



# Correlation

## Standards of Learning for Virginia

### Science

  

# Grade Five

**For more information about this correlation,  
a quote or to place an order, please contact:**

O'Brien Associates  
2512 Grenoble Road  
Richmond, VA 23294  
Local 804-346-2424  
Toll-free 800-340-7323  
Fax 804-747-1378  
email: [info@obrienassociates.com](mailto:info@obrienassociates.com)

April 2016

**Standards of Learning for Virginia  
Science  
Grade Five**

The fifth-grade Standards emphasize the importance of selecting appropriate instruments for measuring and recording observations. The organization, analysis, and application of data continue to be an important focus of classroom inquiry. Students are introduced to more detailed concepts of sound and light and the tools used for studying them. Key concepts of matter, including those about atoms, molecules, elements, and compounds, are studied, and the properties of matter are defined in greater detail. The cellular makeup of organisms and the distinguishing characteristics of groups of organisms are stressed. Students learn about the characteristics of the oceans and Earth's changing surface.

The fifth-grade Standards focus on student growth in understanding the nature of science. This scientific view defines the idea that explanations of nature are developed and tested using observation, experimentation, models, evidence, and systematic processes. The nature of science includes the concepts that scientific explanations are based on logical thinking; are subject to rules of evidence; are consistent with observational, inferential, and experimental evidence; are open to rational critique; and are subject to refinement and change with the addition of new scientific evidence. The nature of science includes the concept that science can provide explanations about nature, can predict potential consequences of actions, but cannot be used to answer all questions.

**Scientific Investigation, Reasoning and Logic**

**5.1 The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations.**

<i>Hypothesis, Theory, Law</i>	T/820	978-1-62717-868-6	10.95	Rourke Ed Media
Predict! Plan an Experiment	N	978-1-4777-3086-7	42.00	Rosen Classroom
<i>Using the Scientific Method</i>	T/770	978-1-6271-7870-9	10.95	Rourke Ed Media
<i>Using Tools to Understand Our World</i>	S/1030	978-1-61810-230-0	8.95	Rourke Ed Media
What Are the Facts? Collecting Information	N/690	978-1-4042-4067-4	42.00	Rosen Classroom

**Force, Motion and Energy**

**5.2 The student will investigate and understand how sound is created and transmitted and how it is used.**

Adventures in Sound with Max Axiom, Super Scientist *	U/630	978-0-7368-9962-8	48.70	Capstone Classroom
Breaking the Sound Barrier (Light and Sound)	L/470	A64871	53.00	Benchmark Education
Light and Color (Light and Sound) *	M/360	A64888	56.00	Benchmark Education
Light and Sound Technology *	R/680	A62280	51.00	Benchmark Education
Listening to Sound	Q	A62273	51.00	Benchmark Education
Sound (Bridges) *	T/1070	Y13450	69.00	Benchmark Education
Sound Is Energy	H/260	A64864	53.00	Benchmark Education
The Science of a Rock Concert: Sound in Action	T/820	978-1-4296-5075-5	48.70	Capstone Classroom
Understanding Sound (Infomax CC Readers)	L/570	978-1-4777-2394-4	42.00	Rosen Classroom
<i>Waves of Light and Sound *</i>	U/760	978-1-6271-7871-6	10.95	Rourke Ed Media

Title	GR / Lexile	ISBN/Code No.	Six-pack Price	Publisher
-------	----------------	---------------	-------------------	-----------

*Titles in italics are single copy; order six to make a six-pack.*

**5.3 The student will investigate and understand basic characteristics of visible light and how it behaves.**

Adventures in Sound with Max Axiom, Super Scientist *	U/630	978-0-7368-9962-8	48.70	Capstone Classroom
Light and Color (Light and Sound) *	M/360	A64888	56.00	Benchmark Education
Light and Color: What We See	M/700	978-1-4777-2638-9	42.00	Rosen Classroom
Light and Sound Technology *	R/680	A62280	51.00	Benchmark Education
Sound (Bridges) *	T/1070	Y13450	69.00	Benchmark Education
Thomas Edison and the Light Bulb	U/690	978-0-7368-9763-1	48.70	Capstone Classroom
<i>Waves of Light and Sound *</i>	<i>U/760</i>	<i>978-1-6271-7871-6</i>	<i>10.95</i>	<i>Rourke Ed Media</i>

**Matter**

**5.4 The student will investigate and understand that matter is anything that has mass, takes up space; and occurs as a solid, liquid, or gas.**

