

Conceptual Academy for Foundations of Biology, Biology, Chemistry, Earth and Space, Physical Science, and Physics

Features and Benefits

AI Tools to Enhance Learning

We provide AI tools for teachers to supplement the implementation of the instructional materials. Features include:

- Auto-grading free response sections
- Translating lessons into 60+ languages
- Adjusting reading level of any and all text
- Generating additional documents like Exit Tickets, Formative Assessments, Vocabulary lists, and Letters to Family
- AI-resistant assignments

Phenomenon-Based Learning

We integrate compelling natural phenomena as anchoring experiences for each unit. From exploring the physics of skydiving to investigating the chemistry of waterfall formation, these phenomena provide context and motivation for learning.

Laboratory and Hands-On Activities

Our curriculum includes a rich variety of hands-on activities that range from traditional laboratory experiments to innovative sensor-based investigations using PocketLab devices.



Core Lessons and Interactive Content

Each unit begins with core lessons that introduce fundamental concepts through multiple modalities. These lessons incorporate interactive elements, videos, simulations, and real-world applications that make abstract concepts concrete and engaging.

						
Phenomena (Inquiry)	PocketLab Activity	Hands-On (Guided)	Next-Time Question	PhET Simulation	Practice Page	Writing or Presentation
5E: Engage	5E: Explore	5E: Explore	5E: Explore	5E: Explain	5E: Elaborate	5E: Evaluate
30 min	50 min	50 min	5 min	20 min	30 min	50 min
81 total activities	19 total activities	26 total activities	28 total activities	23 total activities	71 total activities	37 total activities

Extensions

For extension, each unit subchapter has 50% more available activities than fit into a 180-day scope and sequence. The extra activities range from labs, projects, to simulations which can be used with students who finish early or are above grade level. Additionally, the PocketLab Lesson Library has hundreds of activities that can extend learning for students with high interest.

Multiple Modes of Evaluation and Assessment

- Real-time data analytics from hands-on experiments
- Project-based assessments that integrate multiple learning objectives
- Traditional quizzes and tests with immediate feedback
- Peer and self-assessment opportunities
- Portfolio-based evaluation of student work

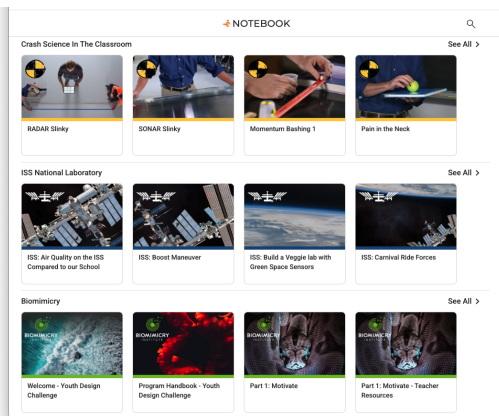
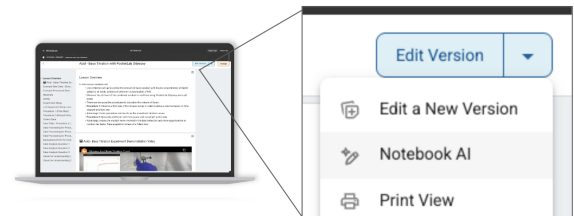
Conceptual Academy for Foundations of Biology, Biology, Chemistry, Earth and Space, Physical Science, and Physics

Free with Order

Notebook AI Tools to Enhance Learning

We provide AI tools for teachers to supplement the implementation, including:

- Auto-grading free response sections
- Translating lessons into 60+ languages
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- AI-resistant assignments



Supplemental Lesson Library

The PocketLab Lesson Library contains hundreds of supplemental activities on every science subject ranging from kindergarten to college. The lesson content is developed by PocketLab, partners like X-STEM, PhET, and the ISS National Lab, and a community of educators that submit user generated content to be vetted and added to the library. New lessons are added to the library each week and the content will continue to grow over the entire implementation with any district.

Professional Development

PocketLab runs a virtual conference program called Science is Cool, which has served over 110,000 educators with online professional development across science topics such as Citizen Science, AI, and Science Literacy. Events have been done in partnership with organizations like the Department of Education, the Smithsonian Institution, the National Science Foundation, and Disney.



Curriculum Scope and Sequence for MCCR Standards for Science

This document contains a description of the *Conceptual Academy* High School Program Scope and Sequence for six courses with the corresponding program title in the table below.

Approved Courses for the Secondary Schools of Mississippi	Conceptual Academy Program Name
Foundations of Biology	<i>Conceptual Academy Biology</i>
Biology	<i>Conceptual Academy Biology</i>
Chemistry	<i>Conceptual Academy Chemistry</i>
Earth and Space Science	<i>Conceptual Academy Earth and Space Science</i>
Physical Science	<i>Conceptual Academy Physics and Chemistry Integrated</i>
Physics	<i>Conceptual Academy Physics</i>

The scope and sequence summarizes how the high school program textbook chapters and activities are organized in relation to the MCCRS for Science. The chapter sequencing is to build on prior ideas and integrate the three dimensions of the *Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*.

Course Sequence

The Conceptual Academy High School scope and sequence can ideally progress through the Mississippi Best Practices for CCR Sequencing in Science.

Grade	9	10	11	12
Course	Biology (260131)	Chemistry 1 (400519)	Physics (400820) <u>or</u> Earth and Space (260629)	Physics (400820) <u>or</u> Earth and Space (260629)

Additionally, the Foundations of Biology program is available for students to gain the basic knowledge needed prior to attempting the rigorous Biology course required for graduation. Combined with the Biology program at 10th grade and the Physical Science program at 11th grade, this sequence would give students the breadth of knowledge across the three core science disciplines in a three-year sequence. If students opted for a fourth year of science they could go into more depth with the Chemistry of Physics programs or gain further breadth with Earth and Space Science.

Grade	9	10	11	12
Course	Foundations of Biology (260628)	Biology (260131)	Physical Science (400700)	Chemistry 1 (400519) <u>or</u> Physics (400820) <u>or</u> Earth and Space (260629)

The order of the standards within each program reflects a purposeful consideration of how to build disciplinary core ideas (DCIs), science and engineering practices (SEPs), and crosscutting concepts (CCCs) through three-dimensional learning, while also maintaining a logical progression through the core content knowledge and covering 100% of the MCCRS for Science.

Program Title: *Conceptual Academy Biology*

[illegible]

Program Title: *Conceptual Academy Biology*

[illegible]

Program Title: *Conceptual Academy Chemistry*

[illegible]

Grade: High school

Subject: Earth and Space Science

Program Title: *Conceptual Academy Earth and Space Science*[illegible]

Program Title: *Conceptual Academy Physics and Chemistry Integrated*

[illegible]

Program Title: *Conceptual Academy Physics*[illegible]

MCCR Standards Correlation

This document contains the correlation between the *Conceptual Academy* High School programs and the Mississippi College and Career Readiness Standards for Science for the following subjects:

Approved Courses for the Secondary Schools of Mississippi	Conceptual Academy Program Name
Foundations of Biology	<i>Conceptual Academy Biology</i>
Biology	<i>Conceptual Academy Biology</i>
Chemistry	<i>Conceptual Academy Chemistry</i>
Earth and Space Science	<i>Conceptual Academy Earth and Space Science</i>
Physical Science	<i>Conceptual Academy Physics and Chemistry Integrated</i>
Physics	<i>Conceptual Academy Physics</i>

Myriad Sensors and Conceptual Academy use a proprietary Assessment of Instructional Materials (AIM) tool to provide insights and feedback to the curriculum writing team on quality of alignment and standards gaps. The AIM tool uses the latest large language model AI-technology to analyze every Chapter and Subchapter against every MCCRS for the given subject. The curriculum team used this information to customize the program for unique features of the Mississippi standards.

The detailed standards correlations are presented as tables in this document and an interactive version of the spreadsheet is available in the digital version of each program under the **About this Program** section.

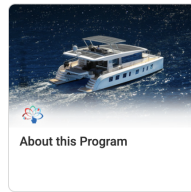
The Scope and Sequence document provides an summarize aggregated correlation to the MCCRS for Science.

app.thepocketlab.com/curriculum/lpDI90490008byj0

Conceptual Academy Physics

Search Collection Name

My Edited Lessons



About this Program

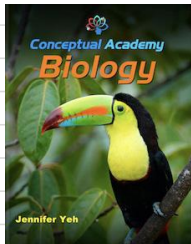


Chapter 00: About Science - Introduction



Chapter 0 Law

MCCR Standards Correlation - Foundations of Biology

Section	FB.1.1	FB.1.2	FB.1.3	FB.1.4	FB.2.1	FB.2.2	FB.2.3	FB.2.4	FB.2.5	FB.2.6	FB.2.7	FB.3.1	FB.3.2	FB.3.3	FB.3.4	FB.3.5	FB.3.6	FB.3.7	FB.4.1	FB.4.2	FB.4.3	FB.4.4	FB.4.5	FB.4.6	FB.5.1	FB.5.2	FB.5.3	FB.5.4	FB.5.5	FB.6.1	FB.6.2	FB.6.3	FB.6.4	FB.6.5	FB.6.6	FB.6.7	FB.6.8	FB.6.9		
Conceptual Academy Biology by Jennifer Yeh 	AIM Chart (Assessment of Instructional Materials)																																							
	Specialization of <i>Conceptual Academy Biology</i> to MCCRS																																							
	Hover over a rating to see the detailed analysis																																							
	3 to 4 = Moves beyond expected student support in multiple components of the standard																																							
	2 to 3 = Supports the student in multiple components of the standard																																							
	2 = Supports the student in at least one component of the standard																																							
	Does not apply																																							
Chapter 1 Science and Biology																																								
1.1 What Is Life?		2.0	2.0					2.0		2.0		2.0	2.0		2.0	2.0				2.0	2.0	2.0	2.0				2.0	2.0		2.0		2.0	2.0	2.0						
1.2 The Scientific Method	2.3	2.0	3.3	2.0		2.0				2.0								2.0									2.0						2.0		2.5	2.0	2.0			
1.3 Science and Technology			2.5	3.0																			2.0	2.0				2.0				2.0		2.0				2.0		
1.4 Facts, Laws, and Theories		2.0							2.0											2.0	2.0		2.0				2.0	2.0		2.0		2.0		2.0						
1.5 Working with Numbers			2.0	2.0																																				
1.6 Quantitative and Qualitative Data			2.3	2.0								2.0															2.0	2.0		2.0		2.0		2.0		2.0				
Living Earth Essay: Biogeology—An Introduction		2.0	2.0	2.0		2.0				2.0		2.0		2.0													2.0	2.0		2.0		2.3	2.0	3.5	2.0		2.0		2.5	
Chapter 2 The Chemistry of Life																																								
2.1 Atoms and Molecules		2.0	2.3	2.0	4.0	2.3	2.0			2.0		2.0								2.0																				
2.2 Chemical Compounds			2.0		2.0	2.5	3.3		2.0	2.0	3.0		2.0		2.0					2.0	2.0									2.0	2.0									
2.3 Mixtures		2.0			2.0	2.0	2.7	2.0	3.3	2.0	2.0		2.0	2.0						2.0										2.0										
2.4 Chemical Reactions			4.0	2.0		2.0	2.5		2.0	2.0	2.0	2.0	2.0	2.0	2.0					2.0							2.0		2.0	2.0	2.0	2.0				2.0				
2.5 Types of Reactions			3.0	2.0	2.3	3.0	3.0	4.0	2.0	2.0	2.3		2.0		2.0	2.0				2.0							2.0		2.0		2.0		2.0				2.0			
2.6 Organic Molecules			2.0	2.0	2.0	2.0	2.0			2.0										2.0																				
2.7 Macromolecules Needed for Life	2.0	2.0		2.0	2.0	2.0	2.0	2.0	3.8	2.2		2.0	2.3							2.5	3.3		2.0	2.0			2.0	2.0		2.0	2.0	2.0	2.0							
2.8 Physical and Conceptual Models			2.7		2.3							2.0	2.0							2.0										2.0										
2.9 Vitamins and Minerals		2.0	3.0	2.0		2.0	2.5		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0			2.0			

MCCR Standards Correlation - Foundations of Biology																																							
Section	FB.1.1	FB.1.2	FB.1.3	FB.1.4	FB.2.1	FB.2.2	FB.2.3	FB.2.4	FB.2.5	FB.2.6	FB.2.7	FB.3.1	FB.3.2	FB.3.3	FB.3.4	FB.3.5	FB.3.6	FB.3.7	FB.4.1	FB.4.2	FB.4.3	FB.4.4	FB.4.5	FB.4.6	FB.5.1	FB.5.2	FB.5.3	FB.5.4	FB.5.5	FB.6.1	FB.6.2	FB.6.3	FB.6.4	FB.6.5	FB.6.6	FB.6.7	FB.6.8	FB.6.9	
Living Earth Essay: Isotopic Dating	2.0	2.0	4.0	2.0	3.0	3.0	2.0		2.0		2.0				2.0											2.0	2.0				2.0	2.0	2.0	2.0					2.0
Chapter 3 The Cell																																							
3.1 What is a Cell?		2.0	2.0							2.0	2.0	3.0	2.0							2.0	2.0		2.0				2.0	2.0	2.0	3.0					2.0				
3.2 Cell Theory	3.5	2.5	2.3	3.0								2.0	2.0																	2.0									
3.3 Looking at Cells	2.0	2.3	4.0	2.0								2.0	2.0		2.0																			2.0					
3.4 Eukaryotic Cell			2.0						2.0	2.0	2.0	3.0	3.3							2.0	2.0					2.0			2.0	2.0			2.0						
3.5 The Cell Membrane			2.0			2.0			2.5	2.3	3.5	2.0	4.0	3.0						2.0						2.0			2.0		2.0	2.0						2.0	
3.6 Cell Organelles										2.0	2.0	2.5	3.3		2.0					2.0		2.0																	
Living Earth Essay: Geologic Time		3.5	3.7	2.0					2.0	2.0	2.0	2.0	2.0		2.0		2.0									2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0		2.0	
Chapter 4 How Cells Work																																							
4.1 Cellular Transport			2.0			2.0			2.0	2.0	2.3	2.0	2.8	3.0	2.0					2.0								2.0		2.0	2.0	2.0	2.0		2.0				
4.2 Cell Communication			2.0						2.0	2.0	2.0	3.0	2.0					2.0		2.0		2.0	2.0					2.0		2.0			2.0		2.0				
4.3 ATP and Chemical Reactions					2.0	2.0	2.0		2.5	2.0	3.3	2.0	2.3	2.0	2.0	3.7				2.0										2.0				2.0					
4.4 Enzymes		2.0	3.0	2.0			2.0	2.0		4.0	2.8	2.0	2.0							2.0				2.0						2.0				2.0			2.0		
4.5 Photosynthesis			2.0	2.0	2.0	3.0	2.0		2.0	2.3	2.0	2.0	2.3		2.0	2.0				2.5											2.4	2.5	2.0	2.0	3.0	2.0	2.0		
4.6 Cellular Respiration			2.0	2.0	2.0		2.0	2.0	2.0	2.3	2.0	2.0	3.3		3.0	2.0				2.0								2.0		2.0	2.3	2.3	2.0						
Living Earth Essay: Plate Tectonics	2.5	3.5	3.7	2.7																						3.0	2.0		2.0	2.0					2.5		2.0		
Chapter 5 DNA and Genes																																							
5.1 What is a Gene?										2.5	2.0	2.0	2.0							2.5	3.3	2.0	2.0					2.0		2.0		2.0							
5.2 Chromosomes			2.0							2.0	2.0	2.0	2.0							3.0	3.2	2.0						2.0											
5.3 The Structure of DNA		2.0	2.0			2.0			2.0	2.0	2.5		2.0							2.3	3.0							2.0											
5.4 How DNA Is Copied						2.0				2.0	3.0	2.0	2.0							2.3	2.5							2.0		2.0									
5.5 How Proteins Are Built			2.0			2.0				3.5	2.7	2.0	2.0							2.5	3.8							2.0											
5.6 Genetic Mutations			2.3							3.0	2.5		2.0						2.0	2.8	3.7	2.0	4.0	2.0	2.0			2.0	2.3	2.0				2.0		2.0			
Living Earth Essay: The Great Oxygenation		4.0	4.0	2.5		3.0	2.0	2.5	2.0	2.0	2.0		2.0		2.5					2.0						2.0	2.0	2.0	2.8	2.5	3.7	4.0	2.0		3.0	2.0	2.0		
Chapter 6 Inheritance																																							
6.1 How Cells Reproduce										2.5	2.0	2.0	2.0			3.0				2.0	2.5		2.0					2.0		2.0									

MCCR Standards Correlation - Foundations of Biology																																							
Section	FB.1.1	FB.1.2	FB.1.3	FB.1.4	FB.2.1	FB.2.2	FB.2.3	FB.2.4	FB.2.5	FB.2.6	FB.2.7	FB.3.1	FB.3.2	FB.3.3	FB.3.4	FB.3.5	FB.3.6	FB.3.7	FB.4.1	FB.4.2	FB.4.3	FB.4.4	FB.4.5	FB.4.6	FB.5.1	FB.5.2	FB.5.3	FB.5.4	FB.5.5	FB.6.1	FB.6.2	FB.6.3	FB.6.4	FB.6.5	FB.6.6	FB.6.7	FB.6.8	FB.6.9	
6.2 Cell Division and Genetic Diversity			2.0	2.0						2.0			2.3				4.0	3.0	2.3	2.5	2.0	2.0	2.0					2.0		2.0									
6.3 Traits and Inheritance	3.0	2.0	2.5	2.0						2.0									2.0	2.0	2.0	2.5				2.0			2.0		2.5								
6.4 First Law of Inheritance	2.0	2.0	2.0							2.0									2.0	2.5	2.3	3.0	2.0						2.0		2.0								
6.5 Second Law of Inheritance	2.0	2.0	4.0	2.5						2.0	2.0	2.0				2.0			2.7	2.3	2.8	3.5	2.0	2.0				2.0	2.3		2.0				2.0				
6.6 Beyond Mendel	2.0	2.0	4.0	2.0						2.0	2.0					2.0			2.3	2.8	3.4	3.3	2.0	2.0					2.3	2.0	2.0				2.0				
Living Earth Essay: Life in the Trenches			2.3	2.0					2.0	2.0	2.0		2.0		2.0												2.0	4.0		3.0	2.0	3.5	2.0	2.0	2.3	2.0		2.0	
Chapter 7 Genetic Technologies																																							
7.1 The Human Genome		2.0	2.5	2.0						2.0	2.0								2.0	2.8	2.0	2.0	2.0	2.0				2.0		2.0									
7.2 Genetic Testing			3.7	2.0						2.0			2.0						2.5	2.3	2.0	2.3	2.5	2.7	2.0			2.0	2.0										
7.3 Cancer			3.0	3.0						2.0	2.0	2.0							3.0	2.3	2.0	2.0	3.5	2.0	2.0			2.3		2.0		2.5				2.0			
7.4 DNA Technology		2.0	3.5	2.5						2.3	2.0	2.0	2.0						2.0	2.8		2.0	3.7	2.0				2.0		3.0		2.0					2.0		
7.5 Genetically Engineered Mosquitoes			4.0	3.0						2.5									2.0	2.0	2.3	2.0	3.5	4.0	4.0			2.0		2.0		2.0	2.0	2.0	2.0	2.0	3.5	2.0	
7.6 Genome Editing with CRISPR-Cas9	2.0	2.5	3.5	4.0						4.0	2.3	2.0	2.0						2.0	2.0	3.2		2.3	4.0	4.0			2.0		2.0				2.0		2.0	2.0		
7.7 Concerns about DNA Technology			3.3	4.0						2.0	2.0	2.0							2.0			2.0	2.3	4.0					2.3		2.0	2.0	2.5	2.0		2.0	2.0	2.0	
Living Earth Essay: Supervolcanoes	2.0	2.7	3.7	3.7		2.0	2.0		2.0																		2.0	2.0			2.0		2.0	2.0		2.0	2.0	2.0	
Chapter 8 Natural Selection																																							
8.1 The Origin of Life	3.0	3.0	3.3	2.5			2.0		2.0	2.5	2.0		2.0						2.0	2.5		2.0				2.0	2.0	2.0	2.0		2.0		2.0	2.0		2.0		2.0	
8.2 Is there life on Mars or Venus?		2.0	3.7	2.7		2.0			2.0	2.0	2.0									2.0							2.0	2.0	2.0	2.0		2.0	2.0	2.0		2.0		2.0	
8.3 Charles Darwin	3.7	3.5	3.0	3.0						2.0									2.0	2.0	2.0					3.0	2.7	2.5	3.3	2.0	2.0		2.0	2.0		2.7		2.0	
8.4 Natural Selection	2.0	2.0	3.0	2.0						2.0									2.0	2.0	2.0	2.5	2.0	2.0			2.0	4.0		2.0		2.0	2.0		2.7	2.0	2.3		
8.5 Examples of Natural Selection	2.0	3.0	3.3	4.0						2.0	2.0				2.0				2.0	2.0	2.0	2.5	2.0	2.5	2.0	2.0	4.0	4.0		3.0		3.5	2.0	2.0	3.0	2.3	2.0		
8.6 Adaptation		2.0								2.0	2.0				2.0				2.0	2.0								2.0	3.3		2.4		4.0	2.3	2.0	2.3	2.0	2.0	2.0
Living Earth Essay: Magnetoreception		2.7	4.0	4.0	2.0	2.0				2.0	2.3	2.0	2.0							2.0							2.0	2.8		3.0		3.0	2.5		2.0		2.0	2.0	
Chapter 9 Evidence of Evolution																																							
9.1 Mechanisms of Evolution	2.0	2.0	2.0	2.0						2.0	2.0								2.0	2.3	3.0	2.3						2.5	4.0		2.8		2.0	2.0		2.0			
9.2 How New Species Form	2.0	2.0	2.0	2.0														2.0	2.0	2.0							2.0	2.5	3.7	2.0	2.0		2.0	2.0		2.0		2.0	
9.3 Natural Selection in Action	2.0	2.0	4.0	2.3															2.0	2.0	2.0		2.0	2.0	3.0	2.0	3.0	3.7		3.0		2.0	2.0		2.0		2.0		
9.4 Fossils		3.0	2.0																								4.0	4.0	2.8	2.0	2.0		2.0		2.0				

