

Chapter 2

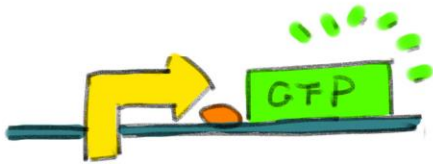
LOGIC DEVICE

PROMOTERS ALSO HAVE A LOT OF CLASSIFICATIONS.

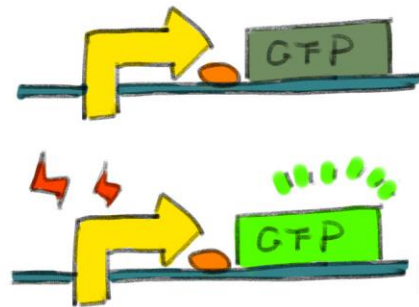
ONE DAY IN CLASS...

MAINLY DIVIDED INTO CONSTITUTIVE PROMOTER AND INDUCIBLE PROMOTER.

CONSTITUTIVE PROMOTER
(CONSTANT PROMOTERS)



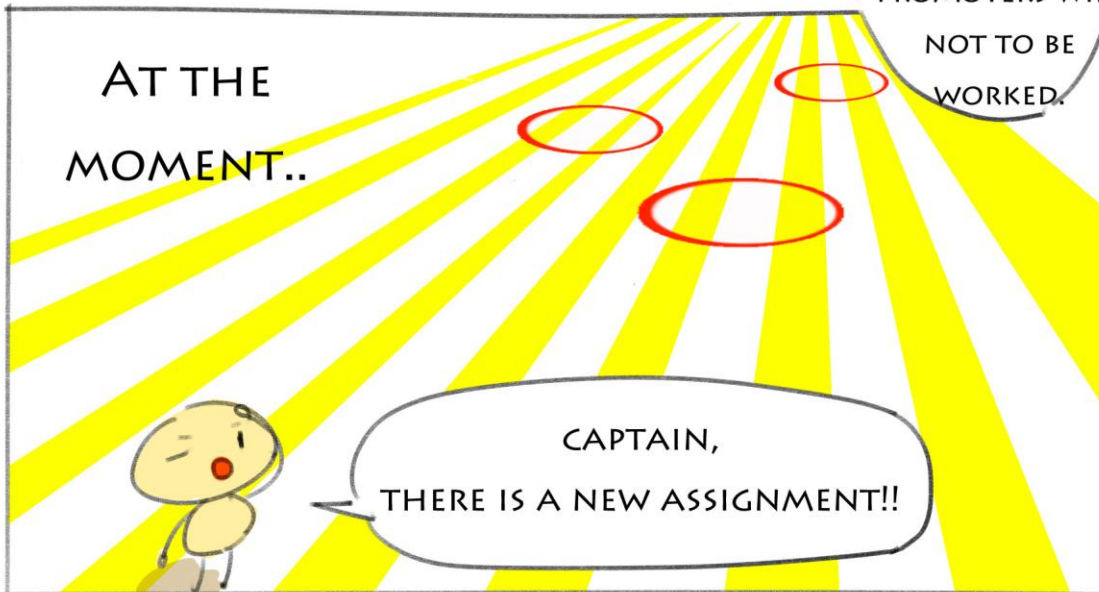
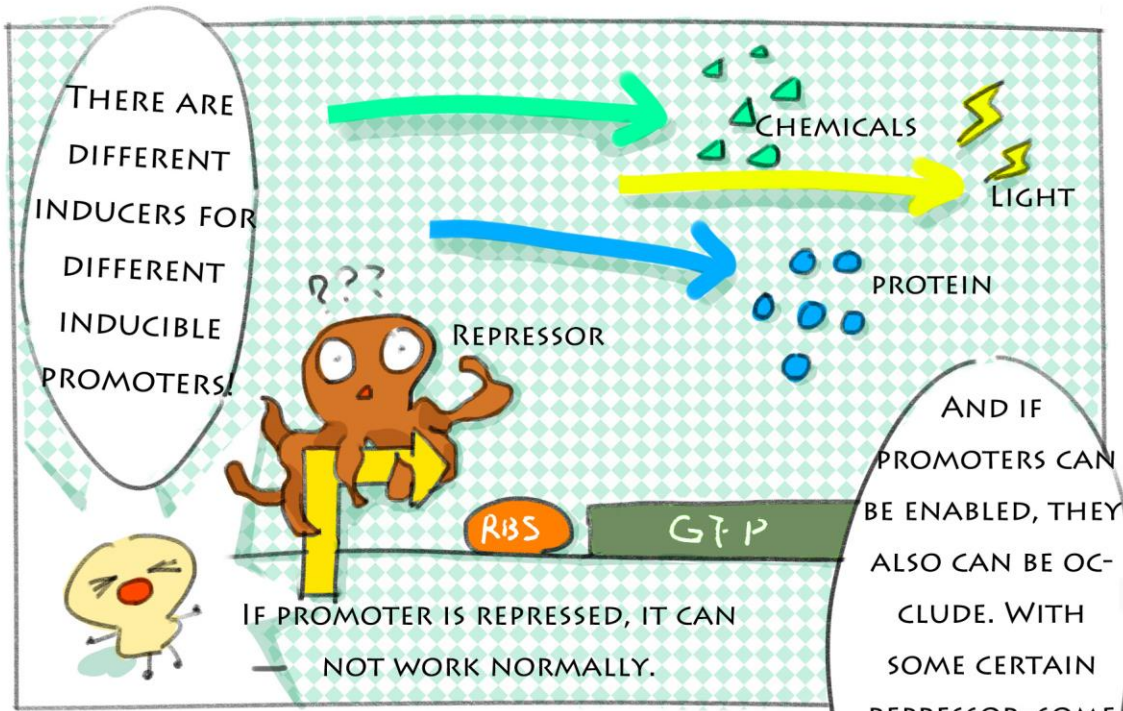
INDUCIBLE PROMOTER



