

SAVVAS

6-8 MODULES

Pacing and
Sequencing
Guide



WDO!
W Learn!

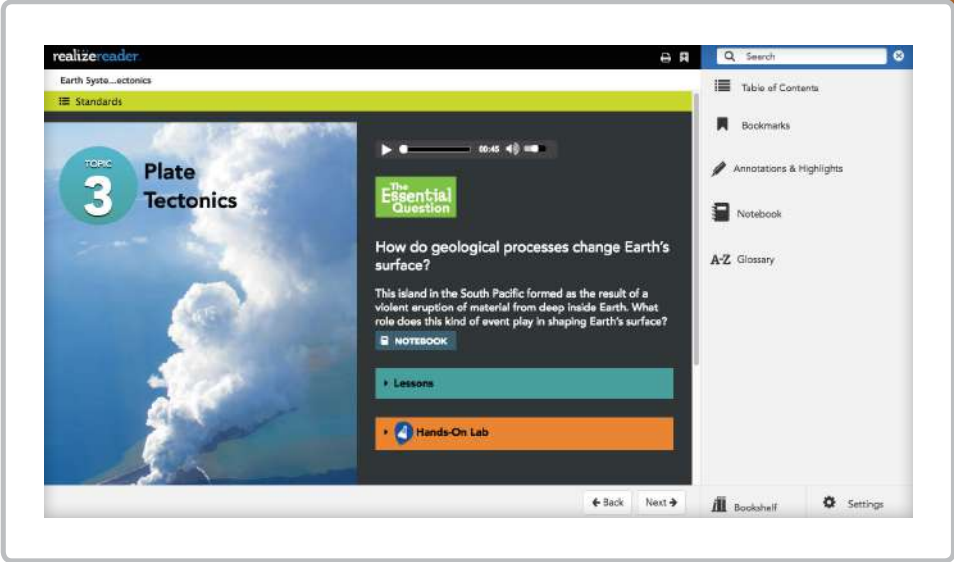
elevate^{science}

It's All You.

Flexibility & Performance.

Meet our most flexible science program yet. *elevateScience*® Modules for Grades 6-8 offer individual thematic units to meet your district's need for NGSS* three-dimensional learning. Use the thematic modules to create your own middle-grades, sequence-based, NGSS Course Map.

The options presented in this booklet will support your teachers in their curriculum planning. Each *elevateScience* module provides phenomena-based opportunities for students to engage in the science and engineering practices (SEPs), crosscutting concepts (CCCs), and disciplinary core ideas (DCIs).



*Next Generation Science Standards is a registered trademark of Achieve. Neither Achieve nor the lead states and partners that developed the Next Generation Science Standards were involved in the production of this product, and do not endorse it.

Pacing and Sequencing Options

elevateScience bundles the performance expectations into 12 highly-engaging modules, so you have the flexibility to customize your own curriculum. Create your own district scope and sequence or follow the suggested sequence options.

Module	Lessons	Pacing Time Frame
Physical Sciences		
Structure and Properties of Matter	6	5-6 weeks
Energy Transfer	7	5-6 weeks
Atoms and Chemical Reactions	9	6-7 weeks
Forces	8	6-7 weeks
Waves and Information Technologies	8	6-7 weeks
Earth and Space Sciences		
Cycles Influencing Weather and Climate	11	7-8 weeks
Earth's Systems	14	9-10 weeks
Changing Earth and Human Activity	12	7-8 weeks
Earth's Place in the Universe	7	5-6 weeks
Life Sciences		
Systems, Reproduction and Growth	17	9-10 weeks
Relationships Within Ecosystems	9	9-10 weeks
Diversity of Life	10	7-8 weeks

Options for Three-Year Sequencing

	Option 1	Option 2
Year One	Earth's Systems Energy Transfer Systems Reproduction and Growth Earth's Place In the Universe	Earth's Place In the Universe Forces Waves and Information Technologies Systems Reproduction and Growth
Year Two	Relationships in Ecosystems Changing Earth and Human Activity Forces Waves and Information Technologies	Structure and Properties of Matter Energy Transfer Cycles Influencing Weather and Climate Relationships in Ecosystems
Year Three	Structure and Properties of Matter Atoms and Chemical Reactions Cycles Influencing Weather and Climate Diversity of Life	Atoms and Chemical Reactions Earth's Systems Diversity of Life Changing Earth and Human Activity
	Option 3	Option 4
Year One	Structure and Properties of Matter Energy Transfer Waves and Information Technologies Systems Reproduction and Growth	Structure and Properties of Matter Energy Transfer Systems Reproduction and Growth Earth's Place In the Universe
Year Two	Earth's Systems Cycles Influencing Weather and Climate Relationships in Ecosystems Earth's Place In the Universe	Earth's Systems Relationships in Ecosystems Changing Earth and Human Activity Waves and Information Technologies
Year Three	Forces Atoms and Chemical Reactions Diversity of Life Changing Earth and Human Activity	Forces Atoms and Chemical Reactions Diversity of Life Cycles Influencing Weather and Climate

Modules Content Coverage

Wondering what’s inside each module? Review the charts below to view the module topics by lesson, the disciplinary core idea, and standards addressed.

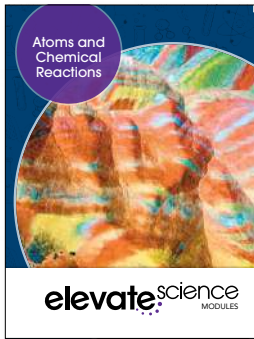


Structure and Properties of Matter		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Introduction to Matter Lesson 1: Describing and Classifying Matter Lesson 2: Measuring Matter Lesson 3: Changes in Matter	PS1.A – Structure and Properties of Matter PS1.B – Chemical Reactions	MS-PS1-1 MS-PS1-2
Topic 2: Solids, Liquids, and Gases Lesson 1: States of Matter Lesson 2: Changes of State Lesson 3: Gas Behavior	PS1.A – Structure and Properties of Matter PS3.A – Definitions of Energy	MS-PS1-4



Energy Transfer		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Energy Lesson 1: Energy, Motion, Force and Work Lesson 2: Kinetic Energy and Potential Energy Lesson 3: Other Forms of Energy Lesson 4: Energy Change and Conservation	PS3.A – Definitions of Energy PS3.B – Conservation of Energy and Energy Transfer PS3.C – Relationship between Energy and Force	MS-PS3-1 MS-PS3-2 MS-PS3-5
Topic 2: Thermal Energy Lesson 1: Temperature, Thermal Energy and Heat Lesson 2: Heat Transfer Lesson 3: Heat and Materials	PS3.A – Definitions of Energy PS3.B – Conservation of Energy and Energy Transfer ETS1.A – Defining and Delimiting Engineering Problems ETS1.B – Developing Possible Solutions	MS-PS3-3 MS-PS3-4 MS-PS3-5

MS-ETS Performance Expectations (MS-ETS1-1 through MS-ETS1-4) are also developed in each topic through the problem-based learning feature called Quest and in the uEngineer It activities.



Atoms and Chemical Reactions		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Atoms and the Periodic Table Lesson 1: Atomic Theory Lesson 2: Periodic Table Lesson 3: Bonding and the Periodic Table Lesson 4: Types of Bonds Lesson 5: Acids and Bases	PS1.A – Structure and Properties of Matter	MS-PS1-1
Topic 2: Chemical Reactions Lesson 1: Mixtures & Solutions Lesson 2: Chemical Change Lesson 3: Modeling Chemical Reactions Lesson 4: Producing Useful Materials	PS1.A – Structure and Properties of Matter PS1.B – Chemical Reactions ETS1.B – Developing Possible Solutions ETS1.C – Optimizing the Design Solution	MS-PS1-2 MS-PS1-3 MS-PS1-5 MS-PS1-6

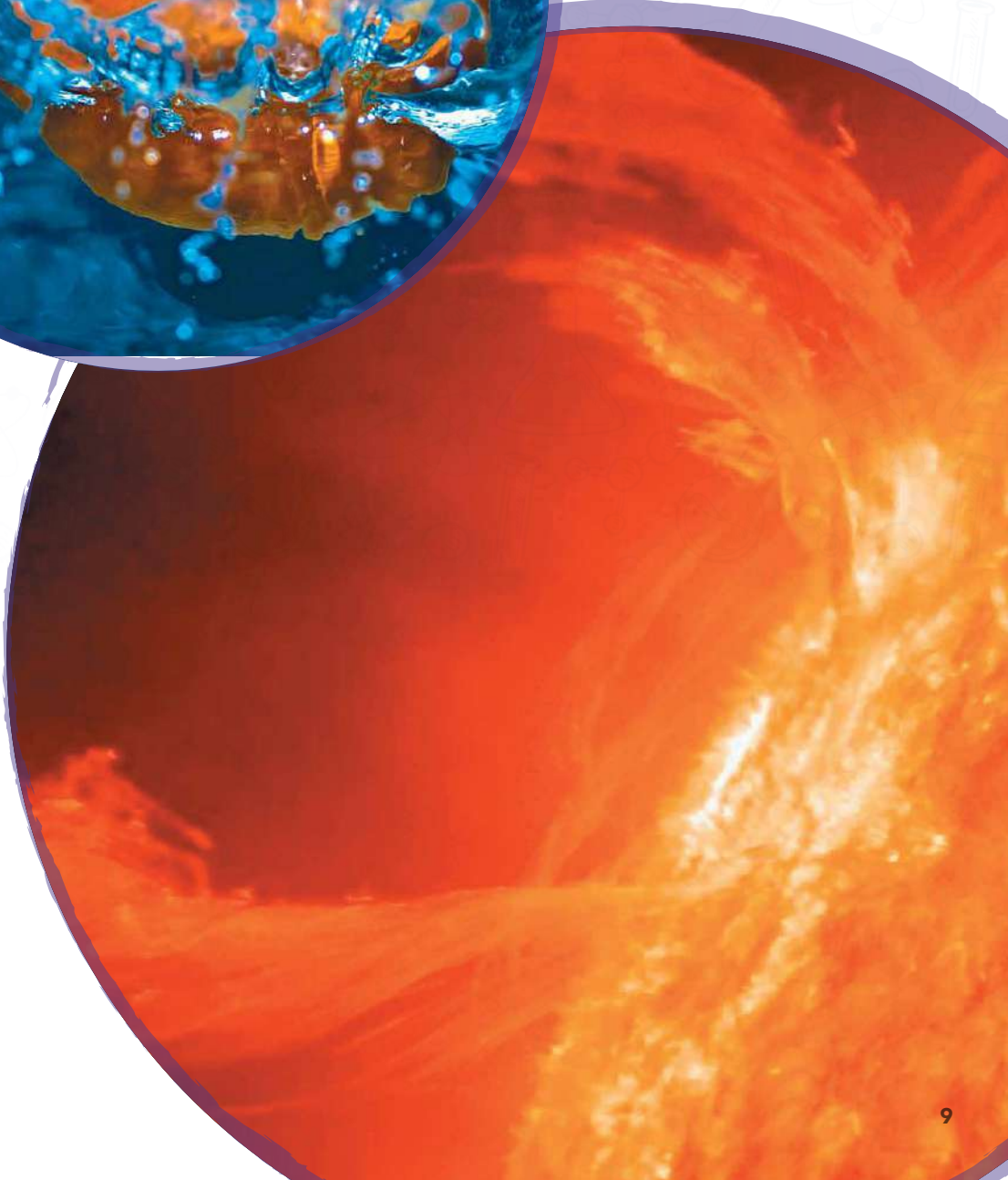
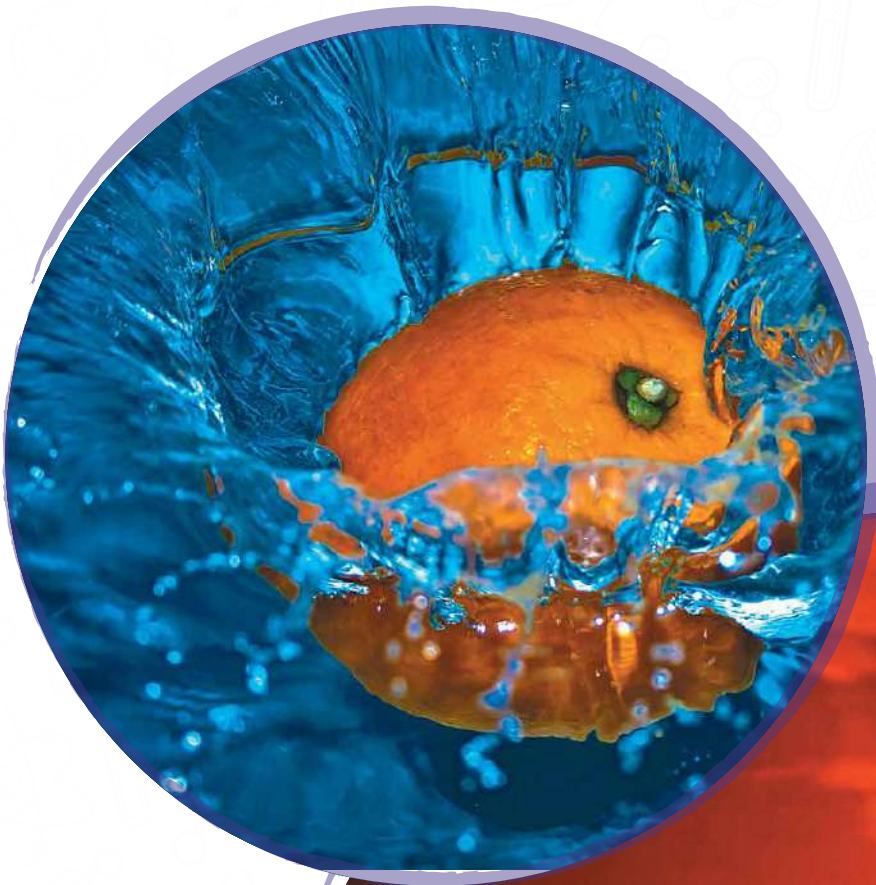




Forces		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Forces and Motion Lesson 1: Describing Motion and Force Lesson 2: Speed, Velocity, and Acceleration Lesson 3: Newton’s Laws of Motion Lesson 4: Friction and Gravitational Interactions	PS2.A – Forces and Motion PS2.B – Types of Interactions PS3.A – Definitions of Energy PS3.C – Relationship between Energy and Forces	MS-PS2-1 MS-PS2-2 MS-PS2-4 MS-PS3-2
Topic 2: Electricity and Magnetism Lesson 1: Electric Force Lesson 2: Magnetic Force Lesson 3: Electromagnetic Force Lesson 4: Electric and Magnetic Interactions	PS2.B – Types of Interactions PS3.A – Definitions of Energy PS3.C – Relationships bet Energy and Forces	MS-PS2-3 MS-PS2-5 MS-PS3-2

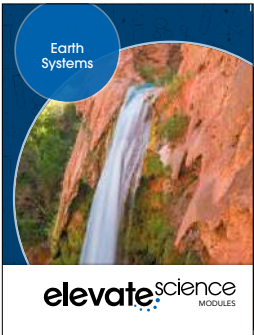


Waves and Information Technologies		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Waves and Electromagnetic Radiation Lesson 1: Wave Properties Lesson 2: Wave Interactions Lesson 3: Sound Waves Lesson 4: Electromagnetic Waves Lesson 5: Light	PS4.A – Wave Properties PS4.B – Electromagnetic Radiation	MS-PS4-1 MS-PS4-2
Topic 2: Information Technologies Lesson 1: Electric Circuits Lesson 2: Signals Lesson 3: Communication and Technology	PS4.C – Information Technology and Instrumentation	MS-PS4-3





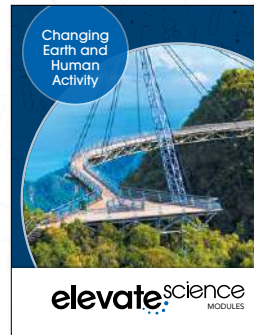
Cycles Influencing Weather and Climate		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Weather in the Atmosphere Lesson 1: The Atmosphere Around You Lesson 2: Water in the Atmosphere Lesson 3: Air Masses Lesson 4: Predicting Weather Changes Lesson 5: Severe Weather and Floods	ESS2.C – Roles of Water in Earth Surface Processes ESS2.D – Weather and Climate ESS3.B – Natural Hazards PS1.A – Structure and Properties of Matter	MS-ESS2-4 MS-ESS2-5 MS-ESS2-6 MS-ESS3-2 MS-PS1-4
Topic 2: Energy in the Atmosphere and Ocean Lesson 1: Energy in Earth’s Atmosphere Lesson 2: Patterns of Circulation in the Atmosphere Lesson 3: Patterns of Circulation in the Ocean	ESS2.C – Roles of Water in Earth’s Surface Processes ESS2.D – Weather and Climate	MS-ESS2-6
Topic 3: Climate Lesson 1: Climate Factors Lesson 2: Climate Change Lesson 3: Effects of a Changing Climate	ESS2.C – Roles of Water in Earth’s Surface Processes ESS2.D – Weather and Climate ESS3.D – Global Climate Change	MS-ESS2-6 MS-ESS3-5



Earth Systems		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Introduction to Earth’s Systems Lesson 1: Matter and Energy in Earth’s Systems Lesson 2: Surface Features in the Geosphere Lesson 3: The Hydrosphere	ESS2.A – Earth Materials and Systems ESS2.C – Roles of Water in Earth Surface Processes	MS-ESS2-1 MS-ESS2-4
Topic 2: Minerals and Rocks in the Geosphere Lesson 1: Earth’s Interior Lesson 2: Minerals Lesson 3: Rocks Lesson 4: Rock Cycles	ESS2.A – Earth Materials and Systems	MS-ESS2-1
Topic 3: Plate Tectonics Lesson 1: Evidence of Plate Motions Lesson 2: Plate Tectonics and Earth’s Surface Lesson 3: Earthquakes and Tsunami Hazards Lesson 4: Volcanoes and Earth’s Surface	ESS2.A – Earth Materials and Systems ESS2.B – Plate Tectonics/ large scale system interaction ESS2.C – Roles of Water in Earth surface processes ESS1.C – History of Planet Earth ESS3.B – Natural Hazards	MS-ESS2-2 MS-ESS2-3 MS-ESS3-2
Topic 8: History of Earth Lesson 1: Determining Ages of Rocks Lesson 2: Geological Time Scale Lesson 3: Major Events in Earth’s History	ESS1.C – History of Planet Earth	MS-ESS1-4

DON'T FORGET!
The Engineering Design Notebook supported by Maker Crates provides even greater STEM integration.

REMEMBER
Every module has it’s own equipment kit organized for quick lab set up!



Changing Earth and Human Activity		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Earth's Surface Systems Lesson 1: Weathering and Soil Lesson 2: Erosion and Deposition Lesson 3: Water Erosion Lesson 4: Glacial & Wave Erosion	ESS2.B – Plate Tectonics/ large scale system interactions ESS1.C – History of Planet Earth ESS3.B – Natural Hazards	MS-ESS2-3 MS-ESS3-2
Topic 2: Distribution of Natural Resources Lesson 1: Nonrenewable Energy Resources Lesson 2: Renewable Energy Resources Lesson 3: Mineral Resources Lesson 4: Water Resources	ESS3.A – Natural Resources ESS3.C – Human Impacts on Earth Systems	MS-ESS3-1 MS-ESS3-3 MS-ESS3-4
Topic 3: Human Impacts on the Environment Lesson 1: Population Growth and Resource Consumption Lesson 2: Air Pollution Lesson 3: Impacts on Land Lesson 4: Water Pollution	ESS3.C – Human Impacts on Earth Systems	MS-ESS3-4



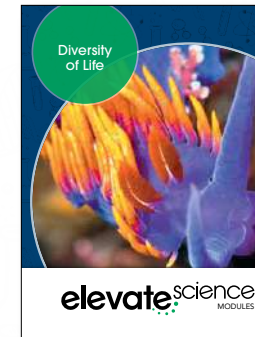
Earth's Place in the Universe		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Earth-Sun-Moon System Lesson 1: Movement in Space Lesson 2: Earth's Movement in Space Lesson 3: Phases and Eclipses	ESS1.A – The Universe and Its Stars ESS1.B – Earth and the Solar System	MS-ESS1-1
Topic 2: Solar System and the Universe Lesson 1: Solar System Objects Lesson 2: Learning About the Universe Lesson 3: Stars Lesson 4: Galaxies	ESS1.A – The Universe and Its Stars ESS1.B – Earth and the Solar System	MS-ESS1-2 MS-ESS1-3



Systems, Reproduction, and Growth		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Living Things in the Biosphere Lesson 1: Living Things Lesson 2: Classification Systems Lesson 3: Viruses, Bacteria, Protists, and Fungi Lesson 4: Plants & Animals	LS1.A – Structure and Function LS4.A – Evidence of Common Ancestry and Diversity	MS-LS1-1 MS-LS1-2 MS-LS1-3 MS-LS4-2
Topic 2: The Cell System Lesson 1: Structure & Function of Cells Lesson 2: Cell Structures Lesson 3: Obtaining and Removing Materials Lesson 4: Cell Division	LS1.A – Structure and Function LS2.B – Cycles of Matter and Energy Transfer in Ecosystems LS1.C – Organization for Matter and Energy Flow in Organisms	MS-LS1-1 MS-LS1-2 MS-LS1-3
Topic 3: Human Body Systems Lesson 1: Body Organization Lesson 2: Systems Interacting Lesson 3: Supplying Energy Lesson 4: Managing Materials Lesson 5: Controlling Processes	LS1.A – Structure and Function LS1.D – Information Processing	MS-LS1-3 MS-LS1-8
Topic 4: Reproduction and Growth Lesson 1: Patterns of Reproduction Lesson 2: Plant Structures for Reproduction Lesson 3: Animal Behaviors for Reproduction Lesson 4: Factors Influencing Growth	LS1.B – Growth and Development of Organisms LS3.A – Inheritance of Traits LS3.B – Variation of Traits	MS-LS1-4 MS-LS1-5 MS-LS3-2



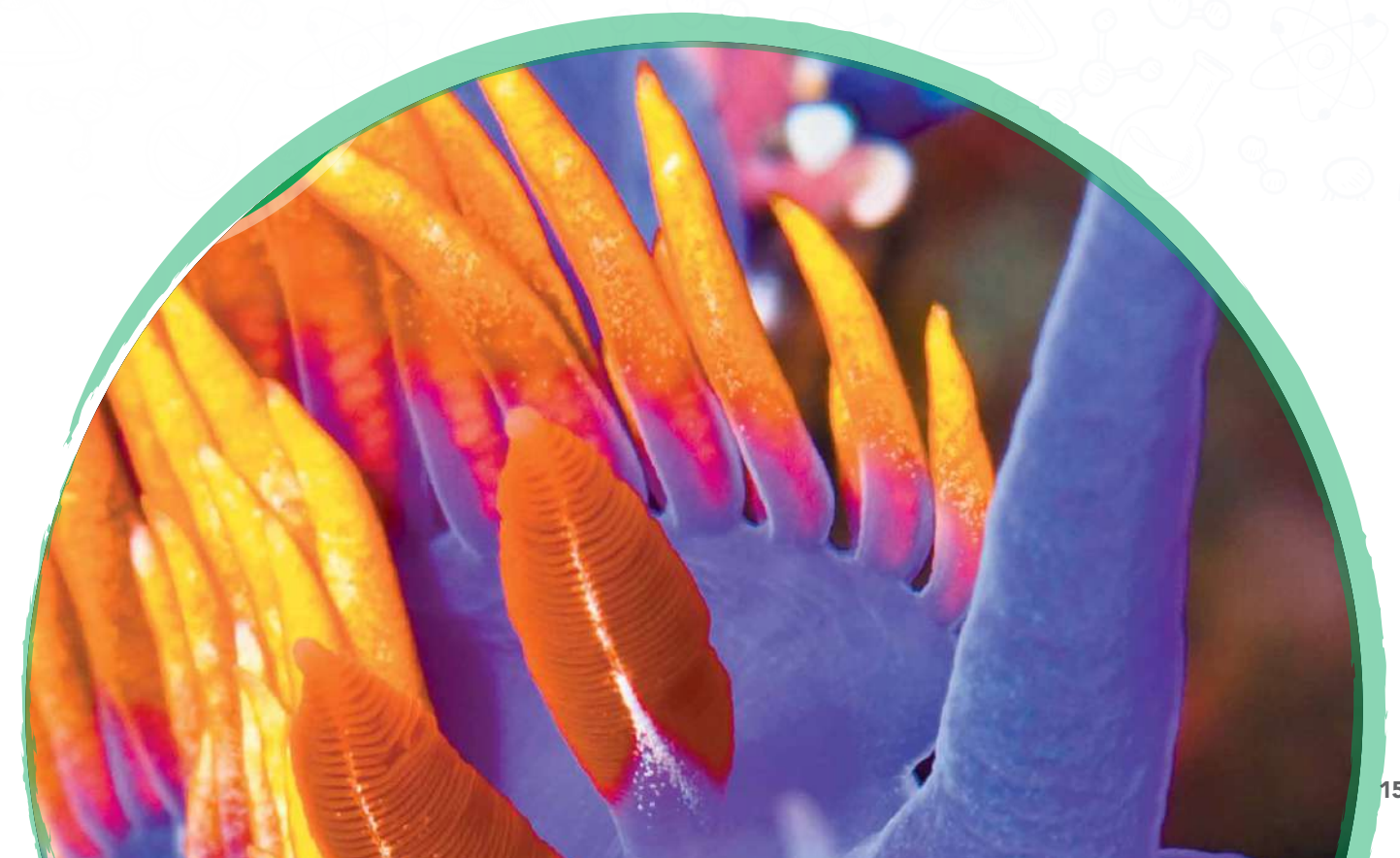
Relationships Within Ecosystems		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: The Cell Processes Lesson 1: Photosynthesis Lesson 2: Cellular Respiration	LS2.B – Cycles of Matter and Energy Transfer in Ecosystems LS1.C – Organization for Matter and Energy Flow in Organisms PS3.D – Energy in Chemical Processes and Everyday Life	MS-LS1-6 MS-LS1-7
Topic 2: Ecosystems Lesson 1: Living Things and the Environment Lesson 2: Energy Flow in Ecosystems Lesson 3: Cycles of Matter	LS2.A – Interdependent Relationships in Ecosystems LS2.B – Cycles of Matter and Energy Transfer in Ecosystems	MS-LS2-1 MS-LS2-3
Topic 3: Populations, Communities, and Ecosystems Lesson 1: Interactions in Ecosystems Lesson 2: Dynamic and Resilient Ecosystems Lesson 3: Biodiversity Lesson 4: Ecosystem Services	LS2.A – Interdependent Relationships in Ecosystems LS2.B – Cycles of Matter and Energy Transfer in Ecosystems LS2.C – Ecosystem Dynamics, Functioning and Resilience LS4.D – Biodiversity and Humans ETS1.B – Developing Possible Solutions	MS-LS2-1 MS-LS2-2 MS-LS2-3 MS-LS2-4 MS-LS2-5

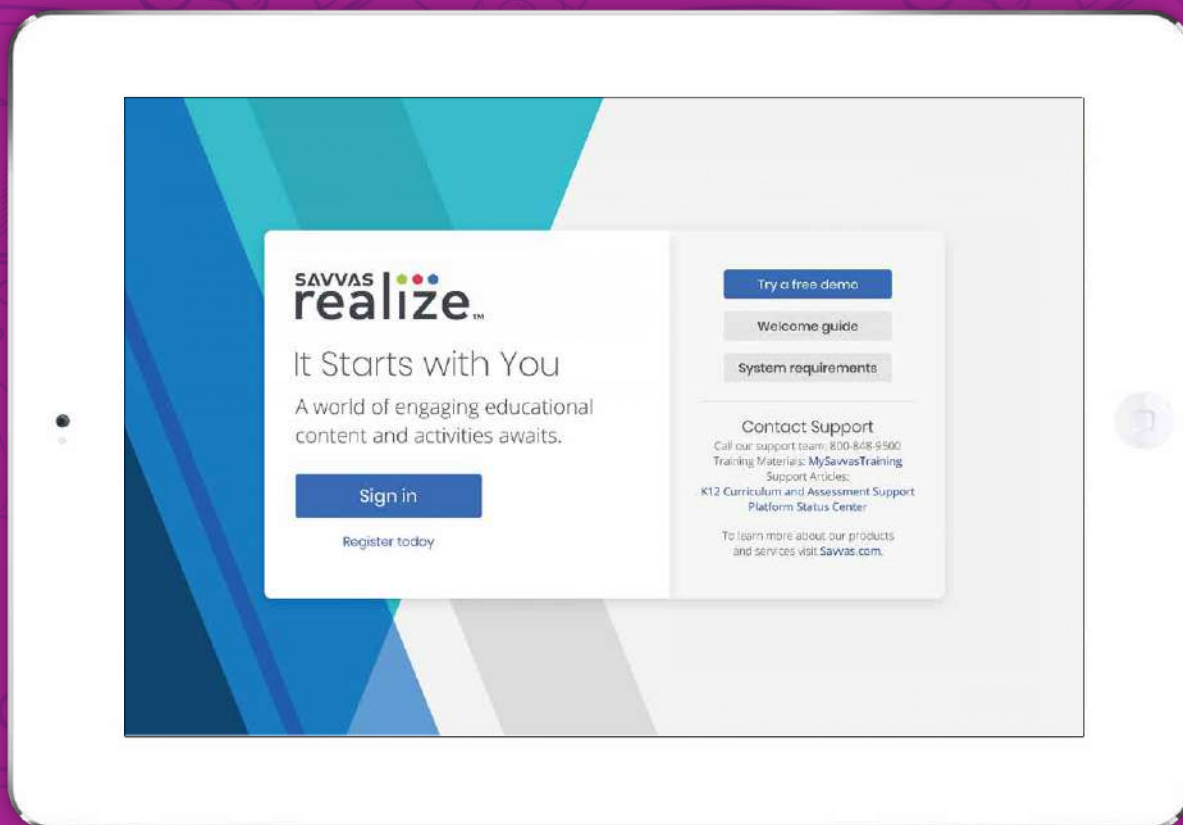


Diversity of Life		
Topic Lessons	Disciplinary Core Idea	Science Standard
Topic 1: Genes and Heredity Lesson 1: Patterns of Inheritance Lesson 2: Chromosomes and Inheritance Lesson 3: Genetic Coding and Protein Synthesis Lesson 4: Trait Variations Lesson 5: Genetic Technologies	LS3.A – Inheritance of Traits LS3.B – Variation of Traits LS1.B – Growth and Development of Organisms LS4.B – Natural Selection	MS-LS3-1 MS-LS3-2 MS-LS4-4 MS-LS4-5
Topic 2: Natural Selection and Change Over Time Lesson 1: Early Study of Evolution Lesson 2: Natural Selection Lesson 3: The Process of Evolution Lesson 4: Evidence in the Fossil Record Lesson 5: Other Evidence of Evolution	LS4.A – Evidence of Common Ancestry and Diversity LS4.B – Natural Selection LS4.C – Adaptation	MS-LS4-1 MS-LS4-2 MS-LS4-3 MS-LS4-4 MS-LS4-5 MS-LS4-6

QUICK TIP

In the Savvas Realize™ digital platform, you can rearrange, hide, and customize individual lessons for greater flexibility.





Experience **IT!**

It's the Science of Doing.

Learn more at Savvas.com/ExperienceIT

elevatescience

SAVVAS
LEARNING COMPANY

Savvas.com
800-848-9500

Copyright © 2022 Savvas Learning Company LLC. All Rights Reserved.
Savvas® and Savvas Learning Company® are the exclusive trademarks
of Savvas Learning Company LLC in the US and in other countries.

SAM: 9780768587630 ADV: 9780768588514

Join the Conversation
@SavvasLearning



Get Fresh Ideas for Teaching
Blog.Savvas.com