

Name _____ Block _____

Exploring Cell Communication

Learn Genetics Website Activity



Part A. Fight or Flight Response (Video Animation)

<http://learn.genetics.utah.edu/content/cells/cellcom/>



Part B. How Cells Communicate During Fight or Flight

http://learn.genetics.utah.edu/content/cells/fight_flight/

1. What part of the brain initiates the fight-or-flight signal?
2. What gland receives the signal from the brain? What hormone is released by this gland?
3. List 3 effects when cortisol is released into the bloodstream.
4. How do signaling molecules provide a boost of energy?
5. What are the effects of epinephrine on:
 - a. the lungs?
 - b. the heart?
 - c. muscle cells?



Part C. Dropping Signals

<http://learn.genetics.utah.edu/content/cells/signals/>

Cell Responses to Different Signals

Type of Cell	Signal			
	Light	Nitric Oxide	Cytokine/ Growth Factor	Hormone
Photoreceptor				
Leaf Parenchyma				
Muscle				
Cancer				
Fibroblast				



Part D. When Cell Communication Goes Wrong

<http://learn.genetics.utah.edu/content/cells/badcom/>

Disease	Normal Signal (What normally happens?)	Abnormal Signal (What goes wrong?)	Consequences
Type I Diabetes			
Multiple Sclerosis			
Type II Diabetes			
Stroke			
Cancer			
Asthma			