

STEM Spring 2026: Week 12-13				
Complete before the class on Apr 6th				
STEM Assembly				
- Supplies: Pencils & pens, folder with paper, scientific calculator				
- Books: LifePac Science, CAP Astronomy, Lab Journal				
General Sciences				
	Topic	Reading	Exercises	
LifePac 9th Grade Unit 7	Universe and Constellations	pg. 5-8	1.1 - 1.10	pg. 8-9
		pg. 9-11	1.11 - 1.24	pg. 12-13
			1.01 - 1.014	pg. 14-15
	Space Exploration	pg. 27-28	3.1 - 3.11	pg. 28-29
pg. 29-31		3.12 - 3.14	pg. 31-32	
		3.01 - 3.027	pg. 33-34	
				20 points
				20 points
Astronomy				
	Topic	Reading	Exercises	
CAP Astronomy Booklet	Beyond the Solar System	pg. 54-57	Draw a picture of the Pegasus constellation and include the Andromeda Galaxy.	5 points
			Read the NASA article and watch the embedded video on the Andromeda Galaxy, and be prepared to discuss in class.	5 points
			Read the NASA article on star clusters and write a paragraph explaining the difference between globular star clusters and open clusters.	5 points
			Complete the NASA SpaceMath exercises: Measuring the Speed of a Galaxy.	10 points
	Observatories	pg. 62-63	Refer to the website list of U.S. Observatories. Which observatory is closest to Hamilton, MT?	5 points
			Refer to the website list of Bortle 1 dark sky locations. Are there any locations in Montana that you have visited? Is Montana a good location for astronomy?	5 points
			Skim-read through some of the articles and resources on buying a telescope.	5 points
Hybrid Mathematics & Science Fair Project				
Consider the uniform random number generator, $U[i] = Z[i]/1024$ where $Z[i] = (5 \cdot Z[i-1] + 3) \pmod{1024}$. If initial seed $Z[0]=173$, then find the first three uniform randomly generated values: $U[1]$, $U[2]$ and $U[3]$.				10 points
Complete the Science Fair Judging Criteria handout on three science fair projects at the Montana State Science Fair. This will require you to interview the presenter and ask questions about their project.				10 points
Total				100 points