

Body Systems, Homeostasis, Feedback (Test Monday, January 22)

Movement of Molecules:

1. What is the difference between diffusion and active transport? Draw a diagram for each one.

Review the Cell Model Lab.

2. What materials could go through the membrane? Explain why.
3. How is the model similar and different from living cell membranes?

Draw and label the following body systems:

1. Circulatory System (heart, arteries, veins, capillaries. Extra: vena cava, aorta)
2. Urinary system (include nephron) (kidneys, ureter, bladder, urethra)

Nephron: Review the parts of the nephron. (vein, artery, capillaries, glomerulus, tubules).

1. What molecules are filtered out of the blood into the tubules and then reabsorbed into the blood?
2. What molecules are NOT filtered out of the blood?
3. What molecules are not reabsorbed into the blood and instead go out the urine?
4. How does this process help regulate water, salt and toxin (urea) levels?

Draw/describe where the following systems interact and what materials are exchanged

1. Circulatory system and muscle
2. Circulatory system and lung
3. Circulatory system and kidney
4. Circulatory system and intestine

Define and give examples of:

1. Negative feedback
2. Positive feedback
3. Diffusion
4. Active Transport
5. Levels of organization in bodies

These are different conditions that must be maintained for homeostasis in a living organism. Give a brief description of where and what happens in the body to keep these conditions at optimal levels.

1. Temperature:
2. pH:
3. water level:
4. salt level:
5. toxins in blood:
6. blood pressure: