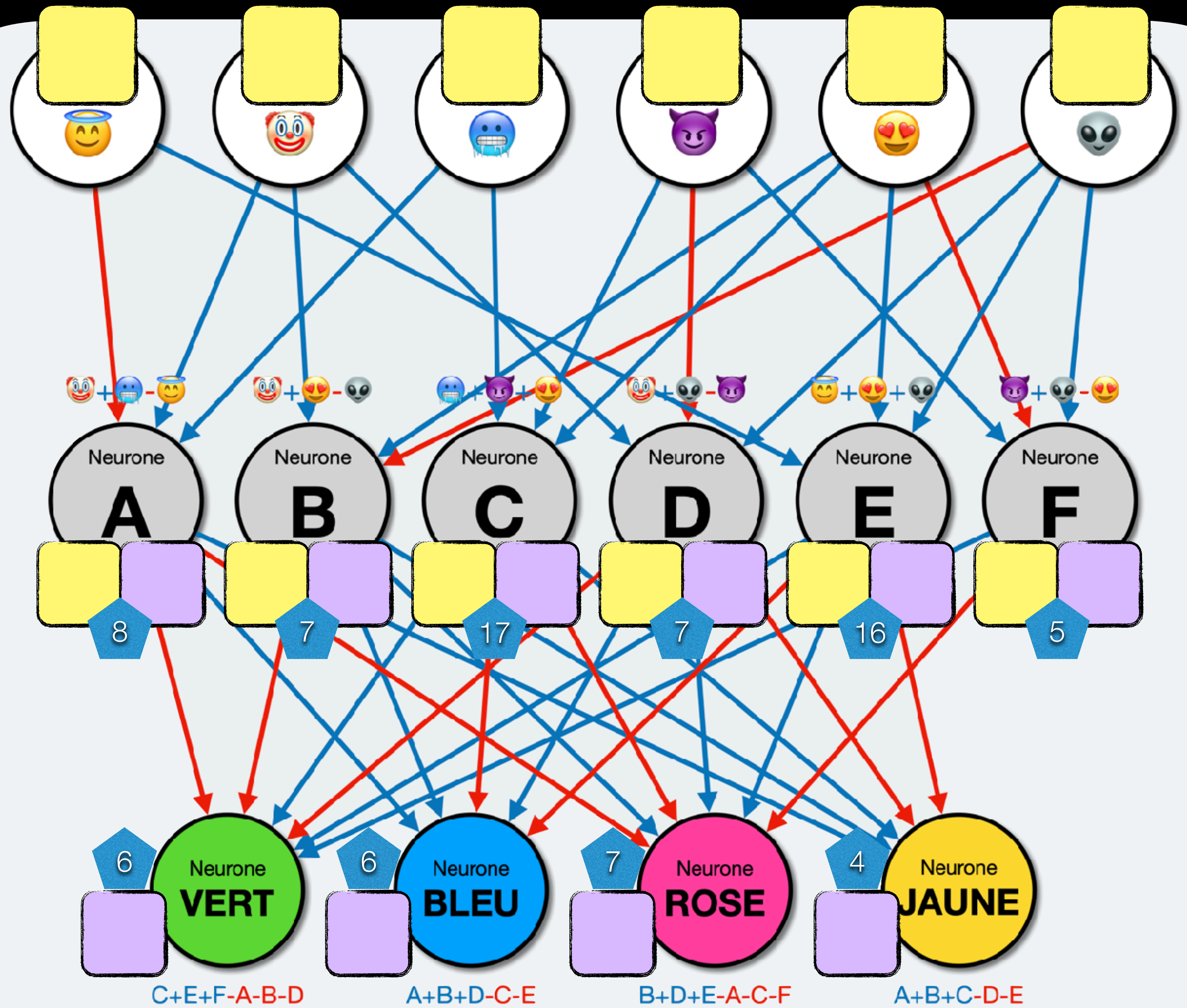
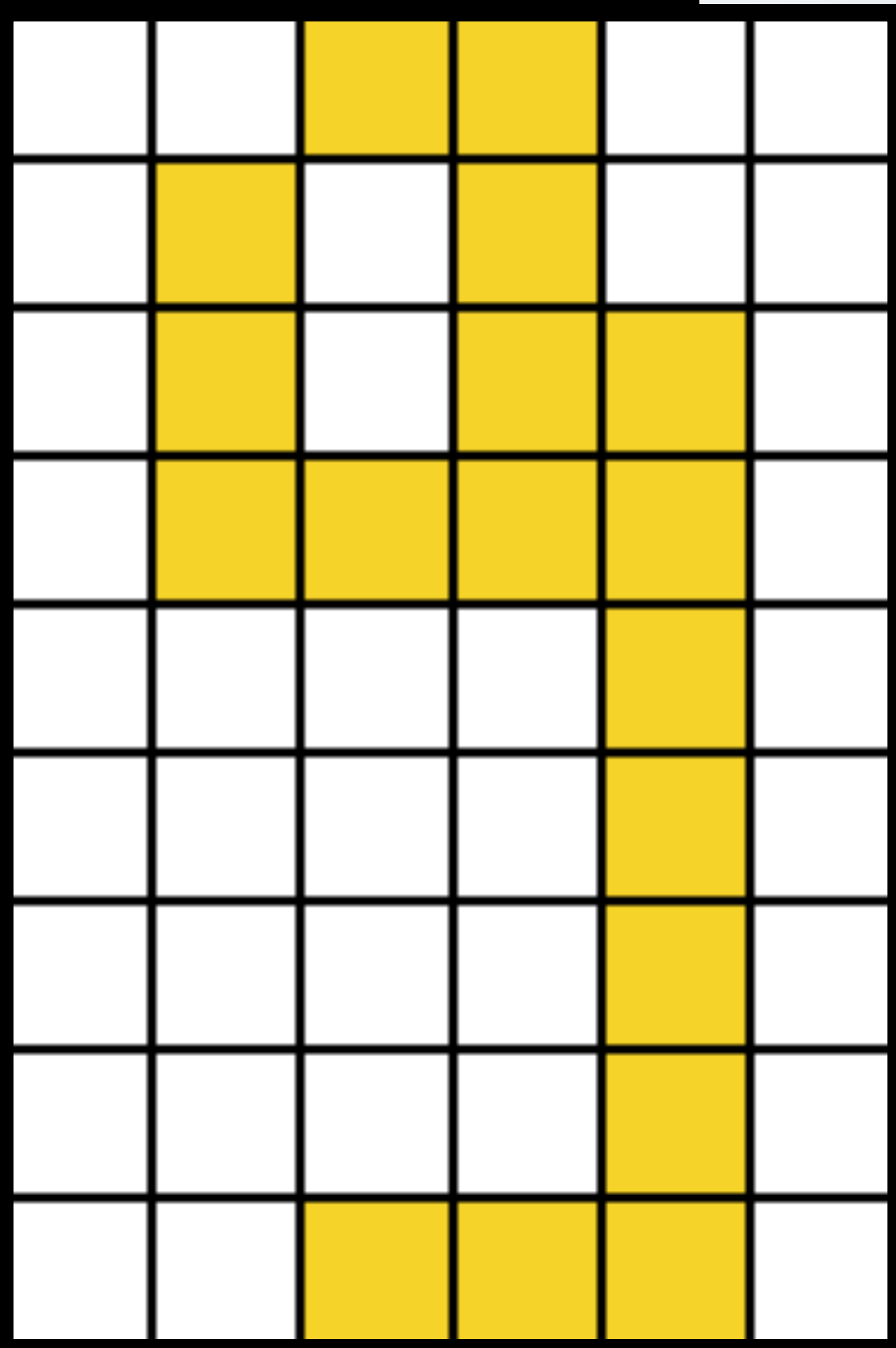
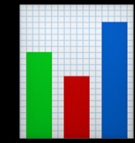
