Curriculum Resources

for the 2025-26 school year

Science K-12, World Language 7-12, Tech. Ed. 5-12, ELA 7-8, SEL K-12

Education Committee
March 4, 2025

Curriculum Review Cycle

METHACTON SCHOOL DISTRICT
CURRICULUM REVIEW CYCLE K-12

CURRICULUM AREA	JAN 24 JUN 24	JUL 24 DEC 24	JAN 25 JUN 25	JUL 25 DEC 25	JAN 26 JUN 26	JUL 26 DEC 26	JAN 27 JUN 27	JUL 27 DEC 27	JAN 28 JUN 28	JUL 28 DEC 28	JAN 29 JUN 29	JUL 29 DEC 29
Science World Language, Counseling	Develop/Write/Identify			Implementation		Review of Imp.		Monitor/Evaluate			Research/Assess	
Social Studies FCS, Tech Ed	Monitor/Evaluate		Research/Assess		Develop/Write/Identify			Implementation		Review of Imp.		M/E
English Language Arts ELD	Review of Impl.	Monitor/Evaluate			Research/Assess		Develop/Write/Identify			Implementation		Review
Mathematics Business, Practical Arts	Implem.	Review of Imp.		Monitor/Evaluate			Research/Assess		Develop/Write/Identify			Implem.
Music, Art, Library Health and Physical Education	D/W/I	Implementation		Review of Imp.		Monitor/Evaluate			Research/Assess		Dev/Write/Ident	

STAGE	STAGE OF CURRICULUM REVIEW	CURRICULUM REVIEW OUTCOMES AND ACTIVITIES
Stage One	*Research and Assess* *This stage focuses on data analysis, National and State Standards review, needs assessment and research of best practices as well as trends in subject area, including site visitations and interviews.*	• *Review local, state and national assessment data.* • *Establish the roles and responsibilities of the steering committee.* • *Create a mission statement that aligns with Comprehensive and Strategic Plans.* • *Develop a synopsis of current best practices and evidence of new learnings.*
Stage Two	***Develop and Write*** *This stage focuses on the development of the new and/or revised curriculum, creating of curriculum maps, and writing using the Understanding by Design (UbD) curriculum framework. Identify pilot/ field study resource and materials once curriculum is written.*	• *Establish a curriculum framework and course scope and sequence chart.* • *Identify curriculum writing team to map and write the curriculum.* • *Review materials and resources for purposes of a pilot and/or field study.* • *Conduct pilot make recommendations to Board of School Directors/Plan for PD.*
Stage Three	***Implementation*** *This stage focuses on the implementation of the revised curriculum, assessments, resources, and related professional development. Implementation of curriculum maps and assessment.*	• *Provide for professional development throughout implementation.* • *Create and/or revise pacing guides and assessment plan.* • *Develop assessments aligned with curriculum and resources.* • *Examine and analyze student achievement data and performance.*
Stage Four	***Review of Implementation*** *The program is fully implemented with revisions being made as needed, as well as identification of any supplemental or additional resources. Analysis of effectiveness through student data and performance.*	• *Review student assessment data in an effort to make needed revisions.* • *Revise the curriculum, assessments, pacing guides, and/or scope and sequence as needed, based upon initial implementation and feedback.* • *Provide ongoing professional development and revise assessments, as needed.*
Stage Five	***Monitor and Evaluate*** *The program is supported through continuous monitoring student assessment data; revisions made as needed and align to any new or updated state or national standards.*	• *Evaluate current program and curriculum with supports and revisions as needed* • *Develop and conduct teacher, student, and/or parent surveys to gain additional information about the existing curriculum resources and/or program.* • *Review student assessment data and post-secondary outcomes.*

STEELS Standards

Science

Life Science focuses on patterns, processes, and relationships of living organisms.
Physical Science focuses on what everything is made of and interactions.
Earth & Space Science focuses on processes that operate on Earth and its place in the solar system and galaxy.

