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THE PLACE FOR READING COMPREHENSION

Welcome to Readorium's Rising Reader (grade 3-5) and Readorium Scholars (grade 6-8). Readorium, is a "smart" web-based software program designed to help elementary and middle school readers comprehend science text based on the National Science Standards for grades 3-8. Our department's goal is to increase student-reading comprehension of scientific informational text. We believe this can be accomplished through a strong school-wide commitment along with a deep homeschool connection with the implementation and usage of Readoiurm at school and home. The Orange Public Schools 2015/16 SY launch of Readorium (3<sup>rd</sup>-8<sup>th</sup> grade) will take place in the week commencing Monday, November 2, 2015.

The Mathematics and Science Department have developed a plan to help teachers, administrators, and parents, understand and successfully implement Readorium within their schools, while providing students greater opportunities to learn. The three-part plan will guide schools toward sustained usage and implementation of Readorium to help all students achieve and maintain reading success. It connects a valuable enrichment program to the district's rigorous curriculum aligned with content standards.

Once correctly and fully implemented, we will assist all learners make breakthrough progress in reading comprehension with the support and dedication of students, families, and educators. This document is designed to help support teachers' efforts implementing and utilizing Readorium as we work toward greater student achievement gains.

## **Readorium Rollout Plan**

Part One – Preparations (October 2015): During this phase, teachers must:

- Register all students with Readorium by providing the science department with the student's first and last name and student ID.
- Secure the ability for classes to access Readorium during science class, according to the Readorium expectations for blocks and period schedules below.
- Watch the "Getting started" video on Readroium and get familiar with the program
- Attend the Readorium professional development training.
- Monitor student's usage on Readorium.
- Provide all students with their Username, Password and class id.
- Ensure that all students go home with the Readorium Parent Letter

**Part Two: Effective Readorium Instruction in Science Classroom and Home:** Teachers must be devoted to providing students with time and resources to access Readorium in class in addition to teaching the core science instructional materials with fidelity. There must also be a deep connection between the school and the students' homes. In addition to classroom usage of Reaorium, students must be assigned Readorium as weekly/nightly homework. *The weekly in class and homework expectations are as follows:* 

Class Schedule	In-Class Instuction	Homework	Total
Block Schedule	45 minutes (bi-weekly)	90 & 45 minutes	90 minutes
(A-B Days)			
Modified Schedule	45 minutes	45 minutes	90 minutes
(A-B days + 45 min Fri.)			
Period Schedule	45 Minutes	45 minutes	90 minutes
(45 Min M-F)			

**Note: Readorium's in-class instruction** must take place minimally as described. This can be accomplished by use of the computer lab or computer carts. Please make the necessary arrangements in advance. It must not replace the core science instruction block/period the remained of the week. Note: Readorium's home instruction; must require students to spend the additional time described above at home on Readorium.

**Part Three: Additional Support: Extended Day Option:** This phase is an intervention option for students struggling to meet the above expectations. This phase is intended to provide students with the opportunity to attend an extended day program in schools where it is feasible. It is also expected that students continue the Readorium in-class expectation as well as the homework expectations.

## <u>Readorium Science Curriculum – Connected Learning.</u>

In order to connect Redorium to the district's science curriculum, we have aligned Readoirum books with grade units. Teachers are required to prioritize the assignment of Readorium books as follows"

- First Priotiy: Books identified below as being connected to unit topics
- Second Priority: Magazines identified below as being connected to unit topics
- Third Priority: Books/Magazines not identified within district grade bands (3-5 or 6-8).

All students must begin with the Readorium book "Science What's it All About?," Science Girls, and/or How We Learn first as an introduction to science (unless they've read them in grade 3).

