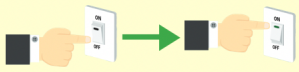
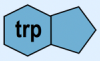
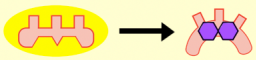
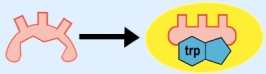
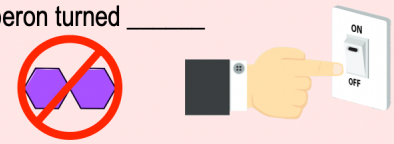
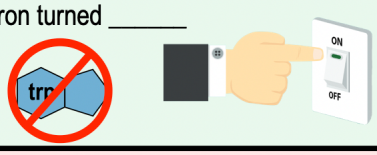
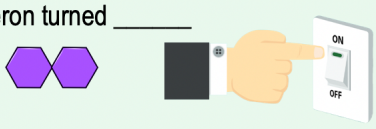
CONCEPT: REVIEW OF LAC & TRP OPERONS

●Now let's review the *lac* and *trp* operons:

	***lac* Operon**	***trp* Operon**
Operon type	_____ 	_____ 
# of Genes	____	____
Function of operon genes	_____ Lactose	_____Tryptophan
Repressor gene	_____	_____
Regulatory molecule	 _____ (Inducer)	 _____ (Corepressor)
Effect of regulatory molecule	_____ Repressor Protein 	_____ Repressor Protein 
Regulatory molecule Absent ✗	Operon turned _____ 	Operon turned _____ 
Regulatory molecule Present ✓	Operon turned _____ 	Operon turned _____ 

PRACTICE: Which of the following statements is FALSE?

a) The *lac* operon is an inducible operon that is normally turned off.

b) The *trp* operon is a repressible operon that is normally turned on.

c) Lactose is the inducer molecule for the *lac* operon.

d) Tryptophan is the activator molecule for the *trp* operon.

e) All of the above are true.

PRACTICE: Which of the following statements is TRUE?

a) Lac I is the inducer molecule for the *lac* operon.

b) Tryptophan is an inducer molecule for the *trp* operon.

c) In the presence of lactose, the *lac* operon is expressed.

d) In the presence of tryptophan, the *trp* operon is expressed.