

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 <ul style="list-style-type: none"> Distance & Motion Balanced and Unbalanced Forces Magnets Design and Building Plant & Animal Cycles 	AV Rover <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Collaboration- design solutions to weather related problems. i.e. design house to withstand hurricane force winds. </div>	<ul style="list-style-type: none"> Measuring Weather 	3D Art & design	<ul style="list-style-type: none"> Review linear measurement Patterns and distance Time Measuring distance using time Sequencing 	Junior Lego League
4	Knowing Science <ul style="list-style-type: none"> Distance & Motion The Energy Cycle Renewable & Non-renewable energy Crayfish Plant Structure 	Code.org- 20 hour class (Library) <ul style="list-style-type: none"> Basic Circuit Theory 	<ul style="list-style-type: none"> Experimental Design Earthquake Engineering 	3D Art & design	<ul style="list-style-type: none"> Measurement: distance, time, force, weight Data collection, representation and interpretation Angle of a slope Volume Amplitude and wavelength 	Junior Lego League
5	Knowing Science <ul style="list-style-type: none"> Matter Ecosystems The Earth Surface Space 	<div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> In Technology class- explore engineering simulation apps i.e. Sim City </div>		Art - Intro to Design Form, Function and Ergonomics	<ul style="list-style-type: none"> Place value, decimals and fractions Multi digit whole number & decimals Addition, subtraction multiplication & division of fractions Problem solving with coordinate plane 	<ul style="list-style-type: none"> Environmental Club Community Action Club MineCraft club LEGO – Club open to Grade 5, 6 and 7
		Collaboration- Interdisciplinary project in Science, Technology and Art on Water				
6	Knowing Science <ul style="list-style-type: none"> Matter Earth & Space Life Science TBD 		<ul style="list-style-type: none"> Forces & Motion Waves & Energy 	ART – Elements of design	<ul style="list-style-type: none"> Ratios and unit rates Arithmetic operations Rational numbers Expressions and equations Area, Surface & volume 	<ul style="list-style-type: none"> MineCraft club

					<ul style="list-style-type: none"> • Statistics 	
7	<p>Mineola Science</p> <ul style="list-style-type: none"> • Life • Earth & Space • Physical 	<p>Minecraft – explore use of student generated ‘worlds’ in Humanities curriculum</p>		Art- Environmental Design	<ul style="list-style-type: none"> • Ratios and proportional relationships • Rational Numbers • Expression and equations • Percent and proportional relationships • Geometry 	<ul style="list-style-type: none"> • Competitive Team (Gr. 7 only) • MineCraft club
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>Collaboration- Interdisciplinary Environmental Theme Project –Building a Greenhouse – Science, Technology, Art and Research (library)</p> </div>						
8	<p>Mineola Science</p> <ul style="list-style-type: none"> • Life • Earth & Space • Physical <p>Regents Earth Science select students</p> <p>(NGSS to be implemented 2015-16)</p>			Design and produce art using a 3D printer	<p>As part of double period Algebra:</p> <p>Quarterly projects:</p> <ul style="list-style-type: none"> • Roller Coasters • Rocketry • Little Bits • TBD 	<ul style="list-style-type: none"> • First Tech Challenge Club for Grades 8 & 9
9	Regents Earth Science	<p>Exploring computer science</p> <ul style="list-style-type: none"> • Q1-humans and computers • Q2-Coding • Q3-Robotics • Q4- App development 	<ul style="list-style-type: none"> • 		<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • First Tech Challenge Club for Grades 8 & 9
Elective Choice			Draw, Design Production Course to include: Makerbot