MCCR Standards Correlation - Foundations of Biology																																							
Section	FB.1.1	FB.1.2	FB.1.3	FB.1.4	FB.2.1	FB.2.2	FB.2.3	FB.2.4	FB.2.5	FB.2.6	FB.2.7	FB.3.1	FB.3.2	FB.3.3	FB.3.4	FB.3.5	FB.3.6	FB.3.7	FB.4.1	FB.4.2	FB.4.3	FB.4.4	FB.4.5	FB.4.6	FB.5.1	FB.5.2	FB.5.3	FB.5.4	FB.5.5	FB.6.1	FB.6.2	FB.6.3	FB.6.4	FB.6.5	FB.6.6	FB.6.7	FB.6.8	FB.6.9	
9.5 Body Structures and Genetics	2.0	2.0	2.0						2.0										2.0	2.0		2.0				3.0	2.0	2.5	2.3	3.0	2.5			2.0		2.0			
9.6 Biogeography and Punctuated Equilibrium	2.0	2.0	2.0	2.0																						2.0		3.0	2.0	2.0	2.7		2.0	2.0		2.5	2.0	2.0	
9.7 The Evolution of Humans		3.5	3.0	3.0						2.0	2.0									2.0	2.0		2.0	2.0	2.0	2.0	4.0	3.5	2.5	2.0	2.5					2.5		2.0	
Living Earth Essay: Living Under the Ice			2.5	3.0	2.0		2.0		2.5	2.0	2.0		2.0		2.0					2.0								2.5		2.3	2.0	4.0	2.0		2.5	2.0	2.0		
Chapter 10 Diversity of Life 1																																							
10.1 Classifying Life	2.0	2.0	2.0	2.0								2.0														2.0	2.3	2.0		2.0									
10.2 Evolutionary Trees	2.0	2.7	3.5	2.0						2.0		2.0								2.0			2.0			2.5	3.7	2.7	2.0	4.0	2.0			2.0		2.0		2.0	
10.3 Three Domains of Life		2.0										2.0	2.0		2.0					2.0							2.0	2.0		2.0	2.0		2.0						
10.4 Bacteria		2.0	2.5	2.0					2.0	2.0	2.0	2.5	2.0	2.0	2.0					2.0	2.0	2.0		2.0	2.0		2.3	2.0	2.3	2.0	2.4	2.0	2.5	2.0		2.0	2.0	2.0	
10.5 Archaea		2.0	3.0	2.0			2.0			2.0	2.0	2.0		2.0						2.0								2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
10.6 Protists		2.0	2.3	2.0						2.0	2.0	2.0	2.0		2.0					2.0				2.0			2.0	2.0	2.0	2.0	3.0	2.0	2.5	2.0	2.0	2.0	2.0	2.0	
10.7 Plants	2.0		2.0	2.0					2.0	2.0	2.0	2.0	2.7		2.0					2.0	2.0					2.0		2.0	3.5	2.0	2.5	2.0	3.0	2.3		2.3	2.0	2.0	
Living Earth Essay: The Wonder of Wind			2.5	2.0						2.0																		2.0		2.0		2.0	2.0					2.0	
Chapter 11 Diversity of Life 2																																							
11.1 Fungi			3.0	2.0						2.0	2.0	2.0	2.0							2.0	2.0							2.0	2.0		2.3	2.0	2.0	2.0	2.0	2.5	2.0	2.0	
11.2 Animals Part 1			3.5	2.5		2.0	2.5	2.0	2.0	2.0	2.0	2.0	2.0		2.5		2.0			2.0	2.0		2.0			2.0	2.0	2.0	2.5	2.0	2.8	2.7	4.0	2.0	2.0	3.0	2.0	2.0	
11.3 Animals Part 2		2.0	2.5	2.0					2.0	2.0	2.0		2.0	2.0													2.7	2.0	2.3		2.8	2.0	3.5	2.0	2.0	2.3	2.0	2.5	2.0
11.4 Animals Part 3			2.0	2.0						2.5	2.5	2.0	2.0							2.0	2.0		2.0			2.0			2.0		2.0		2.0						
11.5 Viruses and Prions			2.3	2.0						2.7	2.0		2.0							2.0	2.0		2.0	2.0				2.0	2.0		2.0		2.0						
11.6 Life is Interconnected		2.0	2.3	2.0						2.0	2.0	2.0	2.0		2.0					2.0	2.0	2.0	3.0	2.0	2.0		2.0	2.0	3.5	2.0				2.0	2.7		2.0		
Living Earth Essay: Interconnectedness	2.0	2.0	2.7	2.0	2.0		2.0		2.0	2.0	2.0		2.0		2.5					2.0									2.0	2.0	3.7	4.0	3.5	2.3	2.0	3.0	2.3	2.0	2.0
Chapter 12 The Nervous System																																							
12.1 Organization of the Human Body									2.0	2.0			2.0								2.0										2.0								
12.2 Homeostasis			2.0				2.0	2.0													2.0								2.0		3.0	2.0							
12.3 The Brain										2.0																						2.0							
12.4 The Nervous System			2.0							2.0	2.0		2.0																2.0		2.0								
12.5 How Neurons Fire			2.0	2.0	2.0	2.0			2.0	2.0	2.3	2.0	2.3	2.5							2.0										2.0			2.0					
12.6 How Neurons Communicate			2.0	2.0					2.0	2.0	2.0		2.0								2.0			2.0															

MCCR Standards Correlation - Foundations of Biology																																							
Section	FB.1.1	FB.1.2	FB.1.3	FB.1.4	FB.2.1	FB.2.2	FB.2.3	FB.2.4	FB.2.5	FB.2.6	FB.2.7	FB.3.1	FB.3.2	FB.3.3	FB.3.4	FB.3.5	FB.3.6	FB.3.7	FB.4.1	FB.4.2	FB.4.3	FB.4.4	FB.4.5	FB.4.6	FB.5.1	FB.5.2	FB.5.3	FB.5.4	FB.5.5	FB.6.1	FB.6.2	FB.6.3	FB.6.4	FB.6.5	FB.6.6	FB.6.7	FB.6.8	FB.6.9	
12.7 The Senses			2.0	2.0						2.0	2.0	2.0	2.0															2.0											
Living Earth Essay: Plant Nutrients			2.0		2.0	3.0	2.0		2.0	2.8	2.8	2.0	2.3		2.0	2.0				2.0								2.0		2.2	2.8	4.0	2.0		2.0	2.0	2.0		
Chapter 13 Control and Development																																							
13.1 Hormones			2.0	2.0						2.3	2.5	2.0	2.0							2.0				2.0						3.0									
13.2 Reproduction							2.0		2.0	2.0	2.0	2.0	2.5				2.0	2.0	2.0	2.0	2.0	2.0					2.0			2.0				2.0					
13.3 Development			2.0						2.0	2.0										2.0										2.0					2.0				
13.4 The Skeleton			2.0							2.0	2.0									2.0										2.0			2.0						
13.5 Muscles			2.0	2.0	2.0	2.0	2.0		2.0	2.5	2.8	2.0	3.7	2.0	2.0	2.0				2.5										3.0			2.0						
Living Earth Essay: Soil Fertility					2.0		2.0	3.5	2.0		2.0	2.0	2.0		2.0													2.0		2.0	2.0	3.5	2.0		2.0	2.0			
Chapter 14 Maintaining the Body																																							
14.1 The Circulatory System			2.0						2.0	2.0	2.0	2.0	2.0	2.0														2.0		4.0			2.0					2.0	
14.2 The Path of Blood Flow			2.0	2.0					2.0			2.0																2.0		2.0	2.0								
14.3 Blood			2.5	2.0	2.0		2.0	2.5	2.0	2.7	3.3	2.0	2.0		2.0	2.0				2.0	2.3		2.0	2.0				2.3	3.0		2.5			2.0					
14.4 Respiration			2.8					2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				2.0								2.0	2.0	2.0	2.0	2.0							
14.5 Digestion			2.0	2.0				2.0	2.0	2.7	2.0	2.0	2.0	2.0	2.0	2.0				2.0								2.0	2.5	2.0		2.0		2.0					
14.6 A Healthy Diet			2.3	2.0			2.0		2.0	3.5	2.7		2.0	2.0	2.0	2.0				2.0								2.0		2.0	2.0			2.0					
Living Earth Essay: Pesticide Bioaccumulation	2.0	2.5	3.3	4.0			2.0		2.0	2.5	2.8			2.0						2.0		2.0	2.0	3.0	2.0		2.0	2.0	2.8	3.0	2.5	4.0	2.3	2.0	2.7	2.3	2.0		
Chapter 15 Protecting Health																																							
15.1 Nutrition, Exercise, and Health			3.0	2.3					2.0	2.3	2.0		2.0		2.0	2.0				2.0								2.0		2.0		2.0			2.0				
15.2 The Excretory System									2.0	2.0	2.0	2.0	2.0	2.0		2.0				2.0										2.0	2.0								
15.3 The Innate Immune System			2.0				2.0			2.3	2.0	2.0	2.0							2.0								2.0		2.0		2.0		2.0					
15.4 The Acquired Immune System			2.5	2.0						3.0	2.5	2.0	2.0					2.0		2.0								2.0		2.3				2.0					
Living Earth Essay: Topsoil in Trouble	2.0	2.7	3.0				2.0	2.0	2.0	2.0	2.0									2.0										2.0	2.7	4.0	2.0	2.0	2.0	2.7	2.5		
Chapter 16 Populations																																							
16.1 Organisms and Their Environments																											2.0	2.0	4.0	2.5	3.0	2.0	2.0	2.0	2.0	2.0			
16.2 Population Growth			2.0																									2.0		2.7		2.0	2.0		2.0	2.0	2.0		
16.3 Life History			2.0																2.0									2.3	2.5		2.0	2.0		2.0	2.0	2.0	2.0		

