

Grade 8 Science

Unit 4: Systems in Action



Systems

Can I please have three volunteers to read for me?

As indicated when we started, this unit is much shorter than our other units of study. Following today's class there are only 2 lessons left. Following that you will be writing the end of unit test. This test, like the unit, will be shorter, but will still cover all of our concepts.

For this unit I have not prepared a practice test for you. Instead, I will be providing this lesson for you as a test preparation period. I will take some time to discuss ideas on how you can prepare for the upcoming test, and then I will give you the remaining time to begin that preparation.

Having written five unit tests for me, you should be familiar with the style and level of expectation. Please keep in mind, when you get to high school, you will most likely not have the same teacher for as long as you have had me, and as such, you may not necessarily know what to expect from a test. This will mean that you need to think more carefully about what the test may be like, and plan for any possibility.



Test Preparation

The first thing that, I feel, should be done in preparing for your test is to summarize the concepts that have been taught. How might you do this for a Collinson science unit?

To summarize the concepts you can quickly review the lessons, as posted online, writing down the topics that have been covered.

Once you have the main concepts covered, you can then look at the main ideas for those topics. For example:

Systems

- Definition - multiple connected parts that influence each other
- Physical (car) or Organizational (Health Care)
- Features - purpose, input, output, components, processes

Notice that my notes are not extensive. By keeping them brief, they do not become overwhelming, which will most likely mean I am more willing to study from them.



Test Preparation

Along with the list of concepts for the unit, I also recommend that you prepare a definition list and an equations list (these will not apply to every test, but they certainly do for this one.)

With the unit summarized, my next recommended step is to look at each topic and ask yourself "What kind of question might he make to test this concept?" Think about the questions we have already done (worksheets, quizzes) and try to predict how that concept will appear on the test. By doing this, it forces you to really think about what is important about the concept, and you are studying without simply reading your notes.

Once you think you have some ideas about the types of questions, you can then prepare example questions and write out answers for them. What would really help is to have a peer give you their example questions, and work on each others'. Not only does it give you extra practise, it also provides you with a different perspective on the topic, and more ideas about how it may be tested.



Test Preparation

We just looked at a summary of the information about the topic "Systems," what type of question might appear on the test to cover this topic?

How would you answer the questions we have just brought up?

After preparing example questions and answers, you do have to consider that they may not actually be correct. Find a way to verify your information. You can take them to a peer, or you can bring them to me. Most teachers will be willing to reward this effort.

The last recommendation I have is... relax!

A tired, stressed brain is not nearly as capable of thinking as a well rested one is. When you sit down to write the test, if the question does not look like what you thought, you want your brain to be able to draw on as much information as possible. Be sure you get your sleep, and realize that if you have prepared yourself, then you will do the best you can.



Test Preparation

Other helpful test prep hints:

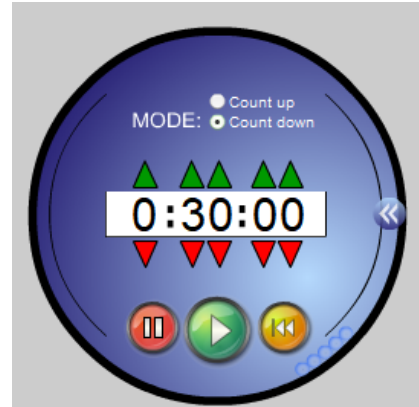
- Mix up the way in which you study, doing the same thing (reading notes) over and over again gets boring.
- Try studying alone and studying with people. Teaching someone else is a great way to reinforce concepts for yourself.
- Make game cards or play a trivia style game (you can prep questions and ask a parent/sibling to quiz you.)
- Prepare cue cards to take with you when you are out (dance, hockey, etc.) They can be used in the car or while waiting - time that is normally wasted poking a device. Prepping the cards is a form of studying too.
- Do not study for extended sittings, break it into multiple short sessions.
- Give yourself a goal (study for 20 minutes), reward yourself (waste 20 minutes on Instagram)... but be honest with yourself, if you don't reach your goal, don't take your reward.
- Relax... it is one test, of one term, in one subject, of one grade.

Test Preparation

You now have the remaining time this period to begin preparing for your test, which will be next week. You may use this time in whatever way you feel best suits your needs in preparing for this test. I will not be directing you in what you must do, but I am here to help you if you want guidance on what you could do.

Here is a summary of what we discussed:

- Determine the main topics
- Summarize the key info for each topic
- Prepare definition and equation lists
- Think about potential questions
- Write example questions
- Answer the example questions
- Verify your answers
- Vary the way you study
- Relax



Click to next slide when the timer is up.

Systems

Due to the nature of this test, having many different equations, I will allow each student to bring with them a hand-written equation sheet*. This is one piece of standard size paper, written on one side only, prepared by you. You may write out any equations you feel you may need.

These sheets will be brought with you during the first day of the test and will be stapled to the test.

Any photocopied sheets will be confiscated and discarded. To take advantage of this opportunity, you need to put in some effort, you need to prepare the sheet yourself.

Good luck!

*accommodations can be made for those whose printing is not exactly legible ;)