



Madawaska Middle/High School

Home of the Owls



Syllabus for Science 7 (SCI7)

of students: 54

Instructor: Linda McDermott

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Webpage:

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Class Schedule:

BLUE DAY (B)		WHITE DAY (W)	
Block	Class	Block	Class
TT	Team Time	TT	Team Time
1 (1-2)	SCI8	1 (1-2)	SCI7
2 (3-4)	SCI8	2 (3-4)	PLAN
3 (5-6)	SCI7	3 (5-6)	SCI7
4 (7-8)	SH / PLAN	4 (7-8)	SCI8

Text:

- 1.) [Planetary Science Resources](#)
- 2.) [Earth History Resources](#)
- 3.) [Weather and Water Resources](#)

Supplies Needed:

Mandatory: Sturdy 1 ½ inch binder with dividers and pockets; writing tools, book cover.

Optional but extremely handy: basic (but sturdy) calculator with simple arithmetic functions, colored pencils, ruler, eraser, scissors, the stretchy kind of book cover in the right size.

State of Maine 2007 Grade Span Expectations

Science and Technology

Grade Span 6-8:

□ Cluster 1-Life Science:

A3 *Describe some structural and behavioral adaptations that allow organisms to survive in a changing environment.*

□ Cluster 2 -Physical Science:

E1- *Predict and test whether objects will float or sink based on a qualitative and quantitative understanding of the concepts of density and buoyancy.*

E5- *Describe how the motion of the particles of matter determines the state of that matter (e.g., solid, liquid, gas, plasma) and vice versa.*

H3- *Compare and contrast the ways energy travels (e.g., waves, conduction, convection, radiation).*

□ Cluster 3 -Earth and Space Science:



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D2-Explain how scientists use fossils to prove that life forms, climate, environment, and geologic features in a certain location are not the same now as they were in the past.

F1-Demonstrate how the earth's tilt on its axis results in the seasons.

F2-Describe how soils are formed and why soils differ from one place to another.

F4-Describe factors that can cause short-term and long-term changes to the earth.

G1-Compare past and present knowledge about characteristics of stars (e.g., composition, location, lifecycles) and explain how people have learned about them.

G5-Describe the motions of moons, planets, stars, solar systems, and galaxies.

□ Cluster 4-Nature and Implications of Science:

J1-Make accurate observations using appropriate tools and units of measure.

J2-Design and conduct scientific investigations which include controlled experiments and systematic observations. Collect and analyze data, and draw conclusions fairly.

J3-Verify and evaluate scientific investigations and use the results in a purposeful way.

K6-Support reasoning by using a variety of evidence.

K8-Construct logical arguments.

K9-Apply analogous reasoning.

L4-Make and use scale drawings, maps, and three-dimensional models to represent real objects, find locations, and describe relationships

M4-Describe an individual's biological and other impacts on an environmental system.

M6-Give examples of actions which may have expected or unexpected consequences that may be positive, negative, or both.

Classroom Rules and Expectations:

- Respect the rights of others to learn in a supportive environment:
 - Listen openly to other ideas.
 - Avoid side conversations and all other forms of interruption during whole group instruction.
 - Treat others with kindness and understanding.
 - Respect school property and others' belongings.
- Come to class prepared:
 - Be punctual. Take care of tasks such as pencil sharpening, toilet, and drinks between classes.
 - Bring binder, text, homework, and writing tool.
- Safety first:
 - Listen, pay attention, and follow instructions.
 - Stay seated as much as possible.
 - No food or drinks allowed due to chemical safety laws.



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Grading/Evaluation Policies:

Students will earn points based on meeting learning expectations. After each investigation there will be a 20-point quiz. During investigations there may be response sheets or quick-writes worth 4 points each based on level of self-assessment. Quick checks of homework and participation are worth 1 point each. At the end of each unit there will be an exam worth 50 pts. There may be other assignments associated with projects or extensions worth 4-20 points. The overall grade is derived from the percentage of points earned out of total points available. Students in danger of failing may be required to re-do assignments.

Office Hours: Available Monday through Thursday after school until 3:00 or by appointment.

Course Theme: Grade 7 Science is focused on Earth Science but is also richly integrated with other branches of science. There are 3 main units called *Planetary Science*, *Earth History*, and *Weather and Water*. Extensions will be introduced throughout the course.

Methods of Instruction: The class is taught in an inquiry-based, hands-on manner, with strong emphasis on group collaboration. We use a program called Full Option Science System ([FOSS](#))

Writing Policy: Most student writing will be expected to be of best effort, first draft quality. Spelling mistakes and minor grammar errors are overlooked in favor of evidence of growing understanding. If the piece is intended for public display, the writing should be carefully edited and polished.

