Stevens
Science 8H

Welcome to Science 8 Honours

Name:
Date:
Block:

Course Outline

Welcome to Science 8 Honours This year will be both exciting and interesting! Science 8H will introduce you to many interesting topics in science such as how humans and other animals reproduce, why the ground under our feet moves (slowly) how compounds are formed from atoms and many others! This class will cover all the Science 8 curriculum and a large portion of Science 9. Upon completion of science 8H and science 9H, you'll be ready to tackle the grade 11 sciences! To make our classes work, it is your responsibility to arrive to class with:

- Binder (please have a separate binder dedicated for Science 8H)
- Pens
- Pencils
- Eraser
- Agenda

Course Content

1) Introduction and Safety
    - Lab Safety
    - WHMIS and other safety symbols
    - Scientific method
    - Basics of graphing and lab reports

2) Biology 8: Life processes are performed at the cellular level
    - Microscopes
    - Characteristics of living things
    - Where do living things come from?
    - What are the different types of cells?
    - The interactions between humans and microorganisms
    - How does the body protect us from pathogens?

3) Biology 9: The continuity of life depends on cells being derived from cells
    - Why is the reproduction of cells important?
    - What are the different ways living things reproduce asexually?
    - How do living things sexually reproduce?

4) Physics 8: Energy can be transferred as both a particle and a wave
    - How does electromagnetic radiation shape you world?
    - How can models explain the properties of electromagnetic radiation?
    - How does light behave when it encounters different materials and surfaces?
    - How does light behave when it is reflected?
    - How does light behave when it moves from one medium to another?

5) Chemistry 8: The behavior of matter can be explained by the KMT and the atomic theory
    - How does matter affect your life?
    - What are some ways to describe matter?

- How can we describe and explain the states of matter?
- How can we investigate and explain the composition of atoms?

6) Chemistry 9: The electron arrangement of atoms impacts their chemical nature
- Why are elements arranged the way they are on the periodic table?
- How does the periodic table help scientists describe and group elements?
- What is the relationship between an element's position on the periodic table and the arrangement of its electrons?
- How can we understand, describe, name, and represent chemical compounds?

7) Earth Science 8: The theory of plate tectonics explains Earth's geological processes
- What ideas, observations, and evidence led to the theory of plate tectonics?
- What are tectonic plates and how is their movement linked to geological processes?
- How do geological features and processes affect where and how we live?

8) Earth Science 9: The biosphere, geosphere, hydrosphere, and atmosphere are interconnected as a matter cycles and energy flows through them
- How does solar energy affect Earth's four spheres?
- What interactions supply energy to Earth's spheres?
- What interactions cycle matter through Earth's spheres?
- How do human activities affect Earth's spheres and how can our actions promote sustainability?

9) Space Science 10: The formation of the universe can be explained by the big bang theory
- What is the universe? How do we make sense of it?
- What do we know about the universe based only on what we can see with our eyes?
- How has technology expanded our knowledge and understanding of the universe?
- How do we use the big bang theory to describe what we know about the universe?

Website
There is a teacher website: mrastevens.weebly.com, where you and your parents can check for homework and assignments. Copies of handouts and notes may be posted on the site as well. Copy and paste the url directly into your browser. I find google often "misplaces" my class site.

Extra Help
You can always email me at astevens@vsb.bc.ca.
Feel free to stop by before school, between classes or immediately after school for extra help.

Skills/Learning Assistance Blocks
Students with skills blocks have the option of writing their tests in the learning resource center. Some smaller quizzes/assessments may be written either in class or with your skills teacher at their discretion. While all students should strive to complete assignments on their due dates, extensions and additional adaptations can be provided on a case-to-case basis.

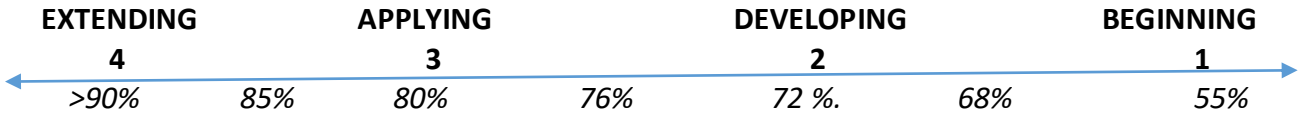
Textbooks

This course uses a variety of textbooks since it covers a variety of topics from grades 8, 9, and 10. The books you will be using are BC Science 8, BC Science 8 Connections, BC Science 9, BC Science 9 Connections, BC Science 10, BC Science 10 Connections. Please take good care of the textbooks as they are all expensive. Lost and damaged books are replaced at the cost of the student.

Marks Breakdown – Standards based grading

Assessment in this course will be based on a combination of tests, quizzes, in-class and take-home assignments, projects and writing. Work will be both individual and group-based.

Feedback on student work will be provided by a letter scale from beginning to extending. No percentages will be calculated or assigned for student work, except as required for term reporting (which will be a letter grade).



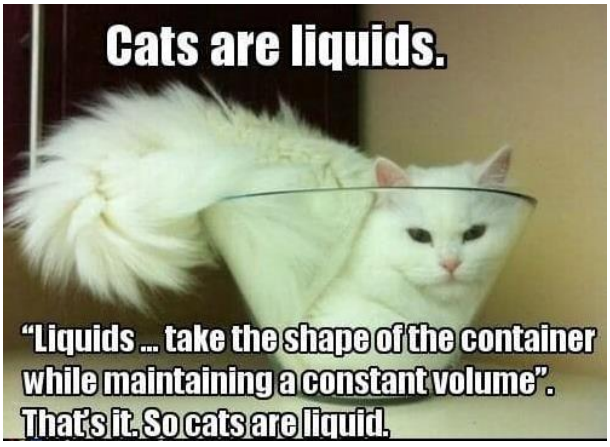
Extending	Applying	Developing	Beginning
Demonstrates a complete and deep understanding of concepts.	Able to apply understanding of concepts in a variety of ways.	Demonstrates a basic understanding of concepts.	At most demonstrate a basic understanding of concepts.

Marks breakdown is subject to change depending on my discretion. Of course, you will be well informed prior to it changing

Classroom Rules

I have 6 major rules. In no particular order. Know them!

1. Mr. Stevens is ALWAYS right*
2. No food or drink in the lab other than water
3. Please put backpacks under the desks and jackets on the back of your chairs
4. Please wait for an appropriate time before you use your electronic device
5. No cheating of any kind!
6. Respect EVERYONE in the classroom



Please have a sense of humour and enjoy Science 8H with me!