Tech & Engineering

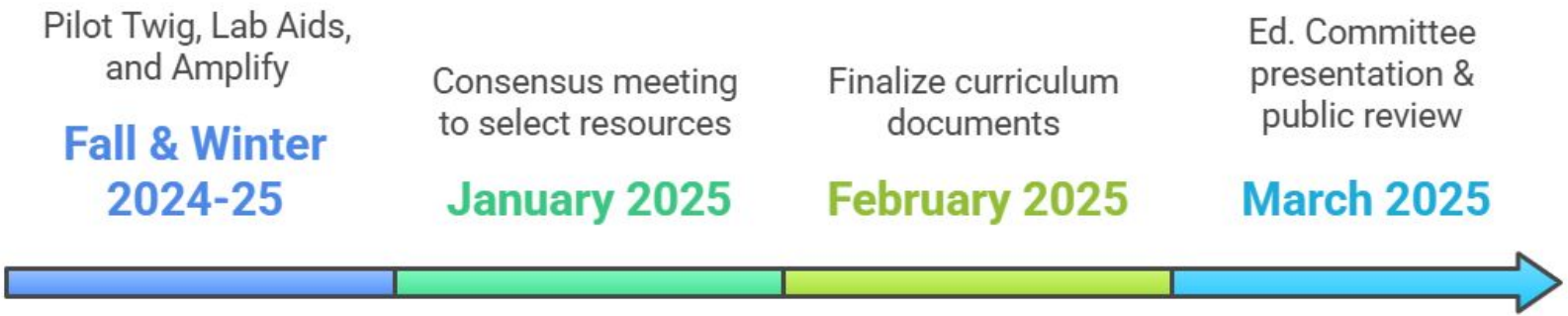
Focuses on the interactions among **technology**, **engineering**, society, the environment, and other disciplines, with a goal of developing individuals that can create, utilize, and assess current and emerging technologies.

Environmental Literacy & Sustainability

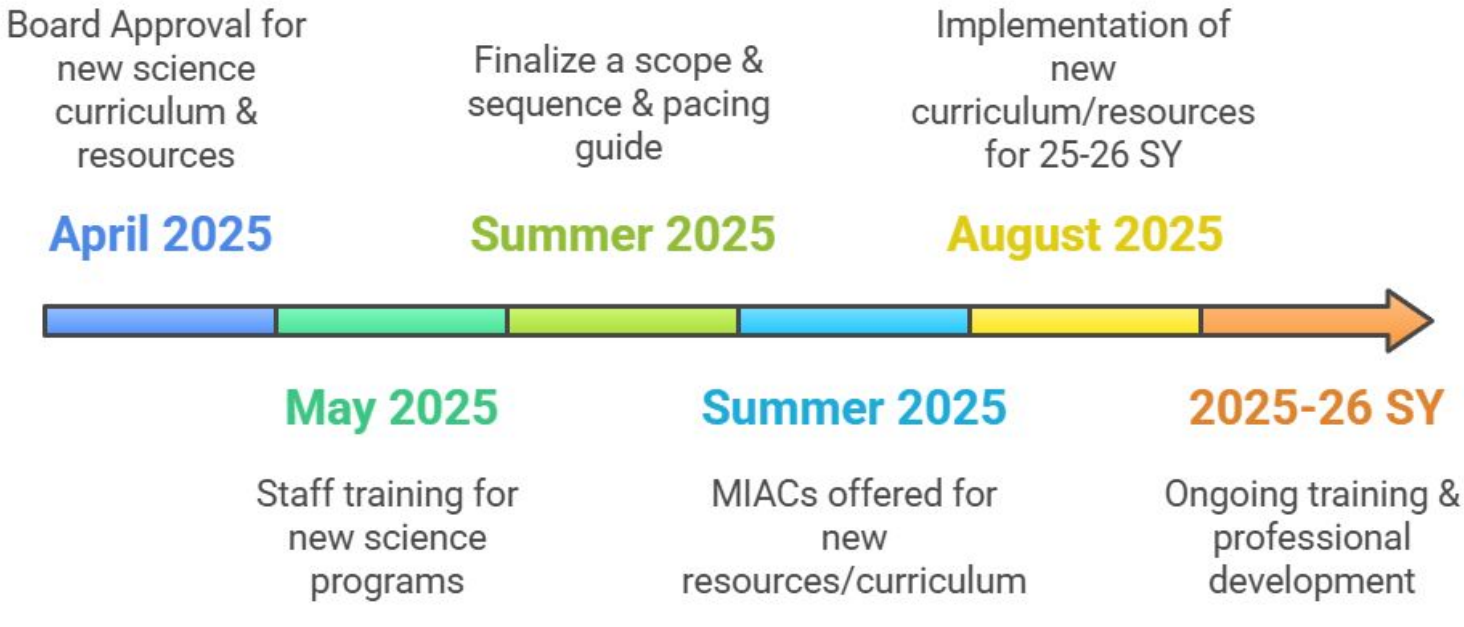
Focuses on ecological processes, and systems that comprise the environment, including human social systems and influences. **Sustainability** is the balanced use of natural / renewable resources.
Sustainable practices seek to ensure the integrity of ecological function and species diversity, with consideration for environmental justice, equity, and economic stability for current / future generations.

