

STEM Spring 2026: Week 3

Complete before the class on Mon, Jan 26th

STEM Assembly

- **Supplies:** Pencils & pens, folder with paper, scientific calculator

2 points

- **Books:** LifePac Science, CAP Astronomy, Lab Journal

In "chemistry code" people greet each other by saying "hydrogen-iodine". Create your own secret word using "chemistry code".

3 points

General Sciences

	Topic	Reading	Exercises		
LifePac 8th Grade Unit 2	Atoms & Molecules		On the Periodic Table of Elements the atomic number of Silicon (Si) is 14, the atomic mass is 28 and the electron configuration is (Ne) 3s2 3p2. Draw a model of the Si atom showing the protons, neutrons, electrons and orbits.		2 points
	Elements, Compounds & Mixtures	pg. 37-38	3.7 - 3.16	pg. 39-40	
		pg. 40-42	3.17 - 3.23	pg. 42-43	
		pg. 43-45	3.26 - 3.27	pg. 46	
			3.29 - 3.35	pg. 46	
		pg. 47	3.36 - 3.45	pg. 47	
			3.021 - 3.026	pg. 50	

Astronomy

	Topic	Reading	Exercises	
CAP Astronomy Booklet	Earth and Night Sky	pg. 14-17	Today in Montana did the sun rise and set south or north of the celestial equator? On Mar 20 the sun will rise and set exactly on the celestial equator - what is the celestial name given to this date?	5 points
			Define the celestial meridian of an observer.	5 points
			Write a paragraph explaining Local Sidereal Time (LST). Bonus: Explain the equation: <i>Hour Angle (HA) = Local Sidereal Time (LST) - Right Ascension (RA)</i>	5 points
			Watch the instructional video on Right Ascension and Declination.	

Hybrid Mathematics & Science Fair Project

Bring to class one challenging mathematics question that you're unable to solve.

3 points

Find the pattern and write the next term (Hint: say each term out loud): 1, 11, 21, 1211, 111221

2 points

Procedure: Complete your procedure as a numbered list

4 points

Materials: Complete your materials list

4 points

Risk & Safety: Start writing your risk & safety section

2 points

Total

50 points