## Physics Scope and Sequence 2019 – 2020

Date	Unit Name	Concepts	TEKS
August 26 -30	Introduction	Investigations*	1B, 2E, 2F, 2G, 2H, 3A, 3B, 3C, 3D, 3E, 3F
		Processes*	2A, 2B, 2C, 2D,
		Safety*	1A
		*included in every unit	
September 3 –	Unit 1: Kinetics, Graphing	Motion	4A
October 3 *Note – 1 <sup>st</sup> six	Motion	One dimensional motion	4B
weeks ends			1A, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I,
October 3			2J, 3A, 3B, 3E,
October 7 - 25	Unit 2: Newton's Laws of Motion	Calculate Forces	4D
			1A, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 3A, 3B, 3C, 3D, 3E,
October 28 –	Unit 3: Two Dimensional	Accelerated motion	4C
November 7	Motion		
*Note – 2 <sup>nd</sup> six weeks ends			1A, 2D, 2E, 2F, 2G, 2I, 2J, 3A, 3B, 3E,
November 7			
November 11 - 15	Unit 4: Universal Gravitation	Forces (gravitational, electromagnetic, weak	5A
	Gravitation	nuclear, strong nuclear)	
		Gravitation force	5B
		magnitudes	
			2C, 2D, 2E, 2F, 2H, 2I, 2J, 3A, 3B, 3C,
			3E,
November 18 –	Unit 5: Conservation of	Quantities	6A
December 20 *Note – 3rd six	Energy	Kinetic, potential energy Mechanical energy	6B 6C
weeks ends		Laws of conservation of	6D
December 20		energy	
End of 1 <sup>st</sup> Semester			1A, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 3A,
			3B, 3E,
January 8 –	Unit 6: Conservation of	Momentum, energy	6C
January 24	Momentum	Laws of conservation of momentum	6D
			1A, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 3A,
			3B, 3E,
January 27 – February 4	Unit 7: Thermodynamics	4 laws of thermodynamics	6E
			1A, 2C, 2D, 2E, 2F, 2I, 2J, 3A, 3B, 3C,
February 5 –	Unit 8: Waves	Oscillatory motion	3D, 3E, 7A
March 3		Wave propagation	7A 7A
*Note – 4th six		Characteristics of waves	7B
weeks ends		Transverse waves	7C
February 13		Behaviors of waves	7D
		Reflection and Refraction	7E
			1A, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 3A, 3B,

			3D, 3E,
March 4 – 27	Unit 9: Electrical, Magnetic Forces and Fields	Forces (gravitational, electromagnetic, weak nuclear, strong nuclear) Magnitude of electrical forces Electric and Magnetic forces	5A 5C 5D 1A, 2D, 2E, 2F, 2H, 2I, 2J, 3A, 3B, 3C, 3E,
March 30 – May 4 *Note – 5th six weeks ends April 3	Unit 10: Current Electricity	Conductors and Insulators Current Electricity	5E 5F 1A, 1B, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 3A, 3B, 3C, 3D, 3E,
May 5 May 6 May 7 May 8	STAAR EOC State Testing	Algebra I Biology U.S. History	
May 11 – May 22	Unit 11: Atomic, Nuclear, Quantum Physics	Forces (gravitational, electromagnetic, weak nuclear, strong nuclear) Photoelectric effect Emission spectra Mass-energy equivalency Applications of atomic and nuclear energy	5A 8A 8B 8C 8D 1A, 2C, 2F, 2H, 2I, 2J, 3A, 3B, 3C, 3D, 3E,
May 25 – 28 *Note – 6th six weeks ends May 28 End of 2 <sup>nd</sup> Semester	Semester Exams		