STEELS Curriculum Development Timeline

Science Curriculum Development Timeline



STEELS Science Curriculum Implementation Timeline

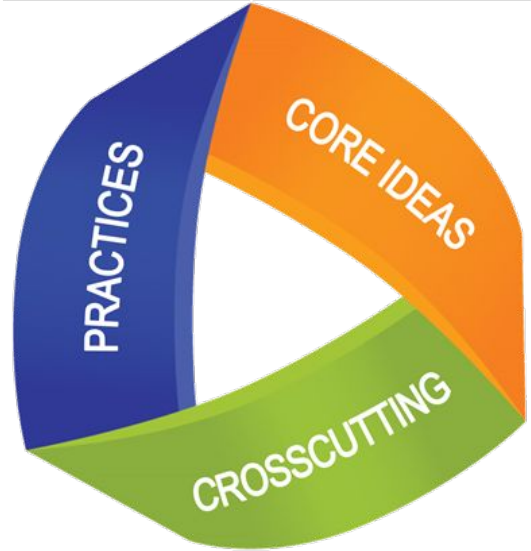


What is Phenomena?

“Natural phenomena are observable events that occur in the universe and that we can use our science knowledge to explain or predict.

The goal of…science is to develop general ideas, based on evidence, that can explain and predict phenomena.

…In this way, phenomena are the context for the work of…the scientist.”



Using Phenomena in NGSS-Designed Lessons and Units

Progression of Scientific Understanding

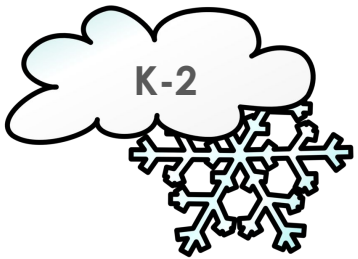
Observe & describe **natural phenomena**

Examine **patterns**, **interactions**, & **cause-and-effect relationships**

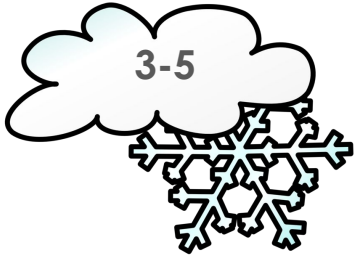
Engage in **systems thinking & dynamic processes**

Explore **complex interactions, stability, & change**

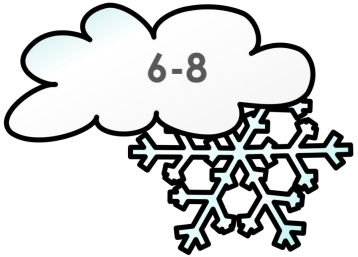
Progression of Standards throughout Grade Levels



Use and share observations of local weather conditions to describe patterns over time.



Represent data in tables and graphical displays to describe typical weather conditions expected in a particular season.



Collect data to provide evidence for how the motion and complex interactions of air masses result in changes in weather conditions.

Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere and biosphere.