3rd GRADE			
Units	Rising Readers Books	<b>Rising Readers Magazines</b>	
Sun, Moon and Stars	• Deep Space	<ul> <li>Our Own Star, the Sun</li> </ul>	
	<ul> <li>Our Planet Earth</li> </ul>	• The Biggest Shadow of All: A Solar	
	<ul> <li>Living in Space</li> </ul>	Eclipse	
		<ul> <li>Where Did the Planets Come</li> </ul>	
		From?	
		<ul> <li>Treasures in the Sky</li> </ul>	
		<ul> <li>Strange Stars</li> </ul>	
		<ul> <li>Our Galactic Neighborhood</li> </ul>	
Water	<ul> <li>Weather Around the World</li> </ul>	• Splash	
	<ul> <li>Exploring the Oceans Depths</li> </ul>	• The Water Cycle	
	(water pressure)		
	<ul> <li>Polluting our Earth (water</li> </ul>		
	pollution)		
	<ul> <li>Earth's Systems (includes the</li> </ul>		
	hydroshpere)		
Matter and Energy	<ul> <li>Powering Our Lives</li> </ul>	<ul> <li>Matter Matters</li> </ul>	
	<ul> <li>Amusement Park Physics</li> </ul>		
	Making Movie Magic		
	4th Grade		
Units	Rising Readers Books	Rising Readers Magazines	
Weather Instruments	<ul> <li>Weather Around the World</li> </ul>	• The Water Cycle	
	<ul> <li>Exploring the Oceans Depths</li> </ul>	• Look at a Rainbow: Where Did That	
	(discusses water pressure)	Come From?	
	<ul> <li>Polluting our Earth (includes</li> </ul>		
	water pollution)		
	<ul> <li>Earth Systems (include</li> </ul>		
	hydrosphere)		
Magnetism and Electricity	<ul> <li>Unbalanced Forces (magnetism)</li> </ul>		
	<ul> <li>Science of Music (electricity)</li> </ul>		
	Olympic Champs Physics (forces)		
	Amusement Park Physics (forces)		
	• Good Vibes - Making Waves with		
	Sound (sound waves)		
	<ul> <li>Technology Changes Medicine</li> </ul>		

	(Talks about human electrical	
	forces- like nervous impulses)	
	• The Computer Revolution	
	(discusses circuitry)	
Structures of Life	• Exploring Ecosystems	Interesting and Funny Animal
	Snider Stories	Relationshins
	Bootlomania	Relationships
	Invasiva Spasias	
	• The Secret Language of Animals	
	• The Secret Language of Ammais	
	(about animal adaptations for	
	communication)	
	Deadliest Creatures (animal	
Eauth Mataniala	adaptations)	
Earth Materials	Ihe Changing Face of Earth	Rocks Rock
	Natural Hazards that Shape the Earth	
Iluito	Dising Decdorg Decks	Dising Decidence Magazines
Diversity of Life	A Demonder of Life	Rising Reduers Magazines
Diversity of Life	• Dependency of Life	Ine venus Flytrap: A Meat-Eating
	• Life and Death in the wild	Plant
	Buzzing About Bees and Wasps	• The Amazing Water Bear
	• Solving Crimes with Forensics	(microscopic animal)
	(microscope and the cell)	• Bee
	• Spider Stories	Bee-havior
	• Inheritance: It's All in the Genes	
	• The Weird and Wonderful World	
	of Plants	
	Deep Sea Creatures	
	<ul> <li>Birds of a Feather</li> </ul>	
	<ul> <li>Smarter Than You Think</li> </ul>	
	<ul> <li>Our Gross World (about strange</li> </ul>	
	adaptations of animals)	
Food and Nutrition	Food Chemistry	
Levers and Pulleys	Making Movie Magic (pulleys)	
	Improving Lives with Assistive	
	Technology	
	• On the Move with Transportation	
	Tech (Deals with forces)	
	6th GRADE	
Units	Readorium Scholars Books	Readorium Scholars Magazines
Physical Science	Lights, Sound Action	Cafeteria Chemistry
Connections	Sports Physics	Kitchen Chemistry
	• Fizz, Pop, Boom, and Beyond:	• Do Scientists Cheat?
	Understanding Chemistry 1	
	• Fizz, Pop, (etc.) Understanding	
	Chemistry 2	
	Newton's Law	
	Scientists Who Changed the	
	World	
	The Scientific Method	

	Character Traits of Great	
	Scientists	
	• Superstition or Science?	
	Microscopes	
Water and the Water	Weather Stories	
Cycle	<ul> <li>Artificial Satellites (discusses</li> </ul>	
	weather satellites)	
Weather and Climate	Weather Stories	
	Desert Biomes	
	<ul> <li>Life in the Tundra</li> </ul>	
	<ul> <li>Why Save Rainforests?</li> </ul>	
	Prairie Ecosystems	
Oceans	• The Importance of Coral Reefs	<ul> <li>The Very Peculiar Anglerfish</li> </ul>
	Life in a Research Ship	Life Near Undersea Vents
		<ul> <li>The Humongous Megafish</li> </ul>
		• The Venomous Sea Wasp
		• The World's Most Disgusting
		Animal: The Hagfish
		<ul> <li>The Adventure of Keeping an</li> </ul>
		Aquarium
		• The Many Uses of Submarines
Earth and Time	Sea Floor Spreading	
	<ul> <li>Continental Drift</li> </ul>	
Plate Tectonics	• On the Move with Plate Tectonics	
	<ul> <li>Sea Floor Spreading</li> </ul>	
	Natural Disaster	
	Earthquakes	
	Volcanic Expedition	
Weathering and Erosion	<ul> <li>Formation of Mountains and</li> </ul>	
	Deserts	
The Solar System	<ul> <li>Inner and Outer Planets</li> </ul>	<ul> <li>Space Junk: Are We Trashing our</li> </ul>
	Space Rocks	Solar System?
		<ul> <li>The Deep Mystery of Black Holes</li> </ul>
		• The Search for Life on Mars
Earth, the Moon, and the	• Earth in Motion	
Sun	Total Lunacy	
Galaxies and the Universe	Lives of Stars	
	• Space Race	
Soil and Freshwater		
Resources		
Natural Resources and	Pollution	
Conservation		
	7 TH GRADE	
Units	Readorium Scholars Books	Readorium Scholars Magazines
Ecosystems	• Life in the Tundra	• Artificial Reefs: How and Why We
	• Caves	
	<ul> <li>(Discusses animals in different</li> </ul>	<ul> <li>The Illegal Wildlife Trade</li> </ul>

	parts of caves)	Invasive Species
	Desert Biomes	What Happens When Something
	<ul> <li>Surviving in Nature</li> </ul>	Goes Extinct?
	Prairie Ecosystems	<ul> <li>50 Amazing Animal Facts</li> </ul>
	• Life on a Research Ship	How Plants Trick Animals
	Rainforests	Animal Cannibals
	• Coral Reefs	• A Weird Animal: The Binturong
		• The Surprising Intelligence of Birds
		• The Marabou Stork: Exceptionally
		Ugly and Gross
		Vampires in Nature
		• Tardigrades AKA Water Bears
		Carnivorous Dinosaurs
Cell Structure and	• Our Bodies: The Most Marvelous	• The Tinjest Killers
Function	Machines	
Cell Processes		
	Mitosis and Meiosis	
	Nature's Weird Surprises	
Heredity	• Genetics	• The Warrior Gene
Code of Life	• Genetics	• Selective Breeding, Genetic
	Nature's Weird Surprises	Engineering, and Pedigrees
	• Life on a Research Ship	
Evolution	• Surviving in Nature	Getting DNA Out of Ancient Fossils
	5	5
Earth and Life History	• Big Delicious Earth	• Gold - The Magnificent Metal
	• Caves	• Crystals
	Volcanic Expeditions	
	<ul> <li>Scientists who Changed the</li> </ul>	
	World	
Human Body Systems	• Our Bodies: The Most Marvelous	• The Teenage Brain - Why Teens Act
	Machines	so Twisted!
	<ul> <li>Becoming and Staying Healthy</li> </ul>	<ul> <li>How Video Games Affect Your</li> </ul>
		Personality
		<ul> <li>Pimples, Whiteheads, &amp;</li> </ul>
		Blackheads, Oh No!
		<ul> <li>From Blinking to Thinking: The</li> </ul>
		Amazing Human Brain
		• The Brain! What's in There?
		<ul> <li>Your Brain at Sleep</li> </ul>
		• Teeth
		• Dreams
		<ul> <li>The Science of Laughter</li> </ul>
		<ul> <li>Making Memories</li> </ul>
		Artificial Blood
		<ul> <li>Strange Medical Conditions</li> </ul>
		• 25 Fascinating Facts About Humans

	• Cloning: The More the Merrier
Support and Movement	<ul> <li>The Limits of the Human Body</li> <li>Artificial Limbs</li> <li>Bones Tell the Story</li> </ul>
	<ul> <li>Sounds and Hearing</li> <li>Optical Illusions: Is Seeing Believing?</li> </ul>

## **Monitoring Student Progress**

Research shows that involving students in monitoring their own progress lead to improved student achievement. Daily, weekly, and monthly reviews enhance the learning of new information and, call attention to areas where additional support or interventions are needed. It is crucial that all students' progress is monitored continuously and routinely and students are active participants in the process.

All teachers are to review and analyze Readorium's student usage reports to make decisions regarding the student's progress. Students and parents must be communicated with bi-weekly in regards to progress and their commitment to Readorium using the district's 'Student Progress Communication Form'.

Parents can provide a great deal of help with promoting reading at home and away from school. Each school is encouraged to create its own plan for involving parents and community members, based on its unique culture. We must encourage parents to monitor their child's nightly use of the program and to encourage and motivate their children at home.

This is a remarkable opportunity that will reap tremendous benefits if we all work relentlessly to ensure students are engaged, motived, monitored and rewards as they make continued progress toward effective reading comprehension.