Attendance and Make-Up: Students are responsible for being on time, prepared for class, and finding out about their missed work if they are absent. "ASSIST" sheets will be provided as needed or upon request or students can find out from peers what has to be made up. Parents are encouraged to contact the teacher if they have concerns or if a student has to miss several days. If a student does not complete any assignment on time, parents will be contacted and the student will be held after school to complete the work. ***This is a 'hands-on' class with much collaborative work. Attendance is very important, because individual make-up assignments cannot replace the class activities.***



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Course Calendar: Sometimes students will have 2 blocks per week, sometimes three. I will follow this as closely as I can. I tried to make it loose enough to allow for interruptions such as Camp Kieve, Standardized Testing, Quebec Exchange, etc.

Term	Week:	Investigations:	Other:
First Quarter	1. August 28-31	2 blocks- <i>Where Am I?</i>	
	2. September 4-7	1 block- <i>Round Earth/Flat Earth</i> 1 block- <i>Day and Night</i>	Monday is a holiday
	3. September 10-14	1 block- <i>Day and Night</i> 1 block- <i>Discover the Moon</i>	
	4. September 17-20	1 block- <i>Discover the Moon</i> 1 block- <i>Moon Craters</i>	Friday is a workshop day
	5. October 10-12	1 block- <i>Moon Craters</i>	Holiday on Monday, workshop on Tuesday
	6. October 15-19	1 block – <i>Moon Craters</i> 1 block- <i>Mapping the Moon</i>	
	7. October 22-26	1 block- <i>Mapping the Moon</i>	Wednesday is Early Release
	8. October 29-November 2	2 blocks- <i>Landing on the Moon</i>	
	9. November 5-9	1 block- <i>Landing on the Moon</i> 1 block- <i>Moon Rocks</i>	Grades close on Friday
Second Quarter	10. November 13-16	2 blocks- <i>Moon Rocks</i>	Monday is a holiday
	11. November 19-20	To be announced (TBA)	Early Release Conference on Tuesday,
	12. November 26-30	2 blocks- <i>Phases of the Moon</i>	
	13. December 3-7	2 blocks- <i>Explore the Planets</i>	
	14. December 10-14	1 Block- <i>Explore the Planets</i> 1 Block- <i>Planetary Science test</i>	



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	15. December 17-21	1 Block- <i>Pushing the Envelope</i> 1 Block- <i>Into the Grand Canyon</i>	Early Release Tuesday
	16. January 2-4	1 Block- <i>Into the Grand Canyon</i>	
	17. January 7-11	2 Blocks- <i>Grand Canyon Rocks</i>	
	18. January 14-18	2 Blocks- <i>My Sediments Exactly</i>	
	19. January 22-25	2 Blocks- <i>My Sediments Exactly</i>	Holiday Monday, Early Release Thursday
	20. January 28 –February 1	2 Blocks- <i>Limestone</i>	Grades close Tuesday
Third Quarter	21. February 4-8	2 Blocks- <i>It's About Time</i>	
	22. February 11-15	1 Block- <i>Fossils and Time</i> 1 Block- <i>One Rock to Another</i>	
	23. February 25-29	2 Blocks- <i>One Rock to Another</i>	Early Release Wednesday
	24. March 3-7	1 Block- <i>Earth History Test</i> 1 Block- <i>What is Weather?</i>	
	25. March 10-13	1 Block- <i>Where's the Air?</i> 1 Block- <i>Seasons and Sun</i>	Early Release Friday
	26. March 17-21	2 Blocks- <i>Seasons and Sun</i>	
	27. March 24-28	2 Blocks- <i>Heat Transfer</i>	
	28. March 31-April 4	2 Blocks- <i>Convection</i>	Workshop on Sunday, March 30
	29. April 7-11	2 Blocks- <i>Water In the Air</i>	Grades close on Wednesday
Fourth Quarter	30. April 14-18	2 Blocks- <i>Water In the Air</i>	
	31. April 28 – May 2	2 Blocks- <i>The Water Planet</i>	
	32. May 5-9	2 Blocks- <i>Air Pressure and Wind</i>	
	33. May 12-16	2 Blocks- <i>Air Pressure and Wind</i>	



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	34. May 19-23	2 Blocks- <i>Weather and Climate</i>	
	35. May 27-30	1 Block- <i>Weather and Climate</i> 1 Block- <i>Weather and Water Test</i>	Holiday on Monday
	36. June 2-6	2 Blocks- <i>Global Warming</i>	
	37. June 9-13	2 Blocks- <i>Energy Sources</i>	Graduation Thursday
	38. June 16-19	TBA	Workshop on Friday
	39. June 23-24	TBA	Snow days