**Acadia Junior High Grade 9 Science Outline 2014 – 2015**

**Teacher:** Ms Maxwell **Phone Number:** 204 269 6210

**E-mail:** [mmaxwell@pembinatrails.ca](mailto:mmaxwell@pembinatrails.ca)

**Class website:** Acadia homepage, click Staff, scroll to M. Maxwell, click homework-on-line.

Click on the tab at the top for your specific section of Grade 9 Science.

**Scientific Literacy**

The Manitoba Grade 9 Science course is a Pan-Canadian course aiming to develop scientific literacy. Scientific literacy is an evolving combination of the science related attitudes/skills/knowledge students need to develop inquiry, problem-solving, and decision-making abilities; to become lifelong learners; to maintain a sense of curiosity about the world around them; move successfully to Grade 9; apply and synthesize knowledge; operate scientific tools; and develop design skills.

**Clusters of Study**

Chapter references below for each topic are from the SciencePower 9 text. Though we do not rely heavily on the textbook, it is useful for learning vocabulary, for pre-reading, has excellent visuals, and has many study questions.

Area of Science Cluster Chapters Model/Theory/Theme

BIOLOGY Reproduction Ch 1-4 Cell Theory

CHEMISTRY Elements Ch 5-8 Atomic Models

PHYSICS Electricity Ch 9-12 Law of Electrostatics/Ohm’s Law

EARTH SCIENCE Astronomy Ch 13-16 Observable Interconnections

**Objectives for Students**

* To develop an understanding of the fundamental models/theories of science
* To develop critical thinking and problem solving abilities.
* To develop skills with tools, measurement, recording/organizing/analyzing data
* To experience and practice the process of scientific inquiry
* To make informed decisions about further studies/careers in science.
* Explore science-technology-society-environment (STSE) connections

**Required Materials for every class**

* Pens (blue and red, additional colors for drawing models), pencil, eraser, ruler
* Scientific calculator (cell phones or iPod apps cannot be used on tests or quizzes)
* SciencePower 9 Textbook
* Binder with loose-leaf
* Graph paper
* Highlighters
* Sticky notes (useful for bookmarking important pages in the text)

**Activities in the “Real” World**

Much of science is learned by studying the world around us. I will be attempting to bring groups outdoors/community walks when applicable. Please fill in the volunteer information attached if you are able to volunteer so that these experiences can be provided more often.

**Extra Assistance**

**Day 4 and Day 6 from 11:40-12:30** will GENERALLY be a good time for students to come for extra help or space to work. If individualized attention is required for a topic of difficulty, please set up an appointment with me. I may ask students to attend **TLC Club at lunch hours** or at early dismissal **(2:35-3:30) on Thursdays** if their effort/performance is in need of support. It is obviously expected that they attend if requested to attend.

**Assessment**

* Term 1 and 2 marks are only an indication of student progress evident at the end of each term. Both are cumulative from September. Neither term 1 nor term 2 marks will be factored into the final grade. Term 3 is also cumulative from September.
* Final marks are weighted as 80% Term 3 mark (cumulative) and 20% exam mark.

**Absences/Missed Classes**

\*It is the **student’s responsibility** to learn concepts missed while absent and complete the assigned work. Ideally, students will get work in advance of an absence. If this is not possible, there are several options:

* + an email can be sent to me requesting what was missed
  + the homework-on-line can be checked (note that this site is not necessarily updated daily)
  + the **red folder** in Room 104 will hold any missed worksheets

Please catch up before the next class.

**Laboratory Safety**

* Following all directions carefully and wearing lab safety equipment wear as per teacher’s instructions IS MANDATORY.
* Students must never drink or taste anything, nor misuse lab equipment.
* Demonstration of student disregard for their own or others safety will result in the student(s) removal from the laboratory.
* Further details will be provided before each laboratory experience.

**Classroom Expectations**

Expectations for BEFORE, DURING and AFTER class have been developed as a class and are listed on-line for parents and students. Expectations will be posted in the classroom as a permanent reminder. Students will receive a written copy of the expectations that we developed together as a class. RESPECT is the theme of these expectations.

**Parents-PLEASE read, sign & RETURN by Friday Sept 12, 2014**

I am looking forward to getting to know you and your family and to discussing ways to enhance your students’ science experiences. Please contact me sooner rather than later if there are any questions at all or concerns you may have. Please complete, and return this form to confirm that you have read this course outline. Include the e-mail address(es) where you would like to receive any communication to make communication very easy!

You can be an active participant in your child’s learning by:

1) Providing quiet time and space for them to work in.

2) Checking the class **homework on-line** to stay informed of expectations/major due dates.

3) Contacting me if you feel that your student is not communicating honestly and/or

frequently with you about their progress. I have told students that it is their

responsibility to do so. If you feel they are not, please contact me.

4) Offering your expertise/experiences in the areas of study. I have found that

parents are often an invaluable source of expertise in the four major areas of study. Sharing

of this expertise can take many forms: conference calls, SKYPE interviews, classroom visits….

5) Particularly in the area of Universe (origins of the universe) and in the area of

Reproduction (reproductive technologies), discussions arise that demand

sensitivity, open-mindedness and respect. There are of course, scientific

principles and historical perspectives that are presented as part of the learning

requirements. We will discuss in class about respecting others views and we will

continue to do so as we approach these topics.

**Using the Class Website (Homework On-line)**

Your child’s first piece of homework is to

\*locate the homework-on-line

\*ask you to read the course outline (Your student has been given a copy of the course

outline)

\*ask you to sign the form attached to the end of the course outline. If you wish to have a paper copy of the form, it was **and still is** available in class in Room 104.

\*return the form to school before Friday September 12, 2014

A main idea of this exercise is so that your student knows where to find applicable information for the course. Homework will not likely be posted on-line every day. Major projects (including rubrics), major assessment dates and other vital information will always be posted. It is a useful communication tool.

Grade 9 Science Parent Form M. Maxwell Please sign and return by Sept 12

I have read Ms Maxwell’s Grade 9 Science course outline. I have discussed these ideas with my student. Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Student (print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature of Student: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Parent/Guardian(s) (print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Parent/Guardian:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Contact Information**

Preferred email address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Preferred phone number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Can I keep your name on a list as a potential volunteer for field trips/outdoor activities if needed? Depending on your availability at the time, of course, you may or may not be able to volunteer for specific future dates. This is no problem.

◊ Yes ◊ No

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