

Study Guide and Study Strategy

UNIT 4 Test

Cells (Structure and Function) HONORS 7 VERSION

The Study Guide

To inform WHAT is on the test.

The following is a list of KEY ideas you should know thoroughly for the test. REMEMBER: the material is NOT limited to these items below. All content material for the test is taken from Science Binder pages and textbook pages that relate to cell structure and function.

BINDER: page # 21+

CHAPTER 1-1 / 1-2 & 1-4 (GRADE LEVEL text); 6.1 & 6.3 (HONORS text).

- 1) Cell Theory: what are the three (3) main ideas surrounding this theory?
- 2) Know each diagram of the cell (animal and plant), and be able to label each of the major organelles, including the cell wall and cell membrane.
- 3) What do all cells, no matter what type, have in common?
- 4) Know the seven (7) step progression of the structure of an organism, starting with atoms.
- 5) What are the functions of all the organelles within a plant and animal cell?
- 6) What organelles are present in a plant cell, but not in an animal cell?
- 7) Know how bacterial cells differ from other types of cells.
- 8) Know what diffusion is, and in turn, what osmosis is. Know the basic definitions of active and passive transport.
- 9) Understand and be able to explain the difference between EUKARYOTIC and PROKARYOTIC cells.
- 10) Know all MICROSCOPE concepts: proper procedure (including wet mount prep), safety (“do’s and don’ts”), the mechanics (i.e., the science behind HOW they work).
- 11) Make sure you know ALL the vocabulary well.

The Study Strategy – Unit 4 Test HONORS VERSION

This is a day by day SUGGESTION of how to approach studying for the test. I always encourage studying a little bit every day prior to the test itself, rather than “cramming” the night before. Take it from me – it doesn’t work!!!! Each day has a list of activities, along with a time frame. **Here is the REALLY GOOD NEWS...if and only IF, you: 1) study each day that I suggest for the minimum time frame listed, 2) log (write down) what you accomplished, and 3) get each day signed by a parent, you can receive extra credit ON THE TEST.** But you must bring this log in the day of the test, and you cannot get partial credit for studying on SOME of the days. If you miss a day, make the day up on the “day off.” One more thing: you do not have to do what I suggest, just study for the time given. Heads-up – it’s a heavy “flashcard” approach (due to large amounts of vocabulary).

Friday, December 12 (40+ min.)

Day #1 of your preparation – the material is fresh in your mind! Make flash cards for Chapter 1, Sections 1, 2, 4 AND 6.1/6.3 vocabulary terms (that would be ALL of them). One side should have the term, the other the definition. Please use the QUIZLET app if this is something you can do.

Work accomplished:

time spent: _____

Parent Signature: _____

Saturday, December 13 (50 min.)

Day #2: Continue your flashcard work by doing a total of 50 minutes of self-quizzing using the cards or the Quizlet app. This may seem like a lot, but what I want you to do is to find 5 separate times throughout the day to study these for just 10 minutes at a time. You’d be surprised at how often you can find “down time” throughout the day.

Work accomplished:

time spent: _____

Parent Signature: _____

Sunday, December 14 (50 min.)

Day #3: Go over the three (3) main ideas surrounding the Cell Theory (this is VERY important and should be completely memorized). Create flashcards to reinforce this (total time = 20 min). Take some MORE time to review ALL flashcards that you have made – utilize a family member to “quiz” you. It is good to re-read the chapter, section by section (total time = 20 min). Start today, with SECTION ONE (jot down any questions you might have over your reading, total time = 10 min).

Work accomplished:

time spent: _____

Parent Signature: _____

Monday, December 15 (40 min.)

Day #4: Use today to review: the “Seven Step Progression of an Organism” and what ALL cells have in common (this was given in class today). Use your flashcards to specifically review cell functions (these should be second nature to you by now). Make sure you review how bacterial cells are different from other cells and also, what organelles are ONLY found in plant cells. Review what you learned about eukaryotic and prokaryotic cells (also given out today). Continue with your reading, this time with SECTION TWO (jot down any questions you might have over your reading).

Work accomplished:

time spent: _____

Parent Signature: _____

Tuesday, December 16 (40+ min.)

Day #5: Review (again) the Cell Theory and the “Seven Step Progression of an Organism” and review your material on MICROSCOPES (that would be EVERYTHING listed in the Study Guide). Use flashcards wherever (and whenever) you feel comfortable. Review 6.1 and 6.3 of the HONORS text and pay particular attention to osmosis, passive / active transport, equilibrium, diffusion, etc. from your vocabulary. Make sure you can recognize ALL parts of a cell diagram (both plant and animal). Can you name the FUNCTION of EVERY single cell organelle? Write down notes / questions you might have from the reading.

Work accomplished:

time spent: _____

Parent Signature: _____

Wednesday, December 17(30-40 min.)

Day #6: This is your last day!! By design, this is to be the easiest of the days, as you’ve covered just about all the material and should already be confident. You could take the test today!! But you have the advantage of this one extra day, so make it count. Utilize this day to build your confidence. WOW your parents by showing off how well you know your stuff. Review those flashcards (take 3+ times of short, ten-minute self-sessions) and of course, if there is ANYTHING missed from the Study Guide, tackle it today.

Work accomplished:

time spent: _____

Parent Signature: _____

Thursday, December 18

Test Day!

I would wish you “good luck,” but you shouldn’t need

it. You’re ready. 😊 *Bring this SIGNED (daily) document in to receive extra credit.*