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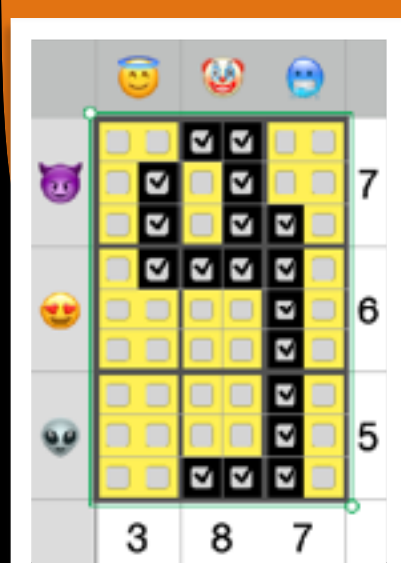
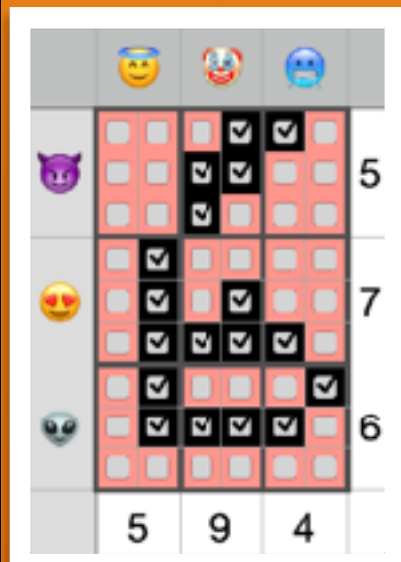
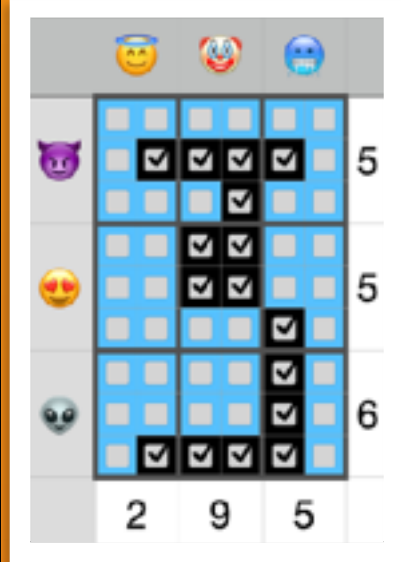