<i>Atoms and Molecules (My Science Library)</i>	<i>S/930</i>	<i>978-1-61810-239-3</i>	<i>8.95</i>	<i>Rourke Ed Media</i>
Fighter Jet: Atoms and Molecules	L	978-1-4109-2885-6	48.94	Capstone Classroom
Liquids and Gases (Physical Science)	P/610	A50714	49.00	Benchmark Education
<i>Matter Comes in All Shapes (My Science Library)</i>	<i>J/320</i>	<i>978-1-61741-941-6</i>	<i>8.95</i>	<i>Rourke Ed Media</i>
Measuring Matter (Physical Science)	O/620	A50706	49.00	Benchmark Education
<i>Melting Matter (My Science Library)</i>	<i>N/560</i>	<i>978-1-61741-954-6</i>	<i>8.95</i>	<i>Rourke Ed Media</i>
Solids (Physical Science)	N/510	A34794	49.00	Benchmark Education
The Dynamic World of Chemical Reactions with Max Axiom	V/790	978-1-4296-5719-8	48.70	Capstone Classroom

**Living Systems**

**5.5 The student will investigate and understand that organisms are made of one or more cells and have distinguishing characteristics that play a vital role in the organism's ability to survive and thrive in its environment.**

Body Systems: Human Cells	U/780	A50862	51.00	Benchmark Education
Plants and Animals of the Chesapeake Bay	L	978-1-4339-9782-2	53.70	Gareth Stevens Cl
Saving the Chesapeake Bay	L	978-1-4339-9786-0	53.70	Gareth Stevens Cl
The Basics of Cell Life with Max Axiom, Super Scientist	W/720	978-1-4296-3905-7	47.70	Capstone Classroom
Tributaries of the Chesapeake Bay	L	978-1-4339-9794-5	53.70	Gareth Stevens Cl
What Makes a Plant a Plant?	Q/760	A62297	51.00	Benchmark Education

**Interrelationships in Earth/Space Systems**

**5.6 The student will investigate and understand characteristics of the ocean environment.**

Freshwater or Salt Water?	K/520	978-1-4777-2373-9	42.00	Rosen Classroom
Oceans and Seas (Mapping Earthforms)	R/950	978-1-4034-9623-2	48.94	Capstone Classroom

Title	GR / Lexile	ISBN/Code No.	Six-pack Price	Publisher
-------	-------------	---------------	----------------	-----------

*Titles in italics are single copy; order six to make a six-pack.*

## Earth Patterns, Cycles, and Change

### 5.7 The student will investigate and understand how the Earth's surface is constantly changing.

All Kinds of Rocks (Infomax CC Readers)	I/510	978-1-4777-2408-8	42.00	Rosen Classroom
Earth: Fast Changes (Bridges)(below-level)	M/580	A76805	54.00	Benchmark Education
Earth: Fast Changes (Navigators)(on-level)	Q/710	A50781	51.00	Benchmark Education
Earth: Measuring Its Changes (Bridges)(below-level)	M/610	A76799	54.00	Benchmark Education
Earth: Measuring Its Changes (Navigators)(on-level)	R/710	A50803	51.00	Benchmark Education
Earth: Slow Changes (Bridges)(below-level)	L/570	A76782	54.00	Benchmark Education
Earth: Slow Changes (Navigators)(on-level)	Q/690	A5079X	51.00	Benchmark Education
<i>Earth's Changing Surface (My Science Library)</i>	<i>J/640</i>	<i>978-1-61741-938-6</i>	<i>8.95</i>	<i>Rourke Ed Media</i>
Earthquake! (What Changes Our Earth)	H/280	A45931	53.00	Benchmark Education
<i>Erosion</i>	<i>S/880</i>	<i>978-1-6271-7873-0</i>	<i>10.95</i>	<i>Rourke Ed Media</i>
Inside Earth: Rocks and Minerals	G/400	978-1-4488-9044-6	42.00	Rosen Classroom
Learning about Rocks, Weathering and Erosion with Graphic Organizers	Z	978-1-4042-5043-7	42.00	Rosen Classroom
Learning about the Effects of Natural Events with Graphic Organizers	Y	978-1-4042-5039-0	42.00	Rosen Classroom
Volcanoes (Learning About Landforms)	M/820	978-1-4329-9549-2	48.94	Capstone Classroom
Volcanoes Change the Land (Infomax CC Readers)	L/590	978-1-4777-2400-2	42.00	Rosen Classroom
Weathering and Erosion (What Changes Our Earth)	K/410	A46008	53.00	Benchmark Education

\*Title in multiple strands

Price and availability subject to change without notice.

**For more information about this correlation,  
a quote or to place an order, please contact:**

O'Brien Associates  
2512 Grenoble Road  
Richmond, VA 23294  
Local 804-346-2424  
Toll-free 800-340-7323  
Fax 804-747-1378  
email: [info@obrienassociates.com](mailto:info@obrienassociates.com)

April 2016

Title	GR / Lexile	ISBN/Code No.	Six-pack Price	Publisher
-------	----------------	---------------	-------------------	-----------

*Titles in italics are single copy; order six to make a six-pack.*