



MARIETTA CITY SCHOOLS FIFTH GRADE SCIENCE PACING

Instructional Segment	Earth and Changes Over Time	Dynamics of Classification	Cells and Microorganisms	Energy Transfer through Electricity and Magnetism	Physical and Chemical Changes
Estimated Time	8 Weeks	7 Weeks	8 Weeks	7 Weeks	6 Weeks
Crosscutting Concepts	<ul style="list-style-type: none"> • Structure and function • Cause and effect • Systems and system models 	<ul style="list-style-type: none"> • Patterns • Stability and change • Structure and function 	<ul style="list-style-type: none"> • Systems and system models • Structure and function • Scale, proportion, and quantity 	<ul style="list-style-type: none"> • Energy and matter • Systems and system models 	<ul style="list-style-type: none"> • Cause and effect • Energy and matter
Year-Long Phenomenon: Evidence					
	Impact of Earth's processes on landforms (Yellowstone, Providence Canyon, island formation)	Comparison Pictures: living things look alike but are classified differently	Decomposition of multi-celled organisms by single-celled organisms	Pie Pans on a Van de Graaff Generator	Elephant Toothpaste Three levels of elephant toothpaste
Core Ideas	<ul style="list-style-type: none"> • Geological processes • Formation and/or destruction of landforms 	<ul style="list-style-type: none"> • Grouping animals and plants by their internal and/or external structure • Inherited traits • Acquired traits 	<ul style="list-style-type: none"> • Magnification tools are needed to observe very small things • Plant cell structure and function • Animal cell structure and function • Microorganisms can be helpful or harmful 	<ul style="list-style-type: none"> • Static electricity • Current electricity (human-harnessed) • Energy transfer • Simple electric circuit • Magnetic field and force • Release of stored energy • Insulators and conductors of electricity 	<ul style="list-style-type: none"> • Physical changes • Chemical changes • Phases/States of water are related to temperature changes • Energy transfer
Obtain, Evaluate, and Communicate Information					
	<ul style="list-style-type: none"> • Engage in argument from evidence • Develop and use models • Ask questions • Analyze and interpret data • Use mathematics and computational thinking 	<ul style="list-style-type: none"> • Develop and use models • Ask questions 	<ul style="list-style-type: none"> • Ask questions • Develop and use models • Construct explanations • Engage in argument from evidence 	<ul style="list-style-type: none"> • Plan and carry out investigations • Engage in argument from evidence 	<ul style="list-style-type: none"> • Plan and carry out investigations • Engage in argument from evidence
GSE	S5E1a,b,c	S5L1a,b; S5L2a,b	S5L3a,b,c; S5L4a,b	S5P2a,b,c; S5P3a,b	S5P1a,b,c

Updated May, 2022