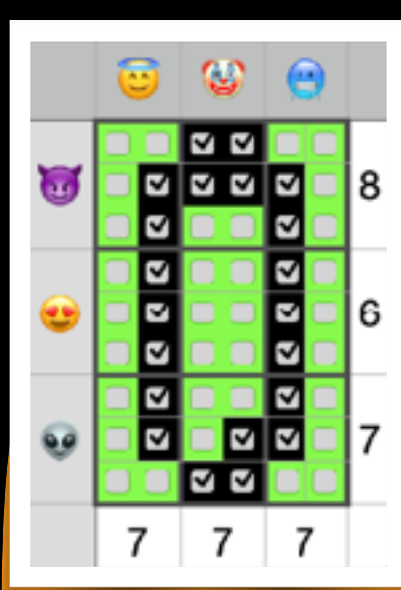
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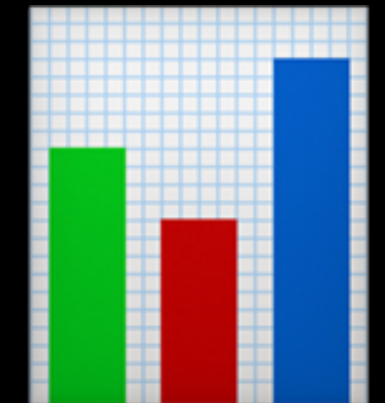