MCCR Standards Correlation - Foundations of Biology																																								
Section	FB.1.1	FB.1.2	FB.1.3	FB.1.4	FB.2.1	FB.2.2	FB.2.3	FB.2.4	FB.2.5	FB.2.6	FB.2.7	FB.3.1	FB.3.2	FB.3.3	FB.3.4	FB.3.5	FB.3.6	FB.3.7	FB.4.1	FB.4.2	FB.4.3	FB.4.4	FB.4.5	FB.4.6	FB.5.1	FB.5.2	FB.5.3	FB.5.4	FB.5.5	FB.6.1	FB.6.2	FB.6.3	FB.6.4	FB.6.5	FB.6.6	FB.6.7	FB.6.8	FB.6.9		
16.4 Human Population Growth			2.5	2.5																								2.0		2.5		2.5			2.0		2.5			
Living Earth Essay: Topsoil Regenerated		2.0	4.0	4.0			2.0		2.0	2.0	2.0									2.0			2.0	2.0	2.0			2.0	2.3		2.2	2.5	4.0	2.0	2.0	2.7	2.5	3.5		
Chapter 17 Communities																																								
17.1 Food Webs			2.0	2.0									2.0		2.0													2.0		3.5		2.0	2.0	3.0	2.5	2.0	2.0			
17.2 Competition	2.0	2.0	2.5	2.0																2.0						2.0		2.0	3.7	2.0	2.3		2.0	2.0		2.5	2.0	2.0		
17.3 Symbiosis													2.0		2.0														2.0	2.0	2.5		2.0	2.0		3.0	2.0			
17.4 Invasive Species			2.0	2.0											2.0														2.0	2.7	2.8	2.0	2.5	2.0	2.0	2.0	2.0	2.0	2.0	
Living Earth Essay: Ocean Acidification	2.0	2.0	3.0	2.5		4.0	2.5	4.0	3.0	2.0	2.5		2.0		2.0									2.5		2.0	2.0	2.0	2.0	2.4	3.3	4.0	2.0	2.0	2.5	2.5	2.5			
Chapter 18 Ecosystems																																								
18.1 Terrestrial Biomes			2.0	2.0						2.0																2.0		2.7		2.8	2.0	2.5	3.3			2.0	2.0	2.5		
18.2 Aquatic Biomes									2.0				2.0	2.0	2.0														2.5		3.0	2.0	2.5	3.3	2.0	2.5	2.0	2.0		
18.3 Biogeochemical Cycles			3.0	2.0	2.0	2.0	2.5		2.0	2.0	2.0				3.0														2.0	2.0	2.3	3.3	3.5	2.0			3.0	2.0	2.5	
18.4 Energy Flow in Ecosystems			2.0							2.0	2.0		2.0		2.5															2.0		2.6	2.0	2.5	2.0	3.5	2.0	2.0		
18.5 Ecological Succession										2.0					2.0															2.0		3.0		3.5	2.0	2.0	2.0	4.0	2.0	
Living Earth Essay: Global Climate Change	2.0		4.0	3.5			2.0	2.0	2.0		2.0				2.0																2.0	3.7	3.5	2.0		2.5	2.0	3.0	2.0	

MCCR Standards Correlation - Biology																																																					
Section	BIO.1A.1	BIO.1A.2	BIO.1A.3	BIO.1A.4	BIO.1B.1	BIO.1B.2	BIO.1C.1	BIO.1C.2	BIO.1C.3	BIO.1D.1	BIO.1D.2	BIO.1E.1	BIO.1E.2	BIO.1E.3	BIO.1E.4	BIO.2.1	BIO.2.2	BIO.2.3	BIO.2.4	BIO.2.5	BIO.2.6	BIO.3A.1	BIO.3A.2	BIO.3A.3	BIO.3B.1	BIO.3B.2	BIO.3B.3	BIO.3B.4	BIO.3C.1	BIO.3C.2	BIO.3C.3	BIO.3C.4	BIO.3C.5	BIO.4.1	BIO.4.2	BIO.4.3	BIO.4.4	BIO.4.5	BIO.4.6	BIO.4.7	BIO.5.1	BIO.5.2	BIO.5.3	BIO.5.4	BIO.5.5	BIO.5.6	BIO.5.7	BIO.5.8	BIO.5.9				
3.5 The Cell Membrane					2.7		2.0	2.5	2.0	2.3	2.0	2.0																								2.0					2.0								2.0				
3.6 Cell Organelles					2.0		2.5	2.5				2.0						2.0	2.0												2.0														2.0								
Living Earth Essay: Geologic Time	2.0				2.0			2.0						2.0			2.0		2.0																2.7	2.3		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Chapter 4 How Cells Work																																																					
4.1 Cellular Transport	2.0		2.0		2.7	2.0	2.0	2.0		3.8	2.3	2.0					2.0															2.0				2.0	2.0		2.0				2.0	2.0	2.0	2.0	2.0						
4.2 Cell Communication	2.0		2.0		2.0		2.0	2.5		2.0		2.0	2.0	2.0																	2.0	2.0	2.0			2.0					2.0				2.0								
4.3 ATP and Chemical Reactions	2.0				3.0			2.0		2.5	3.0	2.0					4.0	2.0	2.5	2.0																							2.0	2.0									
4.4 Enzymes	2.0				2.5	2.0	2.0			2.0			2.0					2.0	2.0		2.0																			2.0	2.0			2.0	2.0						2.0		
4.5 Photosynthesis	2.0		2.0		2.0		2.0	2.0				2.0					2.0	4.0																									2.3	2.3	2.0	2.0	2.0						
4.6 Cellular Respiration	2.0				2.0		2.0	2.0		2.3	2.0	2.0					4.0	2.0	3.7	3.3	2.5	2.0																					2.0	2.0	2.5	2.0							
Living Earth Essay: Plate Tectonics																																						4.0	2.0	2.0		2.0									2.0		
Chapter 5 DNA and Genes																																																					
5.1 What is a Gene?					2.5							2.0										2.0		2.0			2.0	2.0	2.0	2.0					2.0		2.0																
5.2 Chromosomes					2.5		2.0	2.0				2.0	2.0	2.0								2.0		2.0			2.0	2.0	3.0	2.0					2.0		2.0		2.0	2.0													
5.3 The Structure of DNA					4.0							2.0	2.0	2.0																	2.5									2.0													
5.4 How DNA Is Copied					3.0		2.0	2.0				2.0	2.0	2.5								2.0									2.0						2.0					2.0											
5.5 How Proteins Are Built	2.0				3.0		2.5	2.0																							2.3	4.0					2.0		2.0														
5.6 Genetic Mutations					2.7							2.0	2.0	2.0								2.0									2.0	2.0	2.5	4.0				2.0	2.0	2.0		2.0								2.0			
Living Earth Essay: The Great Oxygenation	2.0					2.0	2.0			2.0		2.0						2.0	2.0	2.0	2.0																3.0	2.3		2.8	2.0		3.0	2.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Chapter 6 Inheritance																																																					
6.1 How Cells Reproduce	2.0		2.0		2.0		2.0	2.0				3.0	4.0	2.5								2.0	2.0							2.3									2.0														
6.2 Cell Division and Genetic Diversity					2.0			2.0				3.0	2.0	2.0								3.7	4.0	2.0	2.0	2.0		2.0	2.7		2.0								2.0	3.0	2.0												
6.3 Traits and Inheritance					2.0							2.0										2.0			3.0					2.0	2.0									2.0													
6.4 First Law of Inheritance					2.0			2.0				2.0		2.0								2.0			3.8	4.0			2.0	3.0							2.0				2.0	2.0											
6.5 Second Law of Inheritance			2.0	2.0	2.0		2.0	2.0	2.0			2.0		2.0								2.0			2.0	2.0	4.0	2.7	2.3		2.0		2.0		2.0		2.0		2.0	2.0	2.5		3.0	2.0			2.0				2.0		
6.6 Beyond Mendel				2.0	2.0		2.0	2.0	2.0			2.0		2.0								2.0			2.0	2.0	2.0	4.0	2.7	2.0		2.0		2.0		2.0		2.0	2.0	2.3		3.0	2.0			2.0							
Living Earth Essay: Life in the Trenches	2.0				2.0														2.0																			2.0	2.0		2.0	2.0											
Chapter 7 Genetic Technologies																																																					
7.1 The Human Genome					2.0							2.0		2.0																	2.0	2.0	2.0	2.0	2.5	2.0		2.0		2.0	2.0												
7.2 Genetic Testing					2.0							2.0	2.0									2.0		2.0	2.0	2.0	2.0	3.8	2.0		2.0	2.0	2.0	2.0			2.0	2.0		2.0	2.0												
7.3 Cancer			2.0		2.0			2.0				2.0	4.0	2.0								2.0							2.3	2.0	2.0	2.0	2.0	2.0			2.0		2.0	2.0		2.5	2.0		2.0						2.0		
7.4 DNA Technology					2.3					2.0		2.0		2.0																			2.3	2.0	2.0	3.3	2.0			2.0		2.0		2.0	2.5			2.0				2.0	
7.5 Genetically Engineered Mosquitoes					2.0							2.0		2.0								2.0			2.0	2.0	2.0	2.3	2.5											2.0	2.0		4.0	2.0		2.0	2.0	2.3			2.0	3.0	2.0

