EDUCATION
GEORGIA AQUARIUM

Instructional Segment	Oceans of Energy	Advancing Atoms	Kinetic Konnections
Grade 8 Program Synopsis	What happens when we introduce light, color and heat above and below the ocean surface? We can find ourselves experiencing natural anomalies that almost seem unimaginable. Students will get to explore colors within the ocean, how conduction and convection of water can create and sometimes destroy a whole ecosystem and how those same anomalies are more common than we think.	Atoms are all around us, and they are constantly moving. Though we cannot see them, touch them, eat them, or even smell them they are very much active and make up our whole world. Students will get to observe how atoms move at different states and change physically or chemically depending on their circumstances. Students may even get hands-on experience with how a particular state of matter is not always what it seems.	The foundation of life is atoms. When these atoms are bonded and interacting with other atoms they can display fascinating phenomena. What happens when we go beyond a science lab and apply those phenomena to living, breathing organisms? Students will learn how animals use electric, magnetic and gravitational forces to survive, as well as how kinetic and potential energies aid in predation.
Key Terminology	• Conduction • Convection • Absorption • Reflection • Refraction • Electromagnetic spectrum	• Chemical change • Physical change • Atom • Density • States of Matter	• Electric forces • Magnetic forces • Gravitational forces • Gravity • Drag • Kinetic energy • Potential energy
Georgia Standards of Excellence	**S8P2d.** **S8P4d.**	**S8P1b.** **S8P1c**	**S8P2b.** **S8P5a.**
NGSS Standards	**MS-PS3-5** **MS-PS4-2**	**MS-PS1-2** **MS-PS1-4**	**MS-PS2-5** **MS-PS3-5**