EAST ISLIP SCHOOL DISTRICT

OHM SCIENCE: SCOPE AND SEQUENCE

GRADE	Unit 1	Unit 2	Unit 3
Grade 4	**Structures and Functions of Life** **NYSSLS Covered:** 4-LS1-1, 2-LS2-2, 4-LS1-2, 4-PS4-2, 3-5-ETS1-2, 3-5-ETS1-2, 3-5-ETS1-3 **Driving Question**: How do plants and animals survive, grow, and reproduce? **Students will:** - relate their prior knowledge of parts of the body (anatomy) with the purposes of those body parts (physiology). - understand that all living things have certain activities or goals in common - explore the concept of photosynthesis - conduct their own experiment on how plants can move - review types of seed dispersal methods	**Shaping our Earth** **NYSSLS Covered:** 4-ESS1-1, 4-ESS2-1, 4-ESS2-2, 4-ESS3-2 **Driving Question**: How does the earth change over time? **Students will:** - examine how the slope of earth's surface affects the rate of erosion - determine that a larger volume of water causes faster erosion - determine how vegetation affects the rate of erosion - determine how the evidence found in rocks would suggest that the Earth experiences changes - make comparisons of earthquakes, volcanoes, and tectonic plates	**Understanding Energy** **NYSSLS Covered:** 4-PS3-1, 4-PS3-2, 4-PS3-4, 4-ESS3-1, 3-5-ETS1-2, 3-5-ETS1-2, 3-5-ETS1-3 **Driving Question**: What are different forms of energy? **Students will:** - be introduced to the definition of energy - understand that all of the energy used on Earth originates from our Sun - identify different forms of energy - determine if potential or kinetic energy is displayed. - convert energy from one form to another. - examine energy efficiency in the home

	-review types of consumers and examine their classroom organism, the fiddler crab. - learn more about the digestive system - learn about cells and how they get energy - understand their senses and how they would help them survive - learn how the human eye works in detecting light and helping them see -explore how muscles work and compare their muscles to the fiddler crab's muscles - learn about how animals attract and find mates - design an experiment testing the senses of the fiddler crab	- see the effect that temperature changes have on the fluid movement **Engineering Design:** design and build an earthquake proof building	-learn about the pros/cons of current energy production methods **Engineering Design:** design and build a vehicle which will travel the length of a 1-3 meter track under its own power.