



[Website](#)



[Calendar](#)



[Supports](#)



[Feedback](#)

Physical Science (Course #2003310 Hons #2003320)

Quarter	Big Idea	Benchmark Description		Suggested Pacing Days*
First Quarter (39 days)	Nature & Practice of Science	1	SC.912.N.3.1 , SC.912.N.3.2 , SC.912.N.3.3 , SC.912.N.3.4 Explore the differences between scientific theories and laws	2
		2	SC.912.N.1.1 , SC.912.N.1.2 , SC.912.N.1.3 , SC.912.N.1.4 , SC.912.N.1.5 , SC.912.N.1.6 , SC.912.N.1.7 Describe how scientific observations lead to inferences; Evaluate the strength of scientific claims and information	2
		3	SC.912.N.2.1 , SC.912.N.2.2 , SC.912.N.2.3 , SC.912.N.2.4 , SC.912.N.2.5 Explore what is scientific knowledge and explain that scientific knowledge is durable and open to change.	3
		4	SC.912.N.24.1 , SC.912.N.4.3 Explore the place of science in society	2
	Motion	5	SC.912.P.12.3 Describing motion using Newton’s Laws	10
		6	SC.912.P.12.2 Analyze and solve motion problems including its position, velocity, and acceleration	10
		7	SC.912.P.10.3 Compare and contrast work and power	9
Second Quarter (36 days)	Forces	8	SC.912.P.10.10 Compare the four fundamental forces (gravitational, electromagnetic, weak nuclear, strong nuclear)	4
		9	SC.912.P.12.4 Describe the relationship between gravity and distance and mass	3
	Energy	10	SC.912.P.10.1 Differentiate between forms of energy and recognize energy transformations	4
		11	SC.912.10.18 Explore the theory of electromagnetism and compare various electromagnetic waves	7
		12	SC.912.P.10.21 , SC.912.P.12.7 Describe the motion of electromagnetic waves, including the shift in frequency due to relative motion and speed of waves in a vacuum	7
		13	SC.912.L.18.7 , SC.912.L.18.8 Explore energy's role in biological reactions including cellular respiration and photosynthesis	1
	Electricity	14	SC.912.P.10.4 , SC.912.P.10.5 , SC.912.P.12.11 Describe heat as energy transferred by conduction, convection, and radiation including the relationship between temperature and average molecular kinetic energy and phase changes	5
		15	SC.912.P.10.14 Differentiation among conductions, semiconductors, and insulators	2
Third Quarter (34 days)	Atoms	17	SC.912.P.8.4 , SC.912.N.3.5 Explore the atomic theory including the structure of the atom and how models are used in science	6
	Nuclear Chemistry	18	SC.912.P.10.12 Differentiate between chemical and nuclear reactions	5
	Periodic Table	19	SC.912.P.8.5 Relate the properties of atoms and their position on the periodic table to the arrangement of their electrons, explore trends in the periodic table	21
Fourth Quarter (27 days)**	Chemical Reactions	20	SC.912.P.8.7 Interpret chemical formula representations of molecules and compounds	10
		21	SC.912.P.8.8 Characterize types of chemical reactions	10
		22	SC.912.P.12.12 , SC.912.P.10.7 Explain how various factors affect the rate of chemical reactions and Distinguish between endothermic and exothermic reactions	5
	Water and Solutions	23	SC.912.L.18.12 , SC.912.E.7.1 Explore how the movement of matter and energy support life on Earth, including the properties of water	5
		24	SC.912.P.8.11 Relate acidity and basicity to hydronium and hydroxyl ion concentration and pH	5
	Instructional Review			

*The days provided for each unit/topic is an estimate that may be adjusted by subject-level PLCs based on student achievement data and should be adjusted, if necessary. The recommended days shown are less than the actual days for each quarter to allow for additional time for routines, testing, absences, remediation and outside considerations.

** This does not include the days in May or June due to testing schedules and end of year events.