Timeline of PSSA/Keystone

Spring 2025: 5th graders *(same 4th graders as last year)* take science PSSA / NEW standards

8th graders take science PSSA / NEW standards

HS students take Keystone Bio / old standards

Winter 2025: HS students take Keystone Bio / old standards

Spring 2026: 5th & 8th graders take science PSSA / NEW standards / first year of full implementation

Spring 2026: HS students will take Keystone Bio / NEW standards

Breakdown of 5th/8th Grade SCIENCE PSSA

25%	Life science / Environmental Lit. & Sustainability
25%	Physical science
25%	Earth & Space science
25%	Technology & Engineering

Breakdown of Keystone Bio

100%	Life science standards (Grades 9-12)

K-2 Amplify Kit Topics

K-6 Amplify Science Kits

Grade K

- Needs of Plants and Animals
- Pushes & Pulls
- Sunlight & Weather

Grade 1

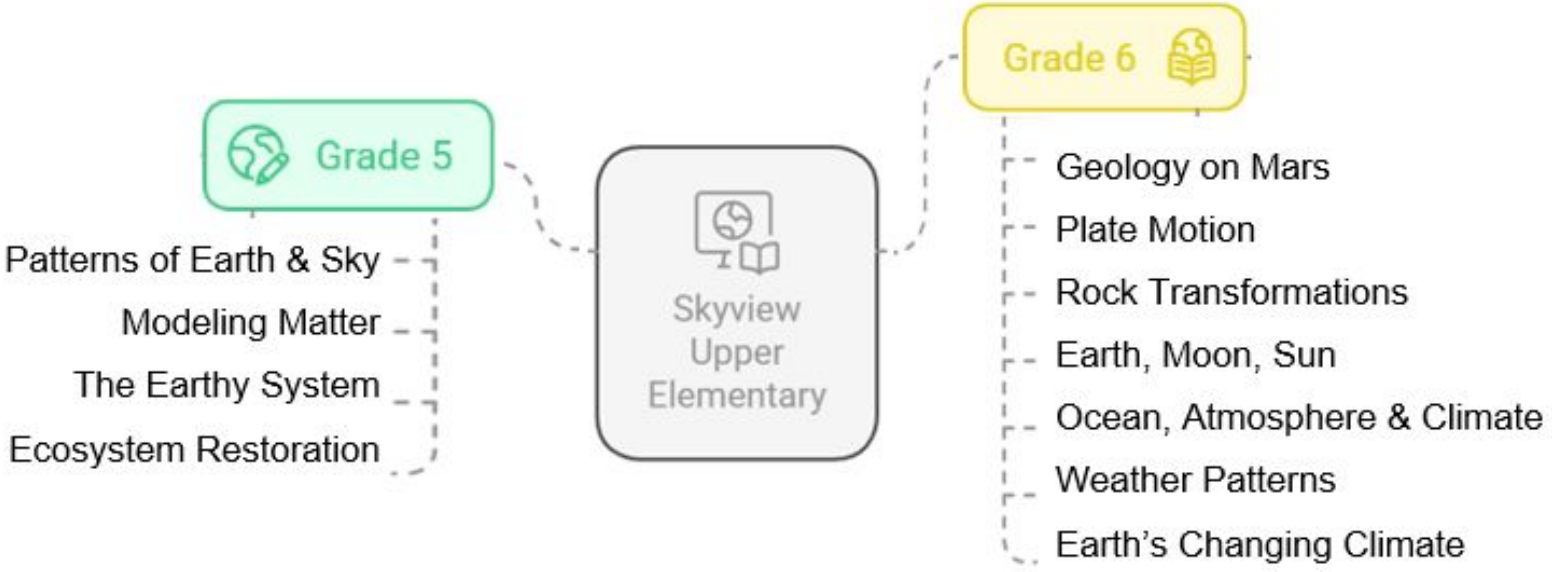
- Living Things Classification
- Waves of Energy
- Solar System

