

Directions:

Each group (3 students per group) will be given a topic and a picture of the animal cell. You will have to write at least 5 creative, complex questions for your topic and describe where in the cell or what cell organelles are important for your topic. Your questions **must** cover the concepts listed on the powerpoint slide, but you are not limited to those concepts.

You can use any resource that we have used in class to develop your questions, but remember **originality** is important. You may also incorporate figures or pictures in your questions.

Grading Scale for Biology Review (per question):

True/ False	1pt	_____
Multiple Choice	1pt	_____
Fill in the blank without word bank	2pt	_____
Short Answer (1 complete sentence response)	3pt	_____
Correct answer on answer key	2pt	_____
Originality (Quest. was not copied from a previous assignment)	1pt	_____
<u>Bonus:</u>		
Integrative (involves more than one concept and 3 complete sentences response)	5pt	_____

Please grade your group members and state why you gave them the grade.

Group Member 1:

Group Member 2:

******Group Participation is worth 25pts******

Sample Questions

Scientific Theory: Chapter 1

Based on the information above, state the hypothesis using an “if, then” statement. Identify the independent and dependent variable and state why.

Organic Compound: Chapter 2

An adoptive child is trying to identify his/her biological parents, what organic compound would be important for him/her to make an accurate identification? List the monomer and polymer.

Cell Structure/ Function: Chapter 3

Both animal and plant cells are classified as eukaryotes, however, they are truly two different organisms. Describe the criteria for an organism to be classified as an eukaryote. Also, what makes animal and plant cells significantly different?

Chapter 5: Write the chemical reaction for photosynthesis and identify all the elements in your chemical formula.

Cell Transport (Osmosis and Diffusion): Chapter 4

You enter your home and realize there is a terrible odor coming from the kitchen. Close by, you notice a can of airfreshner and spray hoping to gain relief from the horrible smell. As you approach the kitchen, you begin to smell the airfreshner. How would you describe the movement of the particles from the airfreshner?

Mitosis/ Meiosis: Chapter 6 and 7

How can siblings from the same parents be so different?

Transcription/ Translation: Chapter 9 and 10

You are given 2 samples, 1 DNA and 1 RNA, how would you identify the difference between the two.

Genetics/ Bioengineering: Chapter 8 and 11

Scientists have identified a gene that may be responsible for breast cancer. However, they must conduct experiments in using mouse cells to confirm their findings. Describe one experiment the scientist can conduct to show the ability of the gene to cause cancer.

Evolution: Chapter 13 and 14

Two species found in Africa have homologous structures in their arms and legs, what is most likely the reasoning for these homologous structures?