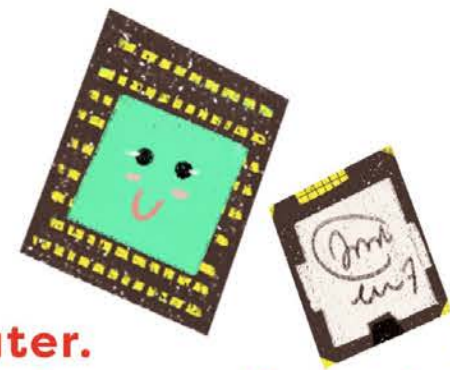


PROCESSOR



A Processor is the “**brain**” of the computer.
It is **VERY** smart - it can add, subtract or multiply numbers really fast.
But it has a problem. It has no memory.



Think about it! (Questions for discussion)

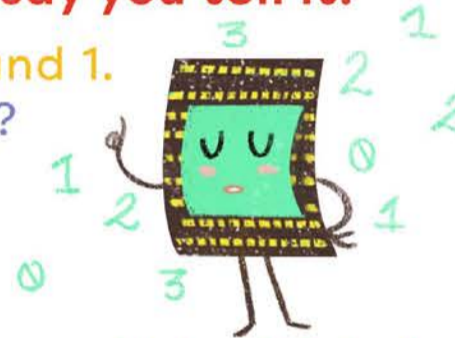
What is it like to not have memory?

You wake up and you have no memory. What is it like?

You come to school and you have no memory. What is it like?

Processor is like that. Let' say you tell it:

- Processor, add 2 and 1.
- Okay! 2 and what?
- And add 1!
- Add what?
- 1!



This is very annoying. It doesn't remember anything! But don't give up!
The Processor has boxes, called registers, let's say box A, B and C,
where you can put the numbers that you ask it to add.
You can put 2 in box A, 1 in box B. Then, if you tell the processor:



- Processor, add what's in box A and what's in box B.
- Okay! It's 3!

You can talk to the Processor in a Machine Language

Machine Language instructions

| | |
|-----------------------------|--------------|
| Put 5 in box A: | PUT 5 -> A |
| Put 7 in box B: | PUT 7 -> B |
| Add A and B and put it in C | PUT A+B -> C |



Now it's your turn to write in machine language

1. Tell processor to add 10 and 15 and put it in box C. What will be there?
2. Tell processor to add 111, 222 and 333 and put in box A, What will be there?