Grade 2

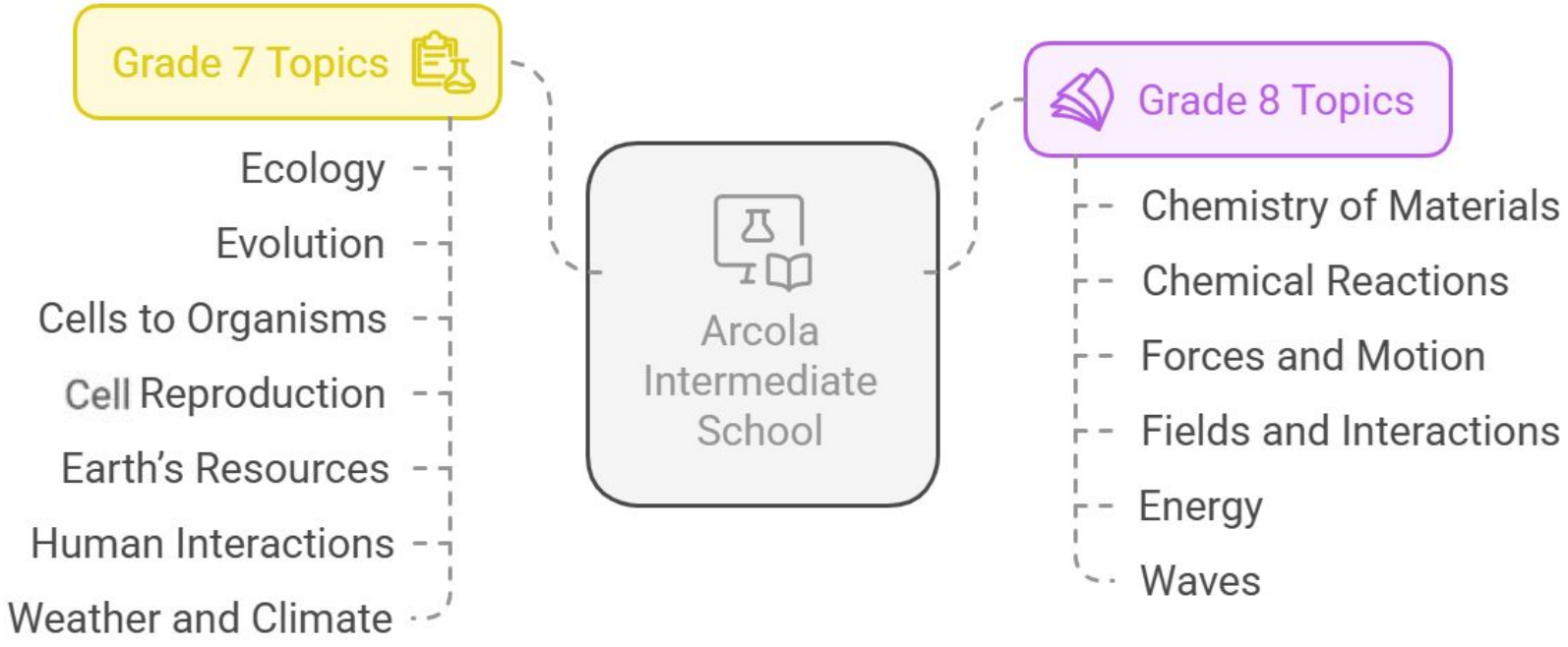
- Living Things Interactions
- Matter
- Earth's Subsystems

Grades 3 & 4 Amplify Kit Topics

Grades 5 & 6 Amplify Kit Topics



7-8 Lab Aids Topics



7-8 English and Reading

Recommended Resource	Replaces	Includes
My Perspectives English Language Arts (SAVVAS, 2025)	Adds a resource to support literacy	6 year digital license Class-set of textbooks Novel sets Professional Development

*Expenses encumbered in the 2024-25 school year

7-12 World Language Textbook Recommendations

Recommended Resource	Replaces	Includes
Asi Se Dice! (McGraw Hill, 2024) Levels 1-3 for use in Spanish I - IV	*Asi De Dice!* (McGraw Hill, 2016)	6-year licenses (digital) Class-sets: Level 1 (6 sets), Level 2 (4 sets), Level 3 (1 set) Teacher Materials
Temas 3E (Vista, 2024) AP Spanish	*Temas 2E* (Vista, 2019)	6 year licenses (digital) Class-set
Deutsch So Aktuell (Carnegie Learning, 2023) Levels 1-3 for use in German I - IV	*Komm Mitt* (Holt, 2003)	6-year licenses (digital) Class-sets: Level 1 (2 sets), Level 2 (1 set), Level 3 (1 set) Teacher Materials