CONSTITUTIVE PROMOTERS ARE OPEN IN NORMALLY! YOU WILL UNDERTAKE WORK AS SOON AS YOU SEE THEM.

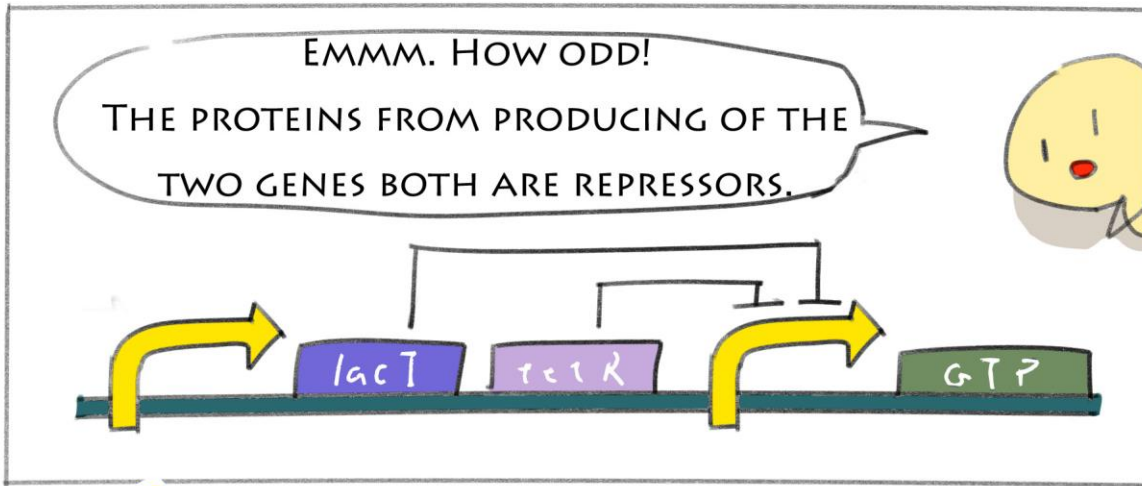


HOWEVER, INDUCIBLE PROMOTERS ARE OPENED BY SPECIFIC SUBSTANCE OR SIGNAL.



