



4. Briefly describe the major functions of the 11 organ systems.

5. Define each pair of anatomical positions.

6. Use each anatomical position in a sentence. For example, “the head is superior to the neck.”

7. Draw a picture of a body and label these sections: *sagittal, transverse, coronal*



6. Define and draw an example of protein folding through the 4 levels of protein structure

7. Draw a double helix of DNA consisting of 4 nucleotides on each side. Just use the "P" for phosphate, "S" for sugar, and "B" for base.



4. Draw out the cell cycle and its 4 stages.

5. Explain why meiosis exists. What cell types in the human body undergo meiosis?

### Multiple Choice

1. The difference in hydrogen ion concentration of a solution at pH4 and pH8 is\_\_\_\_\_.
  - a. 4 times
  - b. 40 times
  - c. 400 times
  - d. 10,000 times
  - e. 400,000,000 times
  
2. My finger is \_\_\_\_\_ to my elbow.
  - a. Medial
  - b. Distal
  - c. Inferior
  - d. A and B
  - e. B and C

3. If I cut my body down the middle into left and right halves, this is a \_\_\_\_\_ section.
  - a. Coronal
  - b. Hemispherical
  - c. Oblique
  - d. Sagittal
  - e. Transverse
  
4. This is a type of covalent bond that makes a molecule have very slight charges on different parts of the molecule.
  - a. Hydrogen
  - b. Ionic
  - c. Non-polar
  - d. Polar
  - e. Transvalent
  
5. Which of the following is an example of a lipid?
  - a. DNA
  - b. Glucose
  - c. Peptide
  - d. RNA
  - e. Steroid
  
6. What letter is not a base of DNA?
  - a. A
  - b. C
  - c. G
  - d. T
  - e. U
  
7. What organelle makes proteins?
  - a. Ribosomes
  - b. Nucleus
  - c. Lysosome
  - d. Golgi Complex
  - e. Mitochondria
  
8. If you put a cell in a high salt solution, it will \_\_\_\_\_ because it is in a \_\_\_\_\_ solution.
  - a. Explode...hypertonic
  - b. Explode...hypotonic
  - c. Shivel...isotonic
  - d. Shivel...hypertonic
  - e. Shivel...hypotonic
  
9. What part of the cell cycle allows for DNA duplication?
  - a. G1
  - b. G2
  - c. M
  - d. S
  - e. H