Crocus Plains Regional Secondary School

COURSE OUTLINE AND ASSESSMENT GUIDE

Course Name: Science 10F

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Course Description: A general science course that covers the areas of physics (nature of electricity), chemistry (atoms and elements), reproduction (basic genetics and human reproduction), earth/space science (exploration of the universe). The goal of this science course is to expose the student to a wide variety of science issues and topics in a meaningful and challenging way.

Units of Study

Unit Title	Essential Outcomes	Assessment Plan	Proposed Time (~ 75 school days)
Reproduction	1. What are the building blocks of life? 2. How are the building blocks of life linked to reproduction? 3. Are the building blocks of life the same for all living organisms? 4. How did I and other organisms get here and did we get here in the exact same way? 5. If I burn my skin why does skin, not hair, grow back? 6. Why aren't all offspring identical in a family? 7. How do differences in offspring occur? 8. What is biotechnology? 9. What significance does biotechnology pose to our world? 10.Why are issues such as cloning and designer babies controversial?	**Formative Assessment** Assessment may include: - Homework checks - Observation - Worksheets - Demos - Journals - Discussions - Etc. **Summative Assessment** Assessment may include: - Quizzes - Tests - Projects - Labs	Approx. 3-4 Weeks

Atoms and Elements	1. What is each piece of lab equipment used for & how do we use it? 2. How do we identify chemical hazards & how do we use chemicals safely? 3. What is the historical development of atomic structure and the periodic table? 4. How do we currently describe and organize atoms and elements? 5. What are physical properties? 6. How do we classify & organize elements according to physical properties? 7. Why do some elements combine with other elements? 8. How do we describe chemical compounds by names and formulas? 9. What are chemical reactions? 10. What are indications of chemical reactions?	**Formative Assessment** Assessment may include: - Homework checks - Observation - Worksheets - Demos - Journals - Discussions - Etc. **Summative Assessment** Assessment may include: - Quizzes - Tests - Projects - Labs	Approx. 3-4 Weeks
Nature of Electricity	1. Why do we get shocks? 2. What is lightning and what causes it? 3. Why does a balloon stick to my head or the wall? 4. Is it true that a safe place during a lightning storm is in your car? 5. What are electrical conductors and insulators? 6. What is grounding? 7. What is the difference between conduction and induction? 8. Why do sections of Christmas lights go out on house roofs? 9. What is the purpose of a circuit breaker? 10.How we can calculate current, voltage, resistance and power? 11. How much does it cost to run your PlayStation?	**Formative Assessment** Assessment may include: - Homework checks - Observation - Worksheets - Demos - Journals - Discussions - Etc. **Summative Assessment** Assessment may include: - Quizzes - Tests - Projects - Labs	Approximately 3-4 Weeks

Exploring the Universe	1. What are celestial bodies? 2. Where do we fit in in the universe? 3. What objects exist in the universe? 4. What are the summer and winter solstice and fall and spring equinox? Why do they occur? 5. How do the planets in our solar system compare to Earth? 6. How do the motions of Earth and its neighbors affect us? 7. How were the motion and position of celestial objects explained by people long ago? 8. How is the use and understanding of angles important to the study of astronomy? 9. How does Canada contribute to the exploration of space?	**Formative Assessment** Assessment may include: - Homework checks - Observation - Worksheets - Demos - Journals - Discussions - Etc. **Summative Assessment** Assessment may include: - Quizzes - Tests - Projects - Labs -	Approx. 3-4 Weeks

Assessment Guidelines

There are various purposes for assessment:

- Assessment *for* learning **(formative assessment)**: where assessment helps teachers gain insight into what students understand in order to plan and guide instruction, and provide helpful feedback to students.
- Assessment *of* learning **(summative assessment)**: where assessment informs students, teachers and parents, as well as the broader educational community, of achievement at a certain point in time in order to celebrate success, plan interventions and support continued progress.

Academic Achievement

Grades will be calculated on summative assessment information only. The final calculation will be a fair reflection of a student's achievement of the learning outcomes.

Term Work ..... 85 %

Final Exam ..... 15 %

Welcome to Science 10F!

I am looking forward to working with you this year. Please fill out the questions in the "student" section and have your parents fill out the bottom of the page and return it to Ms. B tomorrow!

Student Section

Name: _____
What you prefer to be called: _____
What is your favourite subject? _____
What is your least favourite subject? _____
What was your mark in science last year? _____
Who was your Science teacher last year? _____
What are your hobbies?

_____
_____

Are you planning to be involved in any extra-curricular activities at Crocus Plains?

_____
_____

Parent/Guardian Section

Name(s): _____
Best number to reach you at during the day: _____
Home number (if different from above): _____
Can I communicate with you regarding your student by email? _____
If so, what is the best email address to use? _____

Feel free to contact me with any questions/concerns!
Please return this page to Ms. Bucklaschuk tomorrow.
Thanks so much! I am looking forward to a great semester with you!

Ms. Andrea Bucklaschuk