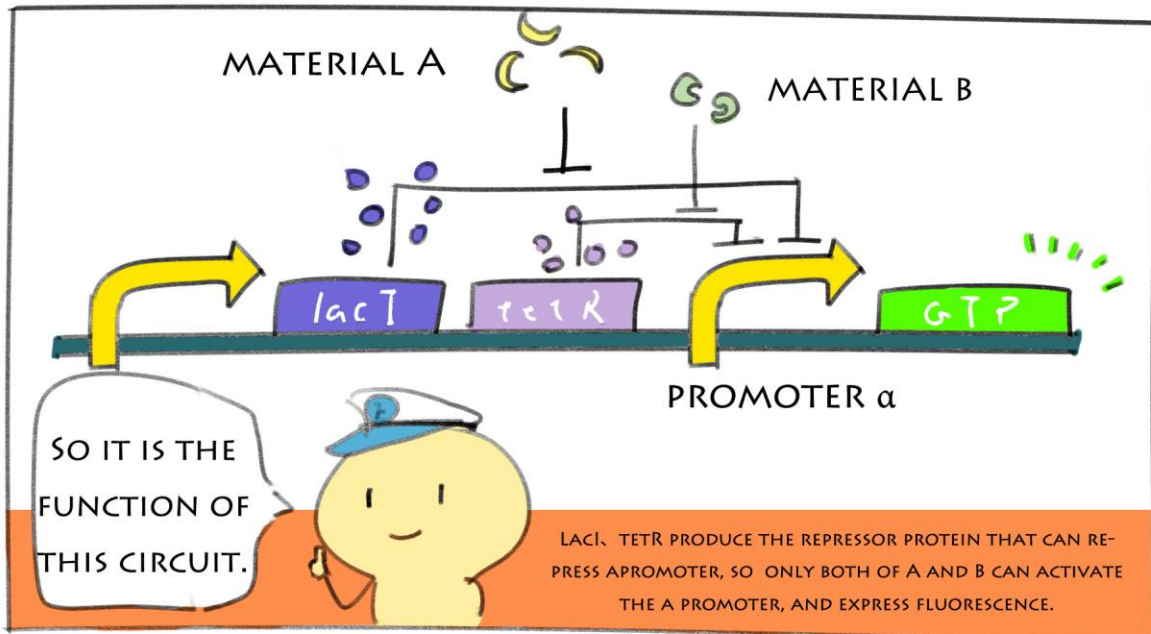
IT IS THE POST-TRANSCRIPTIONAL CONTROL



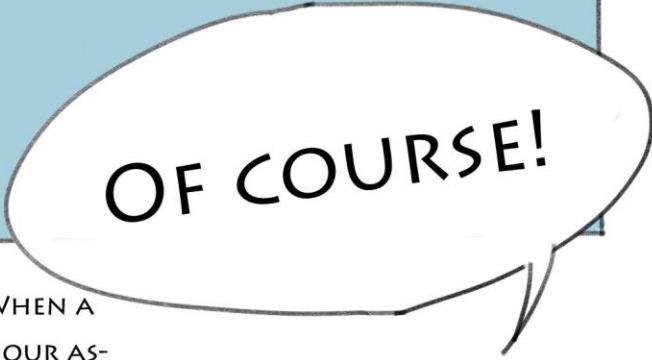
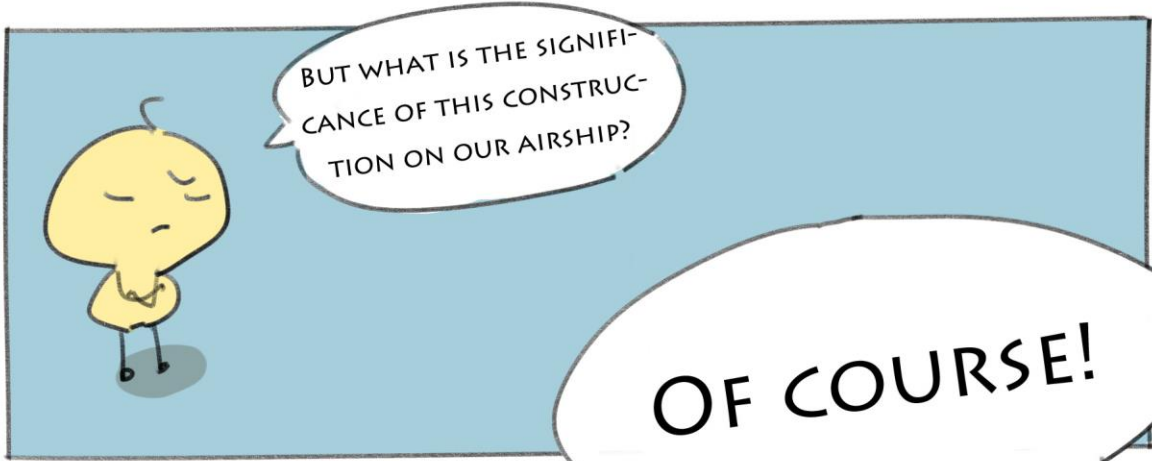
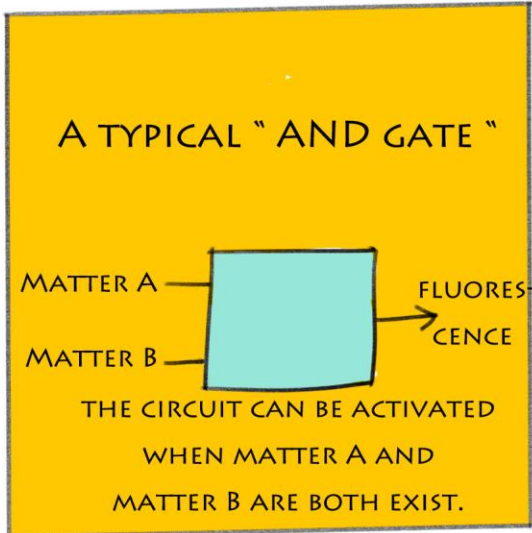