9-12 Science Textbook Recommendations

Recommended Resource	Replaces	Includes
Principles of Environmental Science (McGraw Hill, 2023) Course: Academic/Honors Environmental Science	*Environmental Science* (Holt, 2000)	6-year digital access Class-set textbooks (3) Teacher Materials
Inspire Biology (McGraw Hill, 2020) Course: Academic/Honors Biology	*Biology* (Pearson Prentice Hall, 2006) *Biology Exploring Life* (Prentice Hall, 2002)	6-year digital access Class-set textbooks (5) Teacher Materials

9-12 Science Textbook Recommendations

Recommended Resource	Replaces	Includes
Essential Chemistry (PASCO, 2018) Course: Academic Chemistry/Practical Chemistry	*Chemistry Connections to our Changing World* (Prentice Hall, 1996)	6-year digital access Class-set textbooks (3) Teacher Materials
Essential Physics (PASCO, 2018) Course: Academic/Honors Physics	*Essential Physics* (PASCO)	6-year digital access Class-set textbooks (3) Teacher Materials

9-12 Science Textbook Recommendations

Recommended Resource	Replaces	Includes
Hole's Essentials of Human Anatomy and Physiology (McGraw Hill, 2021) Course: Anatomy & Physiology	Hole's Anatomy (McGraw Hill, 2010)	6-year digital access Class-set textbooks (1) Teacher Materials
Environmental Science for the AP Course (Bedford, Freeman & Worth, 2023)	Environmental Science for the AP Course (Bedford, Freeman & Worth, 2012)	6-year digital access Class-set textbooks (1) Teacher Materials

9-12 Science Textbook Recommendations

Recommended Resource	Replaces	Includes
Biology for the AP Course (Bedford, Freeman & Worth, 2022)	*Campbell Biology in Focus: Third Edition: AP Edition* (Pearson, 2020)	6-year digital access Class-set textbooks (2) Teacher Materials
Physics for Scientists and Engineers (Cengage, 2024)	*Physics for Scientists and Engineers (6 E)* (Freeman, 2007)	6-year digital access Class-set textbooks (1) Teacher Materials

9-12 AP Human Geography

Recommended Resource	Replaces	Includes
Human Geography for the AP Course (Bedford, Freeman & Worth, 2025)	*The Cultural Landscape: 13th Edition* (Pearson, 2019)— license expires July 2025	6 year licenses (digital) Class-set (1) Teacher Materials

K-12 Character Strong

Character Strong is a research-based program designed to develop social-emotional learning (SEL), character education, and leadership skills in students.

Key Focus Areas:

- Social-Emotional Learning (SEL) – Strengthening self-awareness, self-management, and relationship skills.
- Character Development – Encouraging values like kindness, empathy, and responsibility.

Why it Matters?

- Enhances school culture and student well-being
- Promotes kindness, empathy and inclusivity.
- Supports academic success through emotional intelligence
- Explicit instruction for Positive Behavior Intervention Support (PBIS)

Curriculum Resources Expenditures

● Amplify K-6	$320,000
● Lab Aids 7- 8	$68,033
● NewsELA Science 7-8	$15,000
● Character Strong K-12	$31,158
● Science Resources 9-12	$190,145
● World Language Resources 9-12	$126,075
● Social Studies 9-12	$11,010

Curriculum Documents

- Revisions and New Curricular Documents aligned to new STEELS Standards
- Planned Course Documents and new resources for courses available for public review March 19-April 15, 2025 at Farina as well as digital access for preview
- Approval for all PCD's and Resources at April 29, 2025 Board Meeting Action Meeting

Revisions to Planned Course Documents

- K-12 Science Courses
- 7-12 World Language Courses
- 7-12 Technology Education Courses

New Elective Courses for 2025-2026 at Methacton High School

- Data Science
- Cybersecurity

Thank you!