

Arlington Public Schools Instruction and Assessment Map

3rd Grade Science

Unit Topic	Essential Questions	Number of Weeks	Standard of Learning	Formative Assessment	Summative Assessment
Quarter One					
Ecosystems	How are living and nonliving things in an ecosystem connected?	7 weeks	3.5, 3.1	Daily exit tickets	Modeling: Create a model of a food chain showing producers and consumers. Explain the model verbally or in writing. Teacher Generated Unit Test: MC and Short Answer
	How are organisms in an ecosystem interdependent?			Journal entries	
	How does human activity affect the quality of air, water, and habitats of an ecosystem?			Activity: Students predict how one change within a food chain could affect the rest of the food chain. Activity: Food Chain Game (interactive via BrainPop)	
Quarter Two					
Adaptations	How might environmental changes impact a population and affect ecosystems?	6 weeks	3.4; 3.1	Daily exit tickets	Performance Assessment: Students invent an imaginary animal with adaptations that help it survive in its ecosystem Teacher Generated Unit Test: MC and Short Answer
	How do adaptations (physical and behavioral) help an organism to survive in its			Journal Entry	

	surroundings?				
	How might scientists learn about adaptations?				
Water Cycle	Why is water limited and essential to life on Earth?	3 weeks	3.7; 3.1	Daily exit tickets	Modeling: Create a model of the water cycle. Describe the processes involved within the cycle (evaporation, condensation, precipitation). PA: Create a PSA explaining why water conservation is important and sharing tips for conserving water at home. Teacher Generated Unit Test: MC and Short Answer
	How does the water cycle provide the Earth with a continual water supply?			Journal Entry: Have students imagine they are a drop of rain. Have them write a creative story or series of pictures about the journey they take as the fall to the Earth and travel through the water cycle.	
	How can communities conserve water?			Lab: Water cycle in a bag	
Quarter Three					
Soil	How are the different components of soil important to organisms?	6 weeks	3.6; 3.1	Daily exit tickets	Investigation: Design an investigation to compare how different types of soil affect plant growth. Teacher Generated Unit Test: MC and
	How does soil provide support and nutrients			Journal entries	

	necessary for plant growth?			and Sequence	Short Answer
	How does erosion occur and what can be done to prevent erosion?				
	How do you conserve soil?				
Matter	How do solids and liquids mix with water?	3 weeks	3.3; 3.1	Daily exit tickets Journal entries	Lab: Students design an investigation into the factors that affect the speed of dissolving Teacher Generated Unit Test: MC and Short Answer
	How do the properties of liquids and solids in water change when heat is added or removed?				
Quarter Four					
Simple Machines	Why do objects move, stop moving, change speed, or change direction?	6 weeks	3.2; 3.1	Activity: Playground/school simple machine team search Activity: Identify the simple machines within a compound machine.	PA: Design and construct an apparatus that contains a simple machine
	How do simple machines make work easier?				
Natural Events and Human Influences	How do human actions and	3 weeks	3.8, 3.1	Daily exit tickets	PA: design and share a plan to do one of

	natural events impact the environment?			Journal entries	the following: conserve water or natural resources at home or school, prevent erosion, or reduce negative human impact on the environment
	How can conservation efforts reduce the negative impacts of human activity on ecosystems?				