**Operons: Bio Coach** (alternate activity) **WS** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_\_

Go to this site: <http://www.phschool.com/science/biology_place/biocoach/lacoperon/regulate.html>

\*\*DON’T USE CHROME BROWSER or you won’t see all the visuals (I know Explorer works)

1. Why is the Lac regulatory protein called a repressor?
2. The effect of the Lac repressor on the *lac* genes is referred to as \_\_\_\_\_\_\_\_\_\_\_regulation.
3. What happens when (allo)lactose binds to the repressor? Be specific.
4. Why is lactose called an inducer (inducible operon)?
5. Explain what must happen for the repressor to move off the operator.
6. What is the prokaryote’s preferred energy source? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What units are included in an operon? Is the regulatory gene part of the operon?
8. Explain the relationship between cAMP and glucose concentration.
9. Take the self-quiz and enter your answers here:

\*FYI: cAMP will not be on your test

\*Highly advised: go to this site and view the trp operon. Take Notes!

**Example question**s: Why is the trp operon called a repressible operon?

Explain how this operon works in prokaryotes

\*Also, go to right column of Unit 5 blog and open the Mader Ch 15 PPt. Go over the slides! (will be on test)