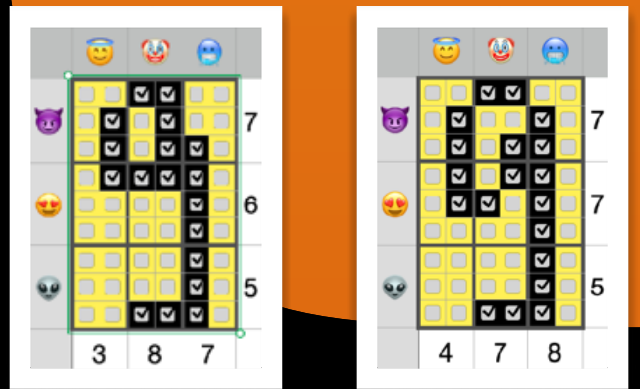
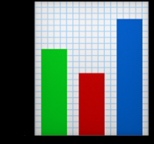
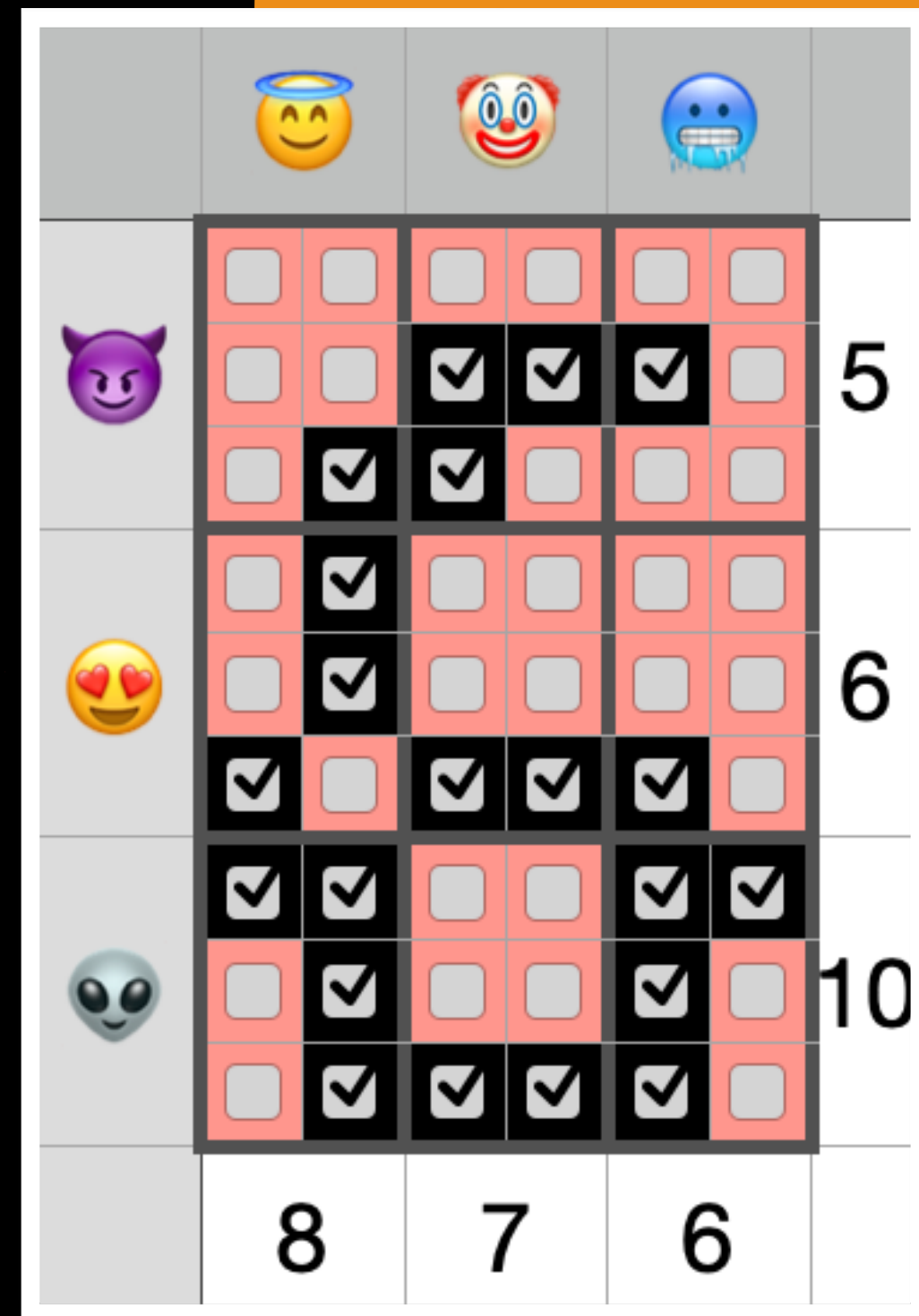
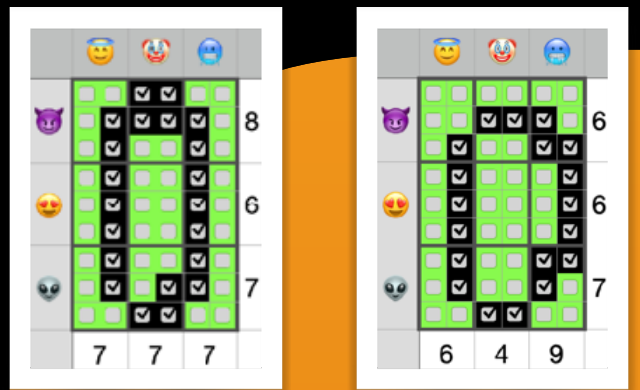