Tips THE SYMBOL OF "PROMOTE" AND "REPRESS"

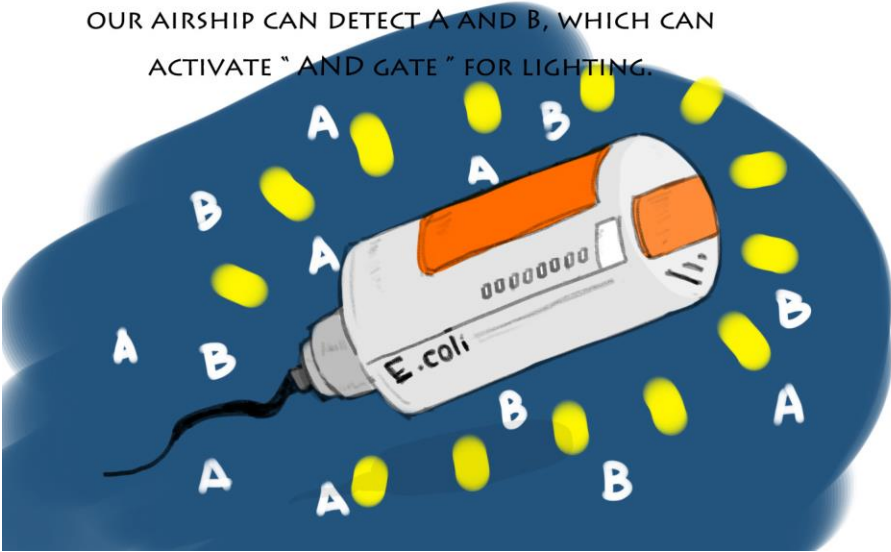
- ① **PROMOTE :**
IT REPRESENTS THAT GENE A THAT EXPRESS THE PROTEIN CAN PROMOTE THE EXPRESSION OF GENE B.
- ② **REPRESS:**
IT REPRESENTS THAT GENE A THAT EXPRESS THE PROTEIN CAN REPRESS THE EXPRESSION OF GENE B.
- ③ WHEN THERE IS A GENE C WHICH CAN CONTROL THE EXPRESSION OF GENE A, A WILL BE REPRESSED, SO THE EFFECT THAT GENE A PROMOTE THE EXPRESSION OF GENE B WILL NOT BE EXIST.
- ④ WHEN THERE ARE TWO REPRESSORS, BECAUSE OF THEM, THE EFFECT THAT GENE A REPRESS THE EXPRESSION OF GENE B WILL BE REMOVE, THEREFORE GENE B CAN BE EXPRESSED HAPPILY.



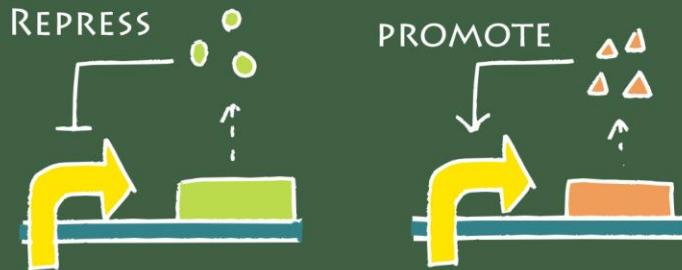
THE CONSTRUCTION THAT BOTH OF A AND B ARE EXIST FOR ACTIVATING, CALLED "AND GATE", IT IS A KIND OF LOGIC GATE. BESIDES, "NOR GATE" AND "NOT GATE". "AND GATE" IS THE SIMPLEST LOGIC GATES.



