

## AP Biology 032 -- Signal Transmission & Gene Expression

### Video Review Sheet -

<http://www.bozemanscience.com/032-signal-transmission-and-gene-expression>

1. What chemical is responsible for the flight or flight response?
  
2. What is signal Transmission?
  - a. What are the 2 types?
  
3. What does the liver contain and in what form?
  
4. Where does the message come from in the body to start the fight or flight response?
  
5. When epinephrine binds to the protein receptor, what happens to the protein?
  - a. And what is the outcome of this change? (hint: what happens to the G-protein \*aka. blue protein)
  
6. How is cAMP made from ATP?

7. Where does the cAMP go?
  - a. And what are the 2 parts of where the cAMP attaches?
  - b. What is this entire process called?
8. What happens to catalytic proteins?
9. How many glucose molecules can one epinephrine molecule activate?
10. What is removed from cell function signal transmission when doing gene expression instead?
11. In gene expression, you are adding the \_\_\_\_\_ and adding one more \_\_\_\_\_ called \_\_\_\_\_.
12. What does the catalytic protein do differently in gene expression?
13. CREB is a \_\_\_\_\_. So it \_\_\_\_\_ to \_\_\_\_\_, which allows \_\_\_\_\_ to grab on and make \_\_\_\_\_ to make a new protein.
14. What is the new protein called from #13? What is its function?
15. What is the overall purpose of signal transduction/transmission?