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A	😊 + 😬 - 😇	0	8	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
B	😊 + 😍 - 😬	0	7	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
C	😬 + 😈 + 😍	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	
D	😊 + 😬 - 😈	0	7	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
E	😊 + 😍 + 😬	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	
F	😈 + 😬 - 😍	0	5	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

	Entrée	Seuil	Sortie	-8 et moins	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
● C+E+F-A-B-D	0	6	NON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9
● A+B+D-C-E	0	6	NON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9
● B+D+E-A-C-F	0	7	NON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8
● A+B+C-D-E	0	4	NON	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11








	Entrée	Seuil	Sortie	0 et moins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
A	😊 + 😬 - 😇	0	8	0	0	0	0	0	0	0	0	0	0	1	2	3	3	5	6	7	8	9	10	11	12	13	14	15	16	17
B	😊 + 😍 - 😬	0	7	0	0	0	0	0	0	0	0	1	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
C	😬 + 😈 + 😍	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	
D	😊 + 😬 - 😈	0	7	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
E	😊 + 😍 + 😬	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9
F	😈 + 😬 - 😍	0	5	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20


	Entrée	Seuil	Sortie	-8 et moins	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
● C+E+F-A-B-D	0	6	NON	3	3	0	0	6	9	9	9	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9
● A+B+D-C-E	0	6	NON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	
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  $A+B+D-C-E$

  $A+B+C-D-E$

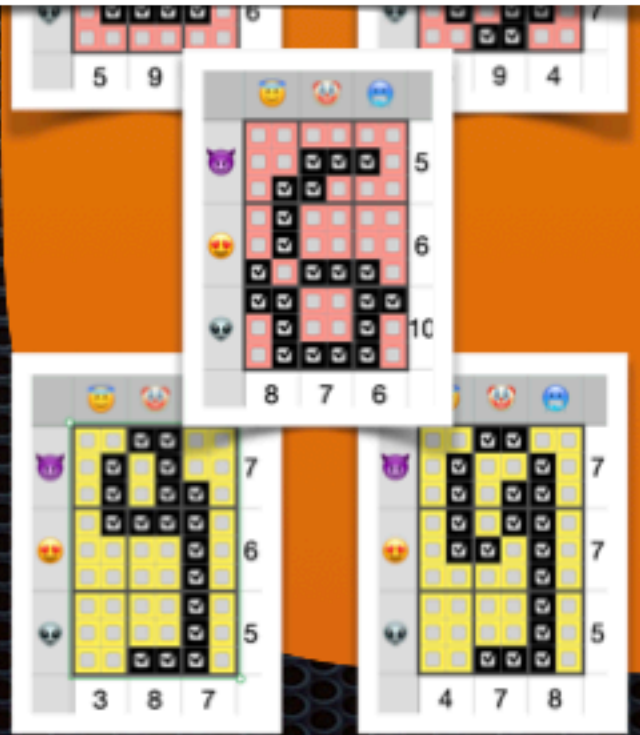
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 C+E+F-A-B-D	0	7	NON	3♦	3♥			6♥		9♥		9♦							6♣		0♦			0♥			
 A+B+D-C-E	0	6	NON	0♥	0♦				6♣			9♦		9♥	6♥					3♥					3♦		
 B+D+E-A-C-F	0	7	NON			9♥		0♥	0♦		3♥				3♦					6♥	6♣	6♦					
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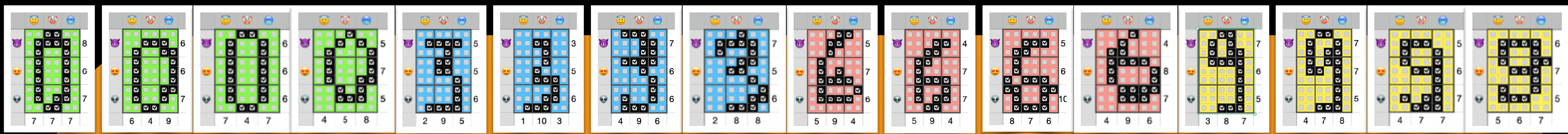