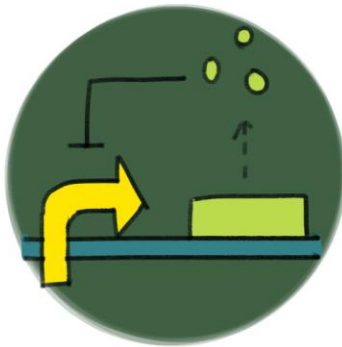
OUR SPACE SHIP IS AUTOMATED SHIP! WHEN A PARTICULAR REGION HAS A AND B, AND OUR ASSIGNMENT IS TO BE THERE FOR LIGHTING. ONCE OUR AIRSHIP CAN DETECT A AND B, WHICH CAN ACTIVATE "AND GATE" FOR LIGHTING.



THIS "AUTOMATED" CONSTRUCTION IS NOT JUST LOGIC GATES.

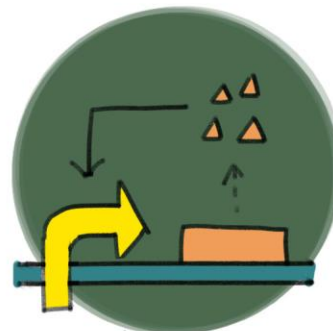


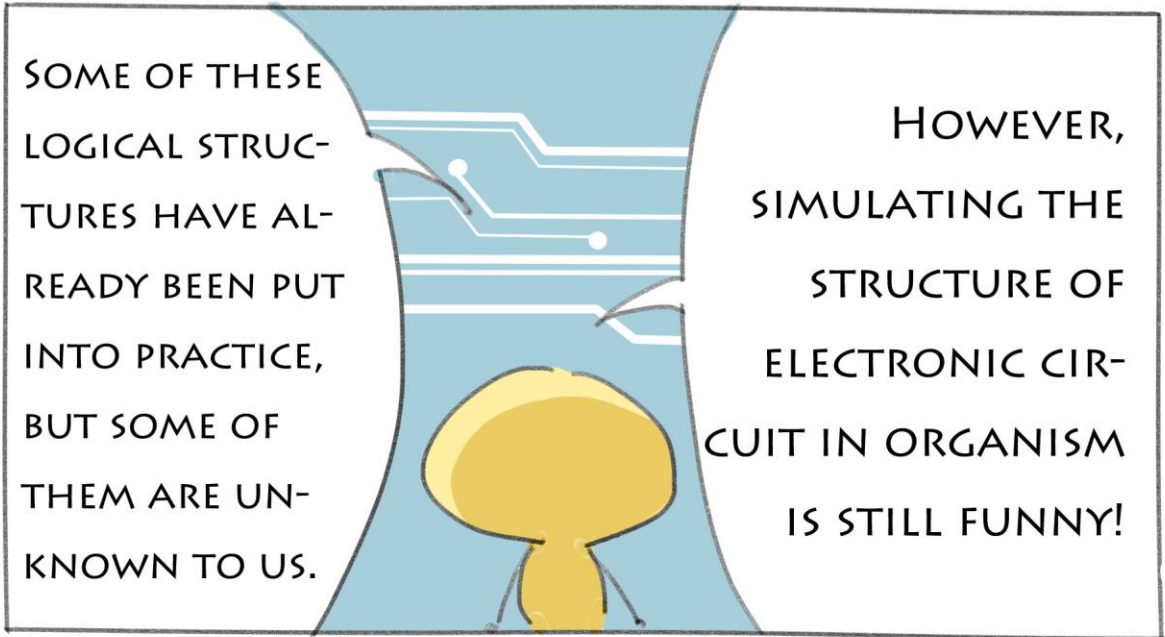
IT CALLED FEEDBACK LOOP,!
CAN YOU GUESS WHAT IMPACT IT HAS?



IT IS NEGATIVE FEEDBACK! WHEN THE MATTER EXPRESS TOO MUCH, IT CAN ACT ON THE PROMOTER TO TURN DOWN THE STRENGTH OF PROMOTER, MAKE THE LATTER EXPRESSION NOT OVER CAPACITY!

AND THAT IT IS A POSITIVE FEEDBACK, IT MAKES THE FRONT OF PROMOTER BE MORE AND MORE STRONGER, PRODUCING MORE PROTEINS.





Tip:

