



**WESTSIDE**  
ATLANTA CHARTER SCHOOL

## Curriculum Map

QTR 1:	Grade: 7 <sup>th</sup> (Life Science)	YEAR: 2018-2019
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Science				
Date	Standard	Assessment	Additional Info.	Extension
Week 1	<b>Culture Camp/Intro to Life Science</b>		Community Building Hopes and Dreams Creating Science Norms	
Week 2	<b>Culture Camp/Intro to Life Science</b>		Community Building Interactive Notebooks Brain States Lesson	
Week 3	<b>Culture Camp/Scientific Practices</b>		Community Building - Kindness Lab Safety Scientific Method	
Week 4	<b>Intro to Living Things and Cells</b> <b>S7L2. Basic Needs of Organisms</b>	<input type="checkbox"/> Pretest: Cells (HMH)	HMH: The Characteristics of Cells	<u>IXL Science</u>
Week 5	<b>Cell Theory and The Two Types of Cells</b> <b>S7L2. Basic Needs of Organisms</b> <i>a. Develop a model and construct an explanation of how cell structures (specifically the nucleus, cytoplasm, cell membrane, cell wall, chloroplasts, lysosome, and mitochondria) contribute to the function of the cell as a system in obtaining nutrients in order to grow, reproduce, make needed materials, and process waste.</i>	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz: Let's Cell-a-brate!	HMH: The Characteristics of Cells	
Week 6	<b>Cell Structures and Functions</b>	<input type="checkbox"/> Daily Exit Tickets and	HMH: Cell Structure and	

	<p><b>S7L2.</b> Basic Needs of Organisms  <i>a. Develop a model and construct an explanation of how cell structures (specifically the nucleus, cytoplasm, cell membrane, cell wall, chloroplasts, lysosome, and mitochondria) contribute to the function of the cell as a system in obtaining nutrients in order to grow, reproduce, make needed materials, and process waste.</i></p>	<p>Homework  <input type="checkbox"/> Summative: Cell Analogy Project</p>	<p>Function</p>	
<p>Week 7</p>	<p><b>Diffusion and Homeostasis</b>  <b>S7L2.</b> Basic Needs of Organisms  <i>a. Develop a model and construct an explanation of how cell structures (specifically the nucleus, cytoplasm, cell membrane, cell wall, chloroplasts, lysosome, and mitochondria) contribute to the function of the cell as a system in obtaining nutrients in order to grow, reproduce, make needed materials, and process waste.</i></p>	<p><input type="checkbox"/> Daily Exit Tickets and Homework  <input type="checkbox"/> Formative: Gummy Bear Lab  <input type="checkbox"/> Quiz: Diffusion</p>	<p>HMH: Homeostasis and Cell Processes</p>	
<p>Week 8</p>	<p><b>Diffusion and Homeostasis</b>  <b>S7L2.</b> Basic Needs of Organisms  <i>a. Develop a model and construct an explanation of how cell structures (specifically the nucleus, cytoplasm, cell membrane, cell wall, chloroplasts, lysosome, and mitochondria) contribute to the function of the cell as a system in obtaining nutrients in order to grow, reproduce, make needed materials, and process waste.</i></p>	<p><input type="checkbox"/> Daily Exit Tickets and Homework  <input type="checkbox"/> Summative: Egg-mosis (Lab Report)</p>	<p>HMH: Homeostasis and Cell Processes</p>	
<p>Week 9</p>	<p><b>Diffusion and Homeostasis</b>  <b>S7L2.</b> Basic Needs of Organisms  <i>a. Develop a model and construct an explanation of how cell structures (specifically the nucleus, cytoplasm, cell membrane, cell wall, chloroplasts, lysosome, and mitochondria) contribute to the function of the cell as a system in obtaining nutrients in order to grow, reproduce, make needed materials, and process waste.</i></p>	<p><input type="checkbox"/> Daily Exit Tickets and Homework  <input type="checkbox"/> Summative: Egg-mosis (Lab Report)</p>	<p>HMH: Homeostasis and Cell Processes</p>	

**Curriculum Map**

QTR 2:	Grade: 7 <sup>th</sup>	YEAR: 2018-2019
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Sciences				
Date	Standard	Assessment	Additional Info.	Extension
Week 10	<p><b>S7L4. Interdependence of Organisms</b>                      a. Construct an explanation for the patterns of interactions observed in different ecosystems in terms of the relationships among and between organisms and abiotic components of the ecosystem. (Clarification statement: The interactions include, but are not limited to, predator-prey relationships, competition, mutualism, parasitism, and commensalism.)</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Formative Assessment: Pre-Assessment</li> <li><input type="checkbox"/> Daily Exit Tickets and Homework</li> </ul>	HMH: Introduction to Ecology	<p><a href="#">Biome Secret Mission</a></p> <p><a href="#">IXL Science</a></p>
Week 11	<p><b>S7L4. Interdependence of Organisms</b>                      a. Construct an explanation for the patterns of interactions observed in different ecosystems in terms of the relationships among and between organisms and abiotic components of the ecosystem. (Clarification statement: The interactions include, but are not limited to, predator-prey relationships, competition, mutualism, parasitism, and commensalism.)</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Daily Exit Tickets and Homework</li> <li><input type="checkbox"/> Quiz</li> <li><input type="checkbox"/> Summative: Want Ad</li> </ul>	HMH: Interaction in Communities	
Week 12	<p><b>S7L4. Interdependence of Organisms</b>                      b. Develop a model to describe the cycling of matter and the flow of energy among biotic and abiotic components of an ecosystem. (Clarification statement: Emphasis is on tracing movement of matter and flow of energy, not the biochemical mechanisms of photosynthesis and cellular respiration.)</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Daily Exit Tickets and Homework</li> <li><input type="checkbox"/> Field Trip: Piedmont Park (It's Lonely at the Top)</li> </ul>	HMH: Roles in Energy Transfers	
Week 13	<p><b>S7L4. Interdependence of Organisms</b>                      b. Develop a model to describe the cycling of matter and the flow of energy among biotic and abiotic components of</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Daily Exit Tickets and Homework</li> </ul>	HMH: Roles in Energy Transfers	

	<p>an ecosystem. (Clarification statement: Emphasis is on tracing movement of matter and flow of energy, not the biochemical mechanisms of photosynthesis and cellular respiration.)</p> <p>c. Analyze and interpret data to provide evidence for how resource availability, disease, climate, and human activity affect individual organisms, populations, communities, and ecosystems.</p>			
Week 14	<p><b>S7L4. Interdependence of Organisms</b></p> <p>b. Develop a model to describe the cycling of matter and the flow of energy among biotic and abiotic components of an ecosystem. (Clarification statement: Emphasis is on tracing movement of matter and flow of energy, not the biochemical mechanisms of photosynthesis and cellular respiration.)</p> <p>c. Analyze and interpret data to provide evidence for how resource availability, disease, climate, and human activity affect individual organisms, populations, communities, and ecosystems.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Daily Exit Tickets and Homework</li> <li><input type="checkbox"/> Quiz</li> </ul>	<p>HMH: Roles in Energy Transfers</p>	
Week 15	<p><b>S7L4. Interdependence of Organisms</b></p> <p>d. Ask questions to gather and synthesize information from multiple sources to differentiate between Earth's major terrestrial biomes (i.e., tropical rainforest, savanna, temperate forest, desert, grassland, taiga, and tundra) and aquatic ecosystems (i.e., freshwater, estuaries, and marine). (Clarification statement: Emphasis is on the factors that influence patterns across biomes such as the climate, availability of food and water, and location.)</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Daily Exit Tickets and Homework</li> </ul>	<p>HMH: Interaction of Living Things (Biomes)</p>	
Week 16	<p><b>S7L4. Interdependence of Organisms</b></p> <p>d. Ask questions to gather and synthesize information from multiple sources to differentiate between Earth's major terrestrial biomes (i.e., tropical rainforest, savanna, temperate forest, desert, grassland, taiga, and tundra) and aquatic ecosystems (i.e., freshwater, estuaries, and marine). (Clarification statement: Emphasis is on the factors that influence patterns across biomes such as the climate, availability of food and water, and location.)</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Daily Exit Tickets and Homework</li> </ul>	<p>HMH: Interaction of Living Things (Biomes)</p>	

Week 17	Project week	<input type="checkbox"/> Summative: Endangered Species Project		
Week 18	Project week	<input type="checkbox"/> Summative: Endangered Species Project		

### Curriculum Map

QTR 3:	Grade: 7 <sup>th</sup>	YEAR: 2018-2019
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Sciences				
Date	Standard	Assessment	Additional Info.	Extension
Week 19	<p><b>S7L3. Genetics and Heredity</b></p> <p>b. Develop and use a model to describe how asexual reproduction can result in offspring with identical genetic information while sexual reproduction results in genetic variation. <i>(Clarification statement: Models could include, but are not limited to, the use of monohybrid Punnett squares to demonstrate the heritability of genes and the resulting genetic variation, identification of heterozygous and homozygous, and comparison of genotype vs. phenotype.)</i></p>	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	HMH: Mitosis, Meiosis, Asexual and Sexual Reproduction	<u><a href="#">IXL Science</a></u>
Week 20	<p><b>S7L3. Genetics and Heredity</b></p> <p>a. Construct an explanation supported with scientific evidence of the role of genes and chromosomes in the process of inheriting a specific trait.</p> <p>b. Develop and use a model to describe how asexual reproduction can result in offspring with identical genetic information while sexual reproduction results in genetic variation. <i>(Clarification statement: Models could include, but are not limited to, the use of monohybrid Punnett squares to demonstrate the heritability of genes and the resulting genetic variation, identification of heterozygous and homozygous, and comparison of genotype vs. phenotype.)</i></p>	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	HMH: Heredity	
Week 21	<p><b>S7L3. Genetics and Heredity</b></p>	<input type="checkbox"/> Daily Exit Tickets and	HMH: Punnett Squares and Pedigree	

	<p>a. Construct an explanation supported with scientific evidence of the role of genes and chromosomes in the process of inheriting a specific trait.</p> <p>b. Develop and use a model to describe how asexual reproduction can result in offspring with identical genetic information while sexual reproduction results in genetic variation. (<i>Clarification statement: Models could include, but are not limited to, the use of monohybrid Punnett squares to demonstrate the heritability of genes and the resulting genetic variation, identification of heterozygous and homozygous, and comparison of genotype vs. phenotype.</i>)</p>	<p>Homework</p> <p><input type="checkbox"/> Quiz</p>	<p>Charts</p>
Week 22	<p><b>S7L3. Genetics and Heredity</b></p> <p>a. Construct an explanation supported with scientific evidence of the role of genes and chromosomes in the process of inheriting a specific trait.</p> <p>b. Develop and use a model to describe how asexual reproduction can result in offspring with identical genetic information while sexual reproduction results in genetic variation. (<i>Clarification statement: Models could include, but are not limited to, the use of monohybrid Punnett squares to demonstrate the heritability of genes and the resulting genetic variation, identification of heterozygous and homozygous, and comparison of genotype vs. phenotype.</i>)</p>	<p><input type="checkbox"/> Daily Exit Tickets and Homework</p> <p><input type="checkbox"/> Quiz</p>	<p>Incomplete Dominance and Codominance</p>
Week 23	<p><b>S7L3. Genetics and Heredity</b></p> <p>a. Construct an explanation supported with scientific evidence of the role of genes and chromosomes in the process of inheriting a specific trait.</p> <p>b. Develop and use a model to describe how asexual reproduction can result in offspring with identical genetic information while sexual reproduction results in genetic variation. (<i>Clarification statement: Models could include, but are not limited to, the use of monohybrid Punnett squares to demonstrate the heritability of genes and the resulting genetic variation, identification of heterozygous and homozygous, and comparison of genotype vs. phenotype.</i>)</p>	<p><input type="checkbox"/> Daily Exit Tickets and Homework</p> <p><input type="checkbox"/> Quiz</p>	<p>HMH: DNA Structure, Selective Breeding</p>
Week 24	<p><b>S7L3. Genetics and Heredity: Assessment Week</b></p>	<p><input type="checkbox"/> Summative Test</p>	

		<input type="checkbox"/> Alien Genetics Project		
Week 25	<b>S7L1. Taxonomy</b> a. Develop and defend a model that categorizes organisms based on common characteristics.	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	HMH: Classification of Living Things	<u>IXL: Science</u>
Week 26	<b>S7L1. Taxonomy</b> b. Evaluate historical models of how organisms were classified based on physical characteristics and how that led to the six kingdom system (currently archaea, bacteria, protists, fungi, plants, and animals). (Clarification statement: This includes common examples and characteristics such as, but not limited to, prokaryotic, eukaryotic, unicellular, multicellular, asexual reproduction, sexual reproduction, autotroph, heterotroph, and unique cell structures. Modern classification will be addressed in high school.)	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	Dichotomous Keys and Sex-Linked Traits	
Week 27	<b>Taxonomy: Assessment Week</b>	<input type="checkbox"/> Summative Test <input type="checkbox"/> Project		

### Curriculum Map

QTR 4:	Grade: 7 <sup>th</sup>	YEAR: 2018-2019
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Sciences				
Date	Standard	Assessment	Additional Info.	Extension
Week 28	<b>S7L5. Evolution and Natural Selection</b> b. Construct an explanation based on evidence that describes how genetic variation and environmental factors influence the probability of survival and reproduction of a species.	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	HMH: The History of Life on Earth	<u>IXL: Science</u>
Week 29	<b>S7L5. Evolution and Natural Selection</b>	<input type="checkbox"/> Daily Exit Tickets and Homework	HMH: Theory of Evolution by Natural Selection	

	<p>a. Use mathematical representations to evaluate explanations of how natural selection leads to changes in specific traits of populations over successive generations. <i>(Clarification statement: Referencing data should be obtained from multiple sources including, but not limited to, existing research and simulations. Students should be able to calculate means, represent this data in a table or graph, and reference it when explaining the principles of natural selection.)</i></p> <p>b. Construct an explanation based on evidence that describes how genetic variation and environmental factors influence the probability of survival and reproduction of a species.</p>	<input type="checkbox"/> Quiz		
Week 30	<p><b>S7L5. Evolution and Natural Selection</b></p> <p>a. Use mathematical representations to evaluate explanations of how natural selection leads to changes in specific traits of populations over successive generations. <i>(Clarification statement: Referencing data should be obtained from multiple sources including, but not limited to, existing research and simulations. Students should be able to calculate means, represent this data in a table or graph, and reference it when explaining the principles of natural selection.)</i></p> <p>b. Construct an explanation based on evidence that describes how genetic variation and environmental factors influence the probability of survival and reproduction of a species.</p>	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	Natural Selection and Survival of the Fittest	
Week 31	<p><b>S7L5. Evolution and Natural Selection</b></p> <p>c. Analyze and interpret data for patterns in the fossil record that document the existence, diversity, and extinction of organisms and their relationships to modern organisms. <i>(Clarification statement: Evidence of evolution found in comparisons of current/modern organisms such as homologous structures, DNA, and fetal development will be addressed in high school.)</i></p>	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	HMH: Evidence of Evolution	
Week 32	<p><b>Evolution and Natural Selection: Assessment Week</b></p>	<input type="checkbox"/> Summative Test <input type="checkbox"/> Project		
Week 33	<p><b>S7L2. Body Systems</b></p>	<input type="checkbox"/> Daily Exit Tickets and	HMH: The Skeletal and Muscular	<a href="#">Field Trip: Human Bodies</a>

	c. Construct an argument that systems of the body (Cardiovascular, Excretory, Digestive, Respiratory, Muscular, Nervous, and Immune) interact with one another to carry out life processes. (Clarification statement: The emphasis is not on learning individual structures and functions associated with each system, but on how systems interact to support life processes.)	Homework <input type="checkbox"/> Quiz	System	<u>Exhibit*</u>  <u>IXL: Science</u>
Week 34	<b>S7L2. Body Systems</b> c. Construct an argument that systems of the body (Cardiovascular, Excretory, Digestive, Respiratory, Muscular, Nervous, and Immune) interact with one another to carry out life processes. (Clarification statement: The emphasis is not on learning individual structures and functions associated with each system, but on how systems interact to support life processes.)	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	HMH: The Circulatory and Respiratory System	
Week 35	<b>S7L2. Body Systems</b> c. Construct an argument that systems of the body (Cardiovascular, Excretory, Digestive, Respiratory, Muscular, Nervous, and Immune) interact with one another to carry out life processes. (Clarification statement: The emphasis is not on learning individual structures and functions associated with each system, but on how systems interact to support life processes.)	<input type="checkbox"/> Daily Exit Tickets and Homework <input type="checkbox"/> Quiz	HMH: The Digestive System and Excretory System, The Nervous and Endocrine System	
Week 36	<b>Body Systems: Assessment Week</b>	<input type="checkbox"/> Summative Test <input type="checkbox"/> Project		