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	Entrée	Seuil	Sortie	0 et moins	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
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C	+  +	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
D	+  -	0	6	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
E	+  +	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
F	+  -	0	5	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

	Entrée	Seuil	Sortie	-8 et moins	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	C+E+F-A-B-D	0	7	NON	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A+B+D-C-E	0	5	OU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B+D+E-A-C-F	0	7	NON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A+B+C-D-E	0	5	NON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



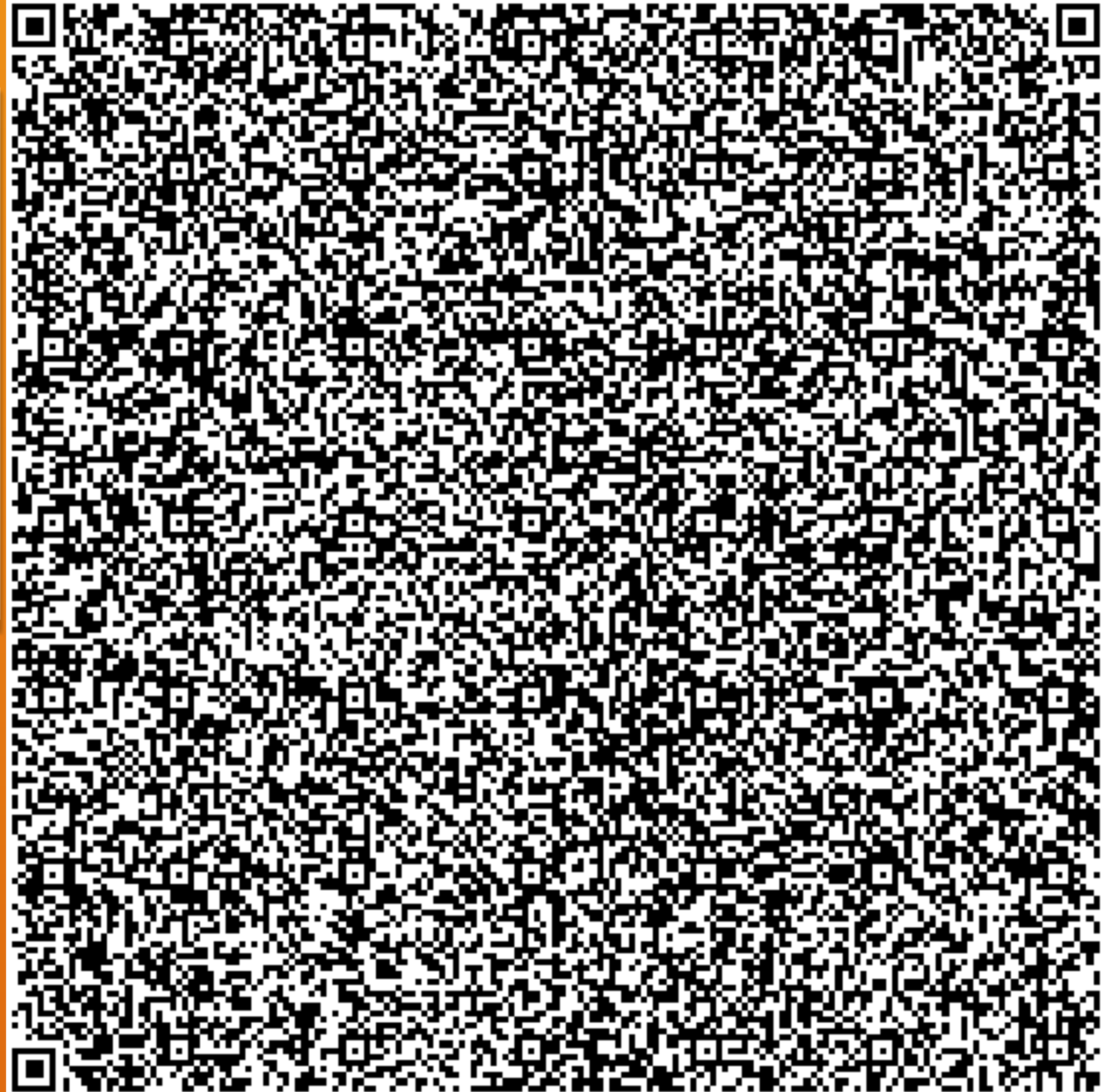


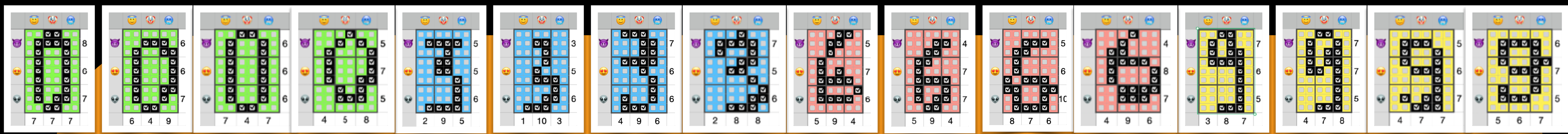
```
basthon
on bat & table pour Python 3

1 #!/usr/bin/env python
2 # -*- coding: utf-8 -*-
3
4 Created on Mon Sep 19 17:19:28 2022
5
6 @author: olivierdruet
7
8
9 import numpy as np
10 import random
11 import math
12 import time
13
14
15 #####
16
17 sortie_cache=np.empty((16,6),dtype='float64')
18
19 sortie_finale=np.empty((16,4),dtype='float64')
20
21 seuil_cache=np.empty((6,),dtype='float64') #le
22
23 seuil_finale=np.empty((4,),dtype='float64') #le
24
25 erreur=np.empty((16,6),dtype='float64') #l'err
```

```
Python 3.11.2 (main, May 3 2023 04:00:05)
Type "help", "copyright", "credits" or "license"
for more information.
>>>
```

x 50 000

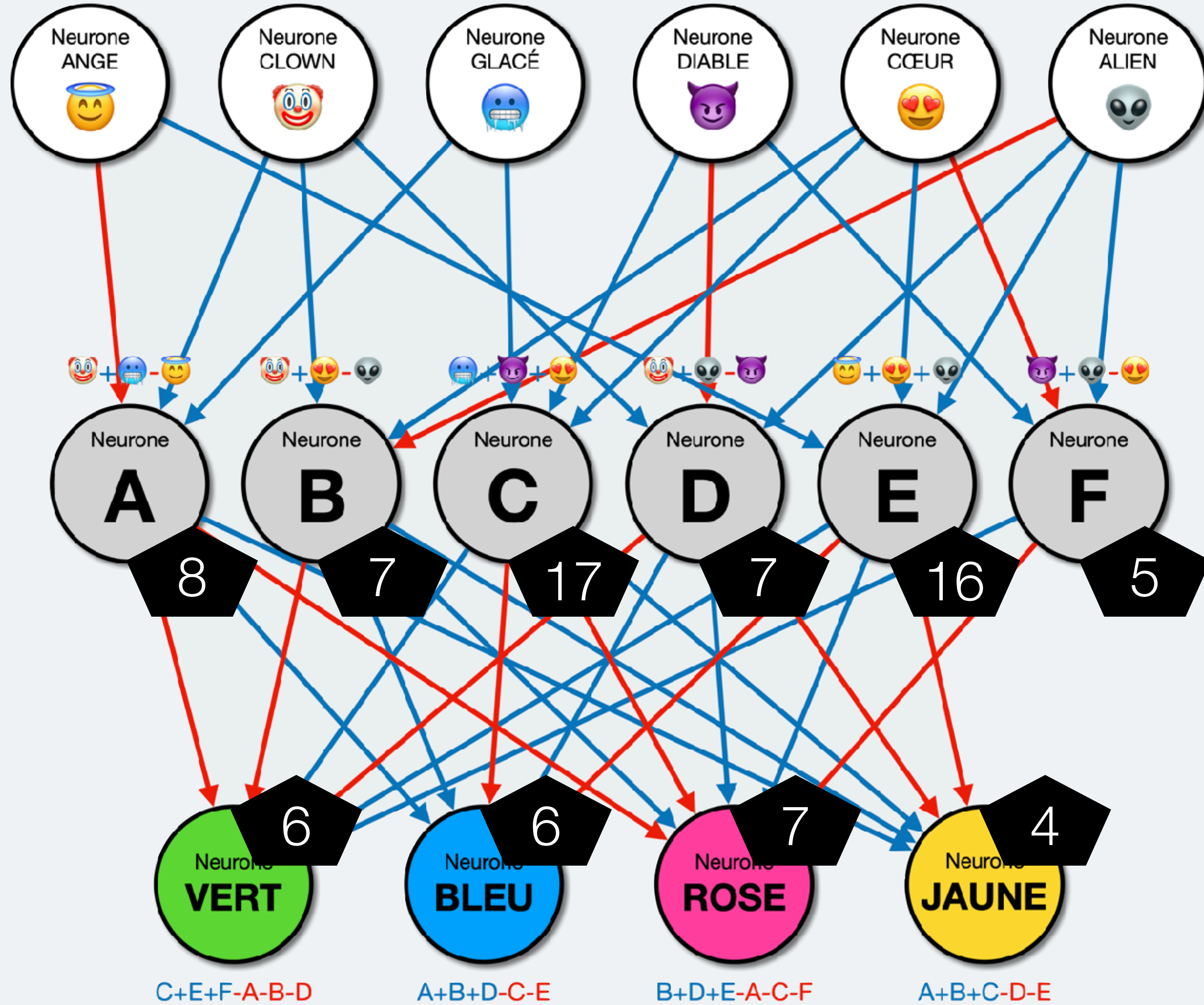
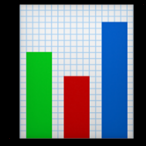




	Entrée	Seuil	Sortie	-8 et moins	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
$1.9C+0.8E+1.5F-1.5A-B-3.6D$	0	6,4	NON	6♥ 6♦ 3♣ 9♦ 3♠ 6♠	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0♠	0♥	0♣																	0♦	
$2A+1.2B+0.5D-1.1C-2.7E+3F$	0	7,0	NON	9♦ 0♣ 0♦	9♣	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3♣																			3♦
$1.1B+1.3D+3.2E-2.1A-0.6C-1.3F$	0	7,7	NON	3♠	9♥	0♦	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
$0*A-0.8B+0.6C+D-3.5E-3.2F$	0	15,1	NON	6♣	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	









## Rôle du neurone B

1 FAIS LE CALCUL SUIVANT :

$$\text{🤖} + \text{😍} - \text{😬} = ?$$

2 TROUVE LA RÉPONSE À MONTRER :

Résultat du calcul 🤖+😍-😬	3	4	5	6	7	8	9	10	11
Réponse à montrer	0	0	0	0	0	1	2	3	4

## Rôle du neurone ROSE

1 FAIS LE CALCUL SUIVANT :

$$B + D + E - A - C - F = ?$$

2 TROUVE LA RÉPONSE À MONTRER :

Résultat du calcul B + D + E - A - C - F	-6	-5	...	6	7	8	9	10	11	12
Réponse à montrer	NON				OUI					



neurone



2

Calcul du neurone rose

$P + D + E + C - F = ?$

Résultat du calcul

Cartes à placer

Sortie du neurone

-7	-5	-2	0	1	2	3	4	5	6	7	8	9	10	11	12	13
9	0	0	3													
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Neurone Rose

Résultat du calcul

Cartes à placer

Sortie du neurone

-9	-8	-7	-5	-4	-3	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
			6																		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Neurone Jaune

Calcul du neurone jaune

$A + B + C - D - E = ?$

du neurone B

LE CALCUL SAVANT

☹️ = ?

UNE LA RÉGION LA MONTE

3	4	5	6	7	8	9	10	11
0	0	0	0	0	1	2	3	4

neurone

2

😊



À bientôt !

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**L'IA par réseau de neurones**

Science informatique débranchée