Overview

Welcome to Grade 8 Science. *By Design Science* is an inquiry-based program, which means that you will learn through inquiry; conducting experiments and investigating the world around you.

Grade 8 Science is divided into 4 units:

- Life Science
- The Human Body
- Earth and Space Science
- Physical Science

Because this program emphasizes developing the mental, physical, and spiritual components of your life, each unit also includes lifestyle challenges and opportunities for you to grow in physical and spiritual health. These activities are optional, but strongly encouraged, as they develop strong, healthy habits.

Materials


Please Note: Science is full of fun and experimentation, which also means there will quite often be a wide variety of materials needed in order to complete the assignments. Effort has been made to limit the number of "special" materials required, but you will need to look ahead and plan for the next several days’ activities to make sure you don't get "stuck." Every module has an introduction that includes the objectives, a list of supplies that will be needed for the entire module, and required assignments that will need to be submitted. Each individual day also lists the supplies and materials needed for that specific lesson.

What to Submit

When it is time to submit an assignment, you will be prompted to submit the assignment to a Chapter Assignment dropbox. Any rubrics provided are for your benefit to see how you will be graded. You do not need to fill out the rubric and turn it in. You will be asked to show your Student Science Journal to your teacher periodically.
Lesson Format

The two semesters of this course consist of 36 modules of 5 lessons each. The lessons will take on average 35-40 minutes to complete. Sometimes the lesson will be much shorter, but sometimes the lesson will take significantly longer, due to time needed for an experiment. Look ahead to gauge the amount of time you need to allot during each lesson and module.

- **Reading assignment:** Almost every lesson will have a reading assignment listed as the first part of your lesson. Read carefully to ensure maximum comprehension of concepts.
- **Discussion Questions:** After each reading assignment there will be listed several discussion questions. See if you can answer the question. If you are not sure of an answer, go back and re-read the text and see if you can then come up with an answer. Answers to the discussion questions may be found by hovering over the question with your cursor. Quite often a question is designed to shed more light on the topic being studied or meant to clarify or apply a concept. These are invaluable!
- **Structured Inquiries:** The fun stuff! Take your time to follow instructions and conduct each experiment carefully. Sometimes an experiment doesn't quite turn out as expected. That's ok. The value is in the learning process and in discovering what happens. It is also very important that you use and fill out your Student Science Journal during each inquiry. You will be graded on completion of your journal.
- **Lesson Review:** At the end of each book lesson section there will be a review assignment. Use this assignment to help you gauge whether you truly understand the topics represented or not. If there is a topic you don't quite understand, go back and review the text again, look for other resources to help clarify, or ask an adult or your teacher to explain it to you.
- **Chapter Review:** This is an open-book review of the chapter. Use these chapter reviews to help you study for your chapter test and semester exams.
- **Chapter Test:** After each chapter (14 in all) you will be prompted to take the chapter test. All of the assignments for that chapter must be completed and submitted before you will be able to take the test.

Helpful Websites

The websites most often referred to are:

- BrainPop: www.brainpop.com (Username: griggsint / Password: bpop)
- Encyclopedia Britannica: school.eb.com (Username: gu1844 / Password: nadsa1)
- Learn360: www.learn360.com (Username: studentgriggs / Password: griggs)

There will be other websites listed in lesson modules occasionally, and these websites are excellent for further study on topics presented.