S.T.E.A.M.
Knowing Science (P-6)- Next generation Science Standards program

Grade	Science	Technology	Engineering	Art	Math	Co-curricular
3	Knowing Science • Distance & Motion • Balanced and Unbalanced Forces • Magnets • Design and Building • Plant & Animal Cycles	AV Rover Collaboration- design solutions to weather related problems. i.e. design house to withstand hurricane force winds.	• Measuring Weather	3D Art & design	• Review linear measurement • Patterns • Measurement and distance • Time • Measuring distance using time • Sequencing	Junior Lego League
4	Knowing Science • Distance & Motion • The Energy Cycle • Renewable & Non-renewable energy • Crayfish • Plant Structure	Code.org- 20 hour class (Library) • Basic Circuit Theory Collaboration- Experimental design problems i.e. design a prosthetic body part for a crayfish that has 'lost' a body part	• Experimental Design • Earthquake Engineering	3D Art & design	• Measurement: distance, time, force, weight • Data collection, representation and interpretation • Angle of a slope • Volume • Amplitude and wavelength	Junior Lego League
5	Knowing Science • Matter • Ecosystems • The Earth Surface • Space Collaboration- Interdisciplinary project in Science, Technology and Art on Water	In Technology class- explore engineering simulation apps i.e. Sim City		Art - Intro to Design Form, Function and Ergonomics	• Place value, decimals and fractions • Multi digit whole number & decimals • Addition, subtraction multiplication & division of fractions • Problem solving with coordinate plane	• Environmental Club • Community Action Club • MineCraft club • LEGO – Club open to Grade 5, 6 and 7
6	Knowing Science • Matter • Earth & Space • Life Science TBD		• Forces & Motion • Waves & Energy	ART – Elements of design	• Ratios and unit rates • Arithmetic operations • Rational numbers • Expressions and equations	• MineCraft club

					• Area, Surface & volume • Statistics	
7	Mineola Science • Life • Earth & Space • Physical	Minecraft – explore use of student generated 'worlds' in Humanities curriculum		Art- Environmental Design	• Ratios and proportional relationships • Rational Numbers • Expression and equations • Percent and proportional relationships • Geometry	• Competitive Team (Gr. 7 only) • MineCraft club
	Collaboration- Interdisciplinary Environmental Theme Project –Building a Greenhouse – Science, Technology, Art and Research (library)					
8	Mineola Science • Life • Earth & Space • Physical Regents Earth Science select students (NGSS to be implemented 2015-16)				As part of double period Algebra: Quarterly projects: • Fibonacci Photography • ABC's of Mathematics • Program a friend • Digest this! • Build a Bobsled	• First Tech Challenge Club for Grades 8 & 9
9	Regents Earth Science	Exploring computer science • Q1-humans and computers • Q2-Coding • Q3-Robotics • Q4- App development	•		•	• First Tech Challenge Club for Grades 8 & 9