STEMSCopes[™] K-12 SCIENCE

High School Suggested Scope & Sequence

BIOLOGY	,	
SCOPE	TEKS(S)	SUGGESTED PACING
Biomolecules	B.5(A) B.11(B)	8
Prokaryotic and Eukaryotic Cells	B.5(B)	7
Homeostasis	B.5(C)	7
Diseases	B.5(D) B.6(C)	8
Cell Cycle and Specialization	B.6(A) B.6(B)	8
Cellular Respiration and Photosynthesis	B.11(A)	7
Interactions in Body Systems	B.12(A)	7
Plant Structures	B.12(B)	7
DNA	B.7(A)	8
Gene Expression	B.7(B) B.7(C)	7
DNA Technology	B.7(D)	7
Meiosis and Reproduction	B.8(A)	7
Genetics and Inheritance	B.8(B)	7
Evidence for Evolution	B.9(A) B.9(B)	8
Mechanisms of Natural Selection	B.10(A) B.10(B)	7
Results of Evolution	B.10(C) B.10(D)	8
Ecological Relationships	B.13(A) B.13(B)	8
Carbon and Nitrogen Cycles	B.13(C)	7
Changing Biodiversity	B.13(D)	7

IPC			
SCOPE	TEKS(S)	SUGGESTED PACING	
Graphing and Analyzing Motion	IPC.5(A) IPC.5(B)	7	
Momentum in Collisions	IPC.5(C)	8	
The Four Fundamental Forces	IPC.5(D)	7	
Gravity and Electromagnetism	IPC.5(E)	7	
Series and Parallel Circuits	IPC.6(A)	7	
Generating Electricity	IPC.6(B)	7	
Conservation of Energy	IPC.6(C) IPC.6(D)	7	
Transferring Energy and Information	IPC.6(E) IPC.6(F)	8	
Renewable Energy	IPC.6(G)	7	
Elements and the Periodic Table	IPC.7(A) IPC.7(B)	7	
Using Properties of Substances	IPC.7(C)	7	
Atomic Emission Spectra	IPC.7(D) IPC.7(E)	7	
Investigating Reaction and Solution Rates	IPC.7(F)	7	
Changes in Chemical Reactions	IPC.8(A)	7	
Balancing Reactions	IPC.8(B)	7	
Nuclear Reactions	IPC.8(C)	7	
Chemistry's Impact on the Environment	IPC.8(D)	8	

*Suggested Pacing (instructional days) are currently based on the time needed to cover the majority of STEMscopes elements in each scope.

**The order of scopes in STEMscopes is suggested but not required; scope sequence can be adjusted to fit the needs of the individual campuses and districts.

HIGH SCHOOL SUGGESTED SCOPE & SEQUENCE

CHEMISTR	RY	
SCOPE	TEKS(S)	SUGGESTED PACING
The Periodic Table	C.5(A) C.5(B)	7
Trends of the Periodic Table	C.5(C)	7
	C.6(A)	
Atomic Models	C.6(B)	7
Light and the Atomic Emission Spectra	C.6(C)	7
Average Atomic Mass	C.6(D)	7
Models of Electron Configuration	C.6(E)	7
Different Types of Bonds	C.7(A) C.7(D)	7
Naming Molecules	C.7(B)	7
VSEPR Shapes	C.7(C)	7
The Mole	C.8(A) C.8(B)	7
Empirical Formulas and Percent Composition	C.8(C) C.8(D)	7
Balancing Equations	C.9(A) C.9(B)	7
Stoichiometry	C.9(C) C.9(D)	7
The Gas Laws	C.10(A) C.10(B) C.10(C)	8
Types of Solutions	C.11(A) C.11(B)	7
Solubility and Reactions	C.11(C) C.11(D)	8
Molarity	C.11(E) C.11(F)	8
Defining Acids and Bases	C.12(A) C.12(B)	7
pH of Strong and Weak Acids	C.12(C) C.12(E)	7
Acid-Base Products	C.12(D)	7
Thermodynamics and Reactions	C.13(A) C.13(C)	8
Calorimetry	C.13(B) C.13(D)	7
Nuclear Chemistry	C.14(A) C.14(B)	7
Nuclear Technology	C.14(C)	7

SCOPETERS(S)PACINGGraphing MotionP.5(A) P.5(B)8Motion EquationsP.5(C)7Projectile MotionP.5(D)8Newton's Three LawsP.5(E) P.5(G)9Universal GravitationP.5(H)7Coulomb's LawP.6(A)7Real-World ElectromagnetismP.6(B)7Conservation of ChargeP.6(C)7Electric CircuitsP.7(A)7Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(D)7Image FormationP.8(G)7	PHYSICS				
Graphing MotionP.5(B)8Motion EquationsP.5(C)7Projectile MotionP.5(D)8Newton's Three LawsP.5(E)9P.5(G)P.5(G)9Universal GravitationP.5(H)7Coulomb's LawP.6(A)7Real-World ElectromagnetismP.6(B)7Conservation of ChargeP.6(C)7Electric CircuitsP.6(D) P.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(D)7Image FormationP.8(G)7	SCOPE	TEKS(S)	SUGGESTED PACING		
Projectile MotionP.5(D)8Newton's Three LawsP.5(E) P.5(G)9 P.5(G)Universal GravitationP.5(H)7Coulomb's LawP.6(A)7Real-World ElectromagnetismP.6(B)7Conservation of ChargeP.6(C)7Electric CircuitsP.6(D) P.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) 	Graphing Motion	()	8		
Newton's Three LawsP.5(E) P.5(G)9Universal GravitationP.5(H)7Coulomb's LawP.6(A)7Real-World ElectromagnetismP.6(B)7Conservation of ChargeP.6(C)7Electric CircuitsP.6(C)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(D)7Image FormationP.8(G)7	Motion Equations	P.5(C)	7		
Newton's Three LawsP.5(F) P.5(G)9Universal GravitationP.5(H)7Coulomb's LawP.6(A)7Real-World ElectromagnetismP.6(B)7Conservation of ChargeP.6(C)7Electric CircuitsP.6(D) P.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(D)7Image FormationP.8(G)7	Projectile Motion	P.5(D)	8		
Coulomb's LawP.6(A)7Real-World ElectromagnetismP.6(B)7Conservation of ChargeP.6(C)7Electric CircuitsP.6(D) P.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(D) P.8(C)7Image FormationP.8(G)7	Newton's Three Laws	P.5(F)	9		
Real-World ElectromagnetismP.6(B)7Conservation of ChargeP.6(C)7Electric CircuitsP.6(D) P.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Universal Gravitation	P.5(H)	7		
Conservation of ChargeP.6(C)7Electric CircuitsP.6(D) P.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Coulomb's Law	P.6(A)	7		
Electric CircuitsP.6(D) P.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Real-World Electromagnetism	P.6(B)	7		
Electric CircuitsP.6(E)8Work and PowerP.7(A)7Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Conservation of Charge	P.6(C)	7		
Energy of a SystemP.7(B) P.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Electric Circuits	()	8		
Energy of a SystemP.7(C)8Impulse and MomentumP.7(D) P.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Work and Power	P.7(A)	7		
Impulse and MomentumP.7(E)8Simple Harmonic MotionP.8(A)7Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Energy of a System	· /	8		
Characteristics of WavesP.8(B) P.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Impulse and Momentum	()	8		
Characteristics of WavesP.8(C)7Behavior of WavesP.8(D)7Image FormationP.8(G)7	Simple Harmonic Motion	P.8(A)	7		
Image FormationP.8(G)7	Characteristics of Waves	· /	7		
	Behavior of Waves	P.8(D)	7		
$\Box = \Delta t = $	Image Formation	P.8(G)	7		
Electromagnetic Spectrum P.8(E)	Electromagnetic Spectrum	P.8(E)	7		
Photoelectric EffectP.8(F) P.9(A)8	Photoelectric Effect	()	8		
Malus's Law P.9(B) 7	Malus's Law	P.9(B)	7		
Applications of Quantum PhysicsP.9(C) P.9(D)8	Applications of Quantum Physics	()	8		

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