MCCR Standards Correlation - Biology																																																		
Section	BIO.1A.1	BIO.1A.2	BIO.1A.3	BIO.1A.4	BIO.1B.1	BIO.1B.2	BIO.1C.1	BIO.1C.2	BIO.1C.3	BIO.1D.1	BIO.1D.2	BIO.1E.1	BIO.1E.2	BIO.1E.3	BIO.1E.4	BIO.2.1	BIO.2.2	BIO.2.3	BIO.2.4	BIO.2.5	BIO.2.6	BIO.3A.1	BIO.3A.2	BIO.3A.3	BIO.3B.1	BIO.3B.2	BIO.3B.3	BIO.3B.4	BIO.3C.1	BIO.3C.2	BIO.3C.3	BIO.3C.4	BIO.3C.5	BIO.4.1	BIO.4.2	BIO.4.3	BIO.4.4	BIO.4.5	BIO.4.6	BIO.4.7	BIO.5.1	BIO.5.2	BIO.5.3	BIO.5.4	BIO.5.5	BIO.5.6	BIO.5.7	BIO.5.8	BIO.5.9	
Living Earth Essay: Topsoil in Trouble	2.0			2.0																																	2.0		2.0	2.3	2.5	2.0	2.0	2.0	2.5	2.3	2.5			
Chapter 16 Populations																																																		
16.1 Organisms and Their Environments	2.0													2.0																						2.0	2.0	2.0		4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
16.2 Population Growth					2.0																																			2.7		2.0	2.0	2.0	3.7	2.0	2.0			
16.3 Life History																2.0												2.0										2.0	2.3		3.0		2.0	2.0	2.0	2.0	2.0	2.0		
16.4 Human Population Growth																																							2.0	2.5	2.0	2.0		2.0	2.3		2.5			
Living Earth Essay: Topsoil Regenerated				2.0										2.0	2.0																					2.0	2.0		2.0	2.8	2.3	2.0	2.7	2.0	2.3	3.5				
Chapter 17 Communities																																																		
17.1 Food Webs																	2.0																						3.5		2.0	2.0	2.5		2.0					
17.2 Competition																	2.0																		2.0	2.0		2.3	3.7	2.0		2.8			2.0	2.5	2.0	2.0	2.0	
17.3 Symbiosis	2.0		2.0				2.0			2.0		2.0																								2.0		2.0	2.0	2.0	3.0			2.0	3.8		2.0			
17.4 Invasive Species																																		2.0				2.5	2.3		2.0	2.5			2.0	3.0	2.0	2.5	2.5	
Living Earth Essay: Ocean Acidification	2.0	2.0							2.0	2.0							2.0	2.0	2.0	2.0															2.0	2.0		2.3	2.0		2.0	2.2	3.3	3.3	2.0	2.5	2.0	2.3	2.7	2.0
Chapter 18 Ecosystems																																																		
18.1 Terrestrial Biomes				2.0													2.0																	2.0		2.0	2.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5			
18.2 Aquatic Biomes											2.0						2.0		2.0															2.0	2.0		2.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0			
18.3 Biogeochemical Cycles	2.0			2.0							2.0						2.0	2.0	2.0															2.0		2.0	2.0		2.3	3.7	2.3	2.0	2.0	2.0	2.0	2.0	2.0			
18.4 Energy Flow in Ecosystems	2.0			2.0																														2.0			2.0	2.0		2.3		2.0	3.5	2.0	2.0	2.0				
18.5 Ecological Succession											2.0																							2.0		2.3	2.0		3.3	2.0		2.0	2.3		2.8	2.5				
Living Earth Essay: Global Climate Change																	2.0																	2.0		2.0		2.3	3.0	4.0		2.0	2.0	2.0	3.7					

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MCCR Standards Correlation - Physical Science																																														
Section	PHS.1.1	PHS.1.2	PHS.1.3	PHS.1.4	PHS.1.5	PHS.1.6	PHS.2.1	PHS.3.1	PHS.3.2	PHS.3.3	PHS.3.4	PHS.3.5	PHS.4.1	PHS.4.2	PHS.4.3	PHS.4.4	PHS.4.5	PHS.4.6	PHS.5.1	PHS.5.2	PHS.5.3	PHS.5.4	PHS.5.5	PHS.5.6	PHS.5.7	PHS.5.8	PHS.6.1	PHS.6.2	PHS.6.3	PHS.6.4	PHS.6.5	PHS.6.6	PHS.6.7	PHS.6.8	PHS.7.1	PHS.7.2	PHS.7.3	PHS.7.4	PHS.8.1	PHS.8.2	PHS.8.3	PHS.8.4	PHS.9.1	PHS.9.2	PHS.9.3	PHS.9.4
Chapter 11: Light and Color																																														
11.1 Electromagnetic Spectrum		2.0	2.0					2.0												2.0	2.0						2.0	2.5	3.0		2.7	2.0	2.5	2.0	2.0	2.0		2.0		2.0						
11.2 Transparency	2.0	3.3	2.0	2.0			2.0	2.0	2.0											2.5	2.0	2.0			2.0		2.7	2.3	3.5	2.0	2.0	3.8	3.0	2.6	4.0	4.0		2.5	2.0			2.0			2.0	
11.3 Light Reflection		2.0	2.0						2.0											3.5							2.0	2.0	2.0			2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0					
11.4 Light Refraction	2.0	2.0	2.0																2.0	2.3	2.0			2.0		2.0	3.5	2.0	3.0			2.0	2.0	2.0	2.0	2.0	2.0	2.3		2.0	2.0					
11.5 Color		3.0	2.0	2.0			2.0	2.0											2.0						2.0		3.5	2.0	2.5			2.5			2.5	2.3	3.0		3.0							
11.6 Mixing Colors		2.0	2.0																2.5									2.3				3.3	2.0		3.0	2.0		2.0		2.0						
11.7 Colors of the Sky	2.3	2.3	2.0				2.0	2.0	2.0	2.0	2.0	2.0							2.5								2.0	2.0	2.0	2.0	2.0	2.0	3.3	2.0	2.0	2.5	3.0	3.0		2.0	2.0					
Chapter 12: Particles of Matter																																														
12.1 The Submicroscopic	2.7	2.0		2.3				2.0	2.0	2.0							2.0										2.0	2.0	2.0			2.0	2.0						2.0							
12.2 Discovering the Atom	4.0	4.0	2.0	2.0			2.3	2.0	2.0				2.0	2.0		2.0				2.0						2.0			2.0	2.0					2.0	2.0										
12.3 Mass and Volume	2.0	2.5	2.0	2.8	2.0		2.0	2.0							2.0																															
12.4 Density: Mass to Volume	2.3	2.3	2.0	2.7	2.7	3.7	2.0	2.0					2.0		2.0																															
12.5 Phases of Matter	4.0	2.5	2.0	2.0									2.5																																	2.0
12.6 Gas Laws	3.5	3.7	2.0	2.0	2.5	2.5	2.0	2.0	2.0		2.0		2.7																																	
Chapter 13: Elements of Chemistry																																														
13.1 Physical and Chemical Properties	4.0	3.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0			3.5		2.0																										2.0					
13.2 Elements Are Made of Atoms	2.5	3.0	2.0				2.0	3.0	2.0				2.0	2.0	2.0																										2.0	2.0	2.0			
13.3 The Periodic Table	2.0	3.3	2.0	2.0				4.0	2.5		2.0		2.0			2.0																	2.0								2.0	2.0		2.5		
13.4 Elements to Compounds	2.0	4.0	2.0	2.0			2.0	2.3	2.3	2.0	2.0		2.0	2.0	2.0	2.0																													2.0	
13.5 Naming Compounds	2.0	2.3	2.5				2.0	3.5	3.3	4.0	3.0		2.0		2.0																										2.0			2.0		
13.6 Most Materials Are Mixtures	4.0	3.5	2.0	2.5				2.0	2.0	2.0	2.0		2.3																																	
13.7 Classifying Matter	2.3	2.8	2.5	2.7	2.0	2.0		2.0	2.0	2.0	2.0		2.0																																	
13.8 The Advent of Nanotechnology	2.0	2.0		2.0			2.0	2.0	2.0				2.0							2.0	2.5					2.0		2.0				2.0	2.0	2.0	2.0			2.0		2.0	2.0		2.0			2.0
Chapter 14: Subatomic Particles																																														
14.1 Physical and Conceptual Models	3.5	3.0	2.0	2.0			2.0		2.0				2.0						2.0					2.0								2.0							2.0							
14.2 The Electron	2.0	2.3	2.0	2.3			2.0		3.0				2.0																						2.0							2.3	2.0		2.0	
14.3 The Atomic Nucleus	2.5	3.0	2.0	2.0			2.5		2.0				2.0			2.0					2.0																						2.0			
14.4 Protons and Neutrons	2.5	2.0	2.0	2.0			2.5	3.0	2.0		2.0	3.0				2.0	2.0	2.0																	2.0									2.0		
14.5 Light Is a Form of Energy		2.0	2.0	2.0			2.0		2.0											2.0	2.0							2.0	2.5	3.0			2.7		2.0	2.5	2.0		2.0		2.0			2.0	2.0	
14.6 Atomic Spectra and the Quantum	2.0	3.5	2.7	2.0			2.3	2.0	2.0				2.3			2.0			2.0						2.0		3.0		3.5		2.0	3.0	2.0	2.5	2.7	2.5	2.0	2.3		2.0	2.0		2.0		2.0	
14.7 Electrons Exhibit Wave Properties	2.0	2.0		2.0			3.0		2.0											2.0					2.0	2.0		2.5	2.5	4.0		2.0	2.0	2.5	2.0	3.3	2.0	2.0		2.0		2.0	2.0		2.0	
14.8 The Shell Model	3.0	2.7					3.0	3.5	2.0																																					
14.9 Understanding Periodic Trends	2.0	3.7	2.0	2.0			3.0	3.4	2.7							2.0																														2.0

MCCR Standards Correlation - Physical Science																																														
Section	PHS.1.1	PHS.1.2	PHS.1.3	PHS.1.4	PHS.1.5	PHS.1.6	PHS.2.1	PHS.3.1	PHS.3.2	PHS.3.3	PHS.3.4	PHS.3.5	PHS.4.1	PHS.4.2	PHS.4.3	PHS.4.4	PHS.4.5	PHS.4.6	PHS.5.1	PHS.5.2	PHS.5.3	PHS.5.4	PHS.5.5	PHS.5.6	PHS.5.7	PHS.5.8	PHS.6.1	PHS.6.2	PHS.6.3	PHS.6.4	PHS.6.5	PHS.6.6	PHS.6.7	PHS.6.8	PHS.7.1	PHS.7.2	PHS.7.3	PHS.7.4	PHS.8.1	PHS.8.2	PHS.8.3	PHS.8.4	PHS.9.1	PHS.9.2	PHS.9.3	PHS.9.4
Chapter 15: The Atomic Nucleus																																														
15.1 Unstable Nuclei	2.0	2.0		2.0			2.0	2.0									2.3	2.0																					2.0	2.0						
15.2 Radioactivity Is Natural	2.0	2.0	2.0	2.0				2.0		2.0	2.0						2.3	2.0																						2.0						
15.3 An Imbalance of Forces	3.0	2.0		2.0			2.5	2.0	2.0				2.0				2.0	2.0																						2.0						
15.4 Transmutation	2.0	2.0					2.0	3.0						3.0	2.0	2.0	2.0	2.0																												
15.5 Radioactive Half-Life	2.0	2.0	2.0	2.0				2.0	2.0								2.0																							2.0						
15.6 Isotopic Dating	2.0	2.0	2.0	2.0			2.0	2.0	2.0	2.0			2.0	2.0	2.0	2.0	2.0	2.0																												
15.7 Nuclear Fission	2.0	2.3	2.0	2.0			2.0	2.0	2.0		2.0			2.0	2.0		4.0	3.3																						2.0	2.0					
15.8 Mass and Energy	2.0	2.0						2.0					2.0	2.0		2.0	3.3	3.0																							2.0					
15.9 Nuclear Fusion	2.0	2.3	2.0	2.0				2.0	2.0			2.0	2.0	3.0		2.0	3.2	3.3																							2.0					
Chapter 16: How Atoms Bond																																														
16.1 Electron-Dot Structures	2.0	2.0					2.0	2.0	2.3	2.0																														2.0	2.0			2.0		
16.2 Ion Formation	3.0	2.3	2.0				2.0	3.2	3.0		2.0		2.0		2.0																									3.0			2.0			
16.3 Ionic Bonds	2.5	3.7	2.0				2.0	2.3	3.3	2.7	2.5		2.0	2.0	2.0	2.0																								2.0				2.0		
16.4 Metallic Bonds	3.3	4.0	2.0	2.0			2.0	2.0	2.0	2.0	2.0		2.0		2.0																									2.0	2.0			2.0		
16.5 Covalent Bonds	2.3	2.7		2.0			2.0	2.3	3.0	2.0	2.5		2.0				2.0																							2.0				2.0		
16.6 Molecular Shape	2.0	2.5	2.0	2.0			2.5	2.0	2.3	2.0	2.0																																			
16.7 Polar Covalent Bonds	3.0	2.5	2.0				2.0	2.2	3.3	2.0	2.0		2.0																												2.0			2.0		
16.8 Molecular Polarity	2.5	2.7	2.0	2.0				2.0	3.0	2.0	2.0		2.0																												2.0					
Chapter 17: How Molecules Mix																																														
17.1 Dipole Attractions	3.5	2.3	2.0	2.0			2.0		3.3	2.0	2.0		2.0																												2.0			2.0		
17.2 Solutions	4.0	3.3	2.7	2.0	2.0			2.0	2.0	2.0	2.0		2.5	2.0																										2.5			2.0			
17.3 Concentration and the Mole	2.5	2.7	2.0	2.5				2.0	2.0	2.0	2.0		2.0	2.0		2.0																														
17.4 Solubility	4.0	2.5	2.7	2.5				2.0	2.3	2.0	2.3		2.0	2.0	2.0	2.0																														
17.5 How Soap Works	2.5	2.5	2.0					2.0	2.7	2.0	2.0		2.0																																	
17.6 Softening Hard Water	3.5	2.5	2.0	2.0			2.0	2.3	2.5	2.0			2.0	2.0																																
17.7 Purifying Drinking Water	2.0	2.5	2.0	2.0				2.0	2.0	2.0	2.0		2.3	2.0																										2.0						
Chapter 18: How Chemicals React																																														
18.1 Chemical Equations	2.0	2.0					2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	4.0	2.3																														
18.2 Measuring Molecules	3.0	2.3	2.0	2.3	2.0		2.0	2.0	2.3	2.0		3.0	2.0	2.0	2.0	3.0																														
18.3 Grams to Moles	2.0	2.0		2.7				2.0	2.0	2.7	2.0	4.0	2.0	3.5	2.5	4.0																														
18.4 Exothermic or Endothermic	2.0	2.3		2.0				2.0	2.3	2.0	2.0		2.0		2.0	2.0																									2.0					

MCCR Standards Correlation - Physical Science																																														
Section	PHS.1.1	PHS.1.2	PHS.1.3	PHS.1.4	PHS.1.5	PHS.1.6	PHS.2.1	PHS.3.1	PHS.3.2	PHS.3.3	PHS.3.4	PHS.3.5	PHS.4.1	PHS.4.2	PHS.4.3	PHS.4.4	PHS.4.5	PHS.4.6	PHS.5.1	PHS.5.2	PHS.5.3	PHS.5.4	PHS.5.5	PHS.5.6	PHS.5.7	PHS.5.8	PHS.6.1	PHS.6.2	PHS.6.3	PHS.6.4	PHS.6.5	PHS.6.6	PHS.6.7	PHS.6.8	PHS.7.1	PHS.7.2	PHS.7.3	PHS.7.4	PHS.8.1	PHS.8.2	PHS.8.3	PHS.8.4	PHS.9.1	PHS.9.2	PHS.9.3	PHS.9.4
18.5 Entropy and Chemical Reactions	2.0	2.0	2.0										2.0				2.0	2.0																							2.0		2.0			
18.6 Chemical Catalysts	2.0	2.3	2.0					2.0	2.0	2.0	2.0		2.0																																	
Chapter 19: Acid/Base and Redox																																														
19.1 Exchanging Protons	2.0	2.3	2.0				2.0	2.0	2.0	2.0	2.7		2.3	2.0	2.0	2.0																									2.0					
19.2 Acid and Base Strength	3.5	2.8	3.0	2.0			2.0	2.0	2.0	2.0	2.7		2.0	2.0																										2.5		2.0				
19.3 Acidic, Basic, or Neutral	2.0	2.3	2.0	2.0				2.0	2.0		2.0		2.0		2.0	2.0																								2.0						
19.4 Rainwater Is Acidic	2.0	3.0						2.0	2.0	2.0	2.7		2.0	2.0		2.0																														
19.5 Ocean Acidification	2.0	2.3	2.0	2.0	2.0			2.0	2.0	2.0	2.3		2.3	2.0	2.0	2.0	2.0	2.0																												
19.6 Exchanging Electrons	2.0	3.3		2.0			2.0	2.0	2.7	2.0	2.0		2.5	2.0	2.0	2.0																									2.0	2.0		2.0		
19.7 Electrochemistry	2.0	2.4	2.0					2.0	2.0	2.0	2.0		2.0			2.0																									2.3	2.0		2.0		
19.8 Types of Batteries	2.0	2.8	2.0	2.0				2.0	2.3	2.0	2.0		2.0	3.0	2.0																									3.0	2.3		2.0			
19.9 Fuel Cells	2.0	2.5		2.0				2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0																								2.5	2.5		2.0			
19.10 Photovoltaics	3.0	2.3		2.0			2.5	2.0	3.0				2.0				2.0																								3.0	2.0		3.0		
19.11 Electrolysis	2.0	2.5	2.0	2.0				2.3	2.0	2.5	2.5	2.0	2.0	2.0	2.0	2.0																								2.5	2.0		2.0			
19.12 Corrosion and Combustion	2.0	3.0		2.0				2.0	3.0	2.0			2.3	2.0	2.0	2.0																								2.0	2.0		2.0			
Chapter 20: Environmental Science																																														
20.1 Water on the Move	2.0	2.0		2.0																																										
20.2 Water We Consume		2.0		2.5																																					2.0					
20.3 Polluting Water	2.0	2.3	2.0	2.0				2.0	2.0																																					
20.4 Earth's Atmosphere	3.0	3.3		2.0		2.0				2.0																																				
20.5 How We Pollute Air	2.0	2.0	2.0	2.0				2.0	2.0	2.0	2.0	2.0																																		
20.6 Global Warming	2.0	2.0		2.0					2.0	2.0																																		2.0		
20.7 Energy through Electricity		2.0		2.0																																				2.5	2.3	2.0	2.0			
20.8 Fossil Fuels	3.3	2.3	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0																													2.0	2.0		2.0			
20.9 The Nuclear Industry		2.0		2.0			2.0																																		2.0					
20.10 Sustainable Energy Sources																																														
20.11 Hydroelectricity	2.0	2.0		2.0				2.0	2.0	2.0	2.0																													2.0	2.7					
20.12 Biomass Is Chemical Energy	2.0	2.0		2.0				2.0	2.0	2.0	2.0																													2.0	2.0					
20.13 Direct Solar Energy		2.0		2.5				2.0	2.0	2.0	2.0	2.0																												2.0	2.5		2.0			
20.14 Hydrogen Fuel	2.0	2.0		2.0				2.0	2.0	2.0	2.0																													3.0	2.3		2.0			

[illegible]

[illegible]

Conceptual Academy for Foundations of Biology, Biology, Chemistry, Earth and Space, Physical Science, and Physics

Technology Support Document

i. Thin Common Cartridge

Not supported

ii. School Rostering

Google Classroom, ClassLink, and other LMS providers

iii. PDF and/or ePUB format

Digital materials available as a PDF

iv. Alternative text (image), captions and subtitles (videos), read-alouds, and other accessibility functions

- Alt text available on all images
- Captions and subtitles available on all videos
- WCAG 2.1AA Compliant

v. 508 Compliant Platform

Yes

vi. Privacy-data security specifications

COPPA, FERPA, GDPR, and New York Section 2-D standards compliant. Custom Data Privacy Agreements available to districts on request.

vii. Browser and OS Support

PocketLab Notebook is the digital platform for all the Conceptual Academy programs. PocketLab Notebook runs on any OS and any Browser on any computer, Chromebook, phone, or tablet.

LMS Integration

PocketLab Notebook is the digital platform for all the Conceptual Academy programs. PocketLab Notebook integrates with Google Classroom, ClassLink, and other LMS providers for sign-on and rostering.

Teacher Dashboard

Teachers can monitor student progress through the Teacher Dashboard and see student scores and responses in real time.

Next Generation Wireless Probeware

The Conceptual Academy programs integrate PocketLab sensors for next generation probeware measurements. All PocketLab sensors connect using Bluetooth to any operating system on any computer, Chromebook, phone, or tablet.



AI Assistant

The integrated Notebook AI assistant can grade student work and automatically generate lesson content. The AI-tools are compliant with District Privacy Agreements.

Automated Test and Assessment Generation

PocketLab Notebook can generate formative and summative assessments based off of the Conceptual Academy test bank and using AI-generated materials.

AI-Resistant Assignments

Lessons and activities in PocketLab Notebook are designed against direct cheating by student use of AI chatbots like ChatGPT.



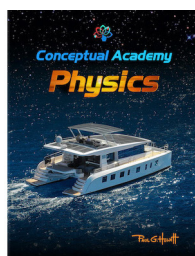
Conceptual
Academy

Powered
by

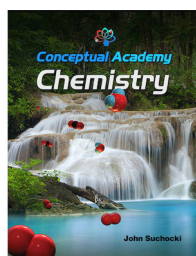
PocketLab
SCIENCE. EVERYWHERE.

Implementation Guide

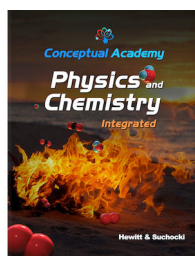
Six Science Programs for Mississippi Schools



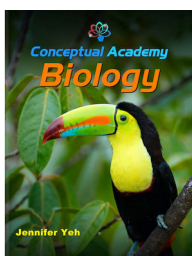
Physics



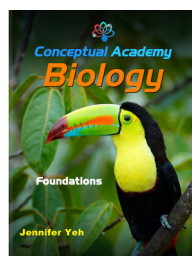
Chemistry



Physical
Science



Biology



Biology
Foundations



Earth & Space
Science

Overview

Conceptual Academy through the PocketLab Notebook platform offers six comprehensive science programs designed for high school implementation: Physics, Chemistry, Physical Science, Biology, Biology Foundations, and Earth & Space Science. Each program combines research-based pedagogy with practical classroom resources to support effective science education.

Keys to Our Approach:

- Activities that engage students in both content mastery and scientific practices
 - Complete implementation guides with detailed activity descriptions
 - Flexible resources adaptable to different classroom environments and teaching styles
 - Comprehensive standards alignment with transparent documentation
-

Our Educational Framework

Core Lessons and Lesson Activities

Our programs divide student resources into two complementary categories:

Core Lessons provide the foundational content through:

- Traditional text enhanced with interactive features
- Embedded video lessons for concept reinforcement
- Built-in assessment and student authoring tools
- Customizable content that instructors can modify and sequence

NOTEBOOK

A. Video: Universal Gravity

The Universal Law of Gravity
An introduction of the universal nature of the law of gravity. Duration: 1:19.



Independent Work

B1. Video Check

Newton concluded that gravity extends to the

☐ A top of a tree.

☐ B Stars.

NOTEBOOK

C. Newton's Insights

Legend tells us that when Newton was a young man sitting under an apple tree, he made a connection that changed the way we see the universe. He saw an apple fall. Perhaps he looked up through the tree branches toward the origin of the falling apple and noticed the Moon. In any event, Newton had the insight to realize that the force pulling on a falling apple is the same force that pulls on the Moon. Newton realized that Earth gravity reaches to the Moon.

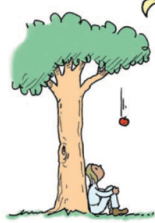
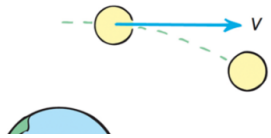


Figure 6.1
Newton realizes that Earth's gravity affects both the apple and the Moon.

A force by Earth on the Moon would explain why the Moon does not follow a straight line path, but instead circles about Earth. Circular motion is accelerated motion, which requires a force. Newton reasoned that the Moon is falling for the same reason the apple falls—they are both pulled by Earth's gravity.

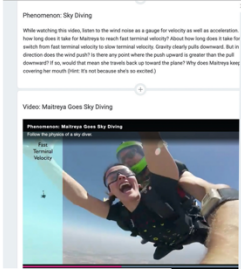


Activity Lessons offer diverse engagement opportunities:

- **Phenomena:** Inquiry-based investigations using real-world examples
- **Sensor Activities:** Data collection and analysis using PocketLab sensors
- **Hands-On Activities:** Guided investigations using accessible materials
- **PhET Simulations:** Interactive digital modeling experiences
- **Next-Time Questions:** Curiosity-driven problem solving
- **Writing Activities:** Creative expression and communication practice
- **Practice Pages:** Concept reinforcement through collaborative problem solving

Activity Lessons Complement Core Lessons

Phenomena

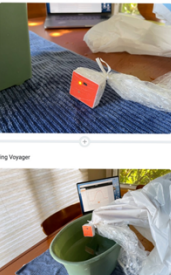


Hands-on Activity: Catapults

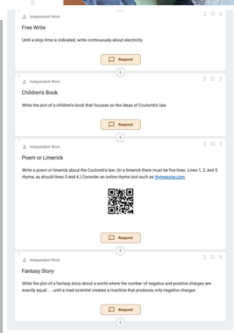


Hands-On

Sensors



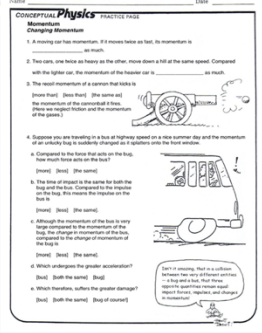
Writing Activities



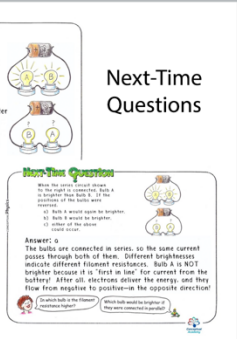
Simulations



Conceptual Worksheets



Bell Ringer NTQs



Next-Time Questions

The 5E Learning Cycle

Our activity lessons align with established pedagogical frameworks:

- **Engage:** Phenomena-based inquiries spark curiosity
- **Explore:** Sensor activities, hands-on labs, and simulations
- **Explain:** Next-time questions and guided discussions
- **Elaborate:** Writing activities and creative applications
- **Evaluate:** Practice pages and formative assessments

 Phenomena (Inquiry)	 PocketLab Activity	 Hands-On (Guided)	 Next-Time Question	 PhET Simulation	 Practice Page	 Writing or Presentation
5E: Engage	5E: Explore	5E: Explore	5E: Explore	5E: Explain	5E: Elaborate	5E: Evaluate
30 min	50 min	50 min	5 min	20 min	30 min	50 min
81 total activities	15 total activities	27 total activities	28 total activities	23 total activities	71 total activities	37 total activities

Implementation Support

Three Levels of Implementation

Level 1: Foundation (Allows for smooth transition by integrating with any previous program)

- Implement basic Core Lessons with embedded assessments
- Use Practice Page worksheets for collaborative problem solving
- Begin with easily accessible hands-on activities
- *Suitable for any classroom environment*

Level 2: Enhanced Engagement (Further builds instructor confidence)

- Include sensor activities and phenomena investigations
- Incorporate bell ringer Next-Time Questions for sustained inquiry
- Use writing activities for deeper concept development
- *Requires minimal additional equipment*

Level 3: Full Integration (Comprehensive implementation)

- Complete activity and lesson ecosystem with all resource types
- Advanced assessment techniques and student portfolios
- Cross-curricular connections and project-based learning
- Dive deep into conceptual and experiential team-based pedagogy
- *Maximizes program potential*
-

Instructor Resources

Each chapter provides comprehensive support materials:

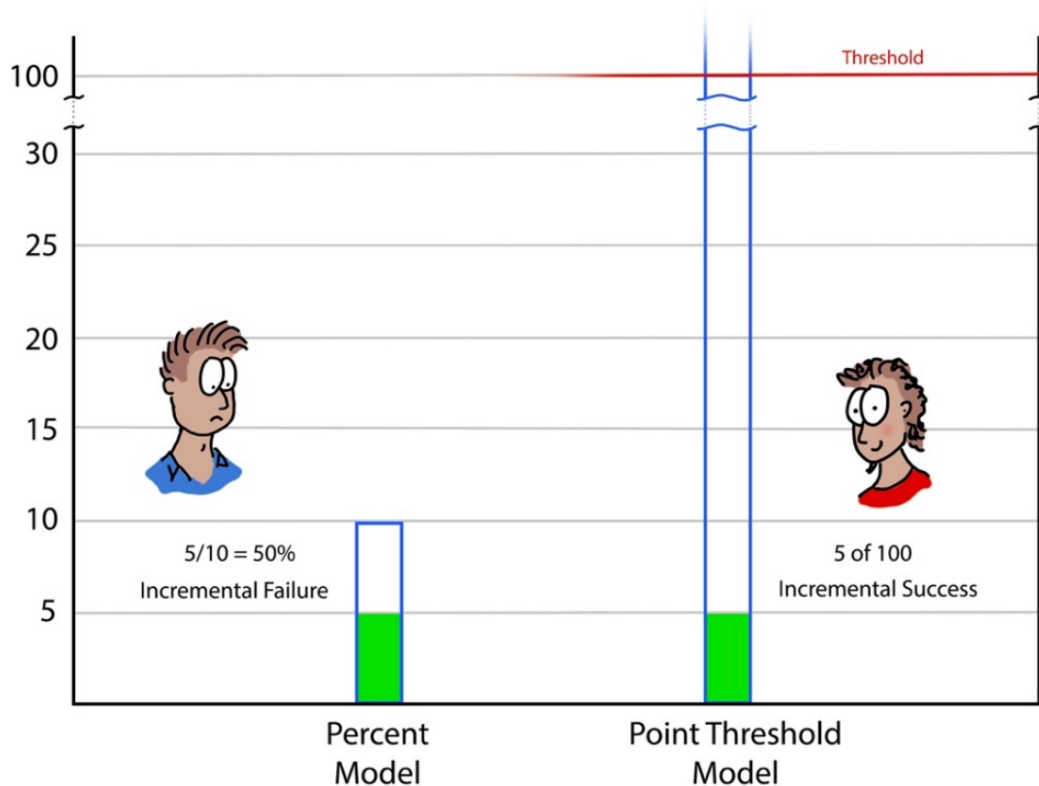
- Start guide
- Test banks and assessment tools
- Lesson pacing guide
- Teaching tips and implementation guidance
- Answer keys and scoring rubrics
- Alia AI teaching assistant trained on our conceptual content and teacher resources
- Materials lists and safety data sheets
- Sample parent communication letters
- Field Journal support and recommendations



Assessment Philosophy

Our "Point Threshold" approach shifts focus from punitive to formative assessment:

- Students earn points toward clearly defined thresholds
- Multiple opportunities for success reduce test anxiety
- Collaborative elements encourage peer support
- System integrates with traditional grading requirements
- Support differentiated learning



Standards Alignment and Documentation

Comprehensive Coverage

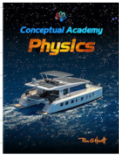
Our programs provide complete MCCRS alignment through systematic analysis:

- Every lesson mapped to relevant standards
- Multiple reinforcement opportunities throughout each program
- Clear documentation for administrative review
- Transparent methodology using innovative AI-assessment tools

AIM Charts: Standards Innovation

We've developed Assessment of Instructional Materials (AIM) charts that provide:

- 100% standards coverage verification
- Detailed rationale for each alignment claim
- Color-coded clarity for quick reference
- Unprecedented transparency in standards documentation

Section	PHY.1.1	PHY.1.2	PHY.1.3	PHY.1.4	PHY.1.5	PHY.1.6	PHY.1.7	PHY.1.8	PHY.2.1	PHY.2.2	PHY.2.3	PHY.2.4	PHY.2.5	PHY.2.6	PHY.2.7	PHY.2.8	PHY.2.9	PHY.2.10	PHY.2.11	PHY.3.1	PHY.3.2	PHY.3.3	PHY.3.4	PHY.3.5	PHY.3.6
Conceptual Academy Physics by Paul G. Hewitt 																									
AIM Chart (Assessment of Instructional Materials) Specialization of <i>Conceptual Academy Physics</i> to MCCRS Hover over a rating to see the detailed analysis																									
3 to 4 = Moves beyond expected student support in multiple components of the standard 2 to 3 = Supports the student in multiple components of the standard 1 to 2 = Supports the student in at least one component of the standard Does not apply																									
Introduction: About Science																									
0.1 Copernicus and Galileo					2.0														2.0						
0.2 Scientific Methods																									
0.3 Scientific Hypotheses	2.0	2.0			2.0	2.0			2.0			2.0		2.0	2.0			2.0				2.0			
0.4 Scientific Attitude																				2.0					
0.5 Science and Technology																				2.0					
0.6 Skepticism and Denialism																		2.0	2.0						
Chapter 1: Newton's First Law																									
1.1 Motion	2.3	2.0			2.3				2.3	2.5			2.0	3.0	2.5	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
1.2 Speed and Velocity	2.5		2.0		3.5								2.0	2.0	3.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0			
1.3 The Law of Inertia	2.0				2.5									2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
1.4 The Life of Isaac Newton														2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
1.5 Net Force	2.0		2.0		2.0									2.0	2.0	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
1.6 Static Equilibrium					2.0									2.8	2.8	3.0	2.0		2.0		3.0	2.0			
1.7 Support Force			2.0		2.0									2.5	3.0	3.0	2.0		2.0		2.5				2.0
1.8 Dynamic Equilibrium	2.0				2.3									2.7	2.5	2.0			2.0		2.0	2.0	2.0	2.0	
1.9 Moving Together	2.0	2.0			2.0									2.0	3.0			2.0	2.0	2.0	2.0	2.0			
Chapter 2: Newton's Second Law																									
2.1 Acceleration	2.7	2.0	2.0		3.0									2.0	2.0	2.0	2.0	2.3	2.0	2.0		2.0			
2.2 Net Force Causes Acceleration	2.0				3.5									2.0	2.5		2.0	2.0	2.0	2.0	2.0	2.0			
2.3 Mass, Inertia, Volume, and Weight	2.0		2.0		2.5	2.0			2.7	2.0			2.0	2.0	3.3		2.0	2.0	2.0	2.0	2.0	2.0			2.0
2.4 Mass Resists Acceleration	2.0				2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.5		2.0	2.0		2.0	2.0	2.0			
2.5 Newton's Second Law	2.0		2.0		3.0	2.0			3.0	2.5	2.0		4.0	2.5	2.5					2.0					
2.6 Friction	2.5	2.0	2.0		2.3	2.0	2.0		3.7	4.0	3.7	2.0	2.0	3.0	3.3	2.0	3.3			2.0		2.5			
2.7 Free Fall	2.5	2.5	2.0		4.0	2.0	2.0		3.0	2.5	2.5	2.0	2.7	2.3	3.0	2.5	2.5	3.0	2.0	2.0	2.0	2.3			
2.8 Falling through Air	2.7	3.0			3.7	2.3	2.0		3.3	2.5	2.0		2.0	2.7	3.0			2.3	2.0	2.0		2.0	2.0		
Chapter 3: Newton's Third Law																									
3.1 Interactions					2.0				2.7	2.0	2.0		2.0	2.8	3.0		3.0	2.0		2.0	2.0	2.0	2.0		
3.2 Action and Reaction	2.0				2.0	2.0			3.7	2.0	2.0	2.0		3.0	3.8		3.0	2.0			2.0	2.0			
3.3 Different Masses	2.0		2.0		2.5	2.0	2.0		3.3	2.0	2.5	2.0	3.0	2.7	3.7			3.0	2.0	2.0	2.3	2.0	2.0		2.0
3.4 Different Objects	2.0				2.0		2.0		2.3	2.0	2.0		2.0	2.0	2.5		2.0				2.0				
3.5 Mass Cost Problem	2.0		2.0		2.0	2.0			4.0	4.0	3.7	2.0	3.5	4.0	3.3		4.0		2.0	2.0	2.0	2.0			

Example: Our physics program shows 127+ reinforcement points per standard across 171 lessons, compared to typical 1-2 touchpoints in traditional textbooks.

Professional Development and Support

Getting Started Resources

- Content Start Guides explaining all program components
- Activity Handbook with 40+ classroom-tested techniques
- Field journal best practices for student documentation
- Double helical model of teaching methods
- "How to Study Effectively" materials for both teachers and students



Start Guide



Class Activity Handbook



Sample Field Journal Rubric



*Double Helical
Model of Teaching*



*How to Study Effectively
Smart Guide*

Ongoing Support

- Technical assistance through PocketLab platform
- Community forums and resource sharing
- Regular updates and content improvements
- Direct access to program development team

Training Options

- Self-paced implementation using provided guides
- Virtual workshops on specific teaching techniques
- Customized professional development for districts
- Collaborative planning sessions for multi-school adoption

Benefits for Mississippi Educators

For Teachers:

- Reduces preparation time with ready-to-use activities
- Provides clear structure while maintaining flexibility
- Offers multiple ways to assess student understanding
- Includes detailed implementation guidance

For Students:

- Engages through hands-on and inquiry-based learning
- Builds scientific practices alongside content knowledge
- Supports diverse learning styles and abilities
- Develops critical thinking and communication skills



For Administrators:

- Ensures complete standards compliance with documentation
- Provides scalable implementation across different contexts
- Offers transparent assessment and progress tracking
- Requires minimal additional resource investment

Next Steps

To explore Conceptual Academy programs:

1. **Review detailed AIM charts** showing complete MCCRS alignment
2. **Access sample materials** through PocketLab Notebook platform
3. **Connect with our team** for questions and implementation planning
4. **Consider pilot implementation** in select classrooms or courses

Contact Information:

- Contact: ThePocketLab.com/contact
- Learn More: ThePocketLab.com/conceptual-academy
- Platform access: ThePocketLab.com
- Training materials: ThePocketLab.com/training

Conceptual Academy:

Research-based science education with practical and engaging classroom implementation.

Conceptual Academy for
Foundations of Biology, Biology, Chemistry,
Earth and Space, Physical Science, and Physics

Presentation Video

Video Link:

<https://www.thepocketlab.com/conceptual-academy-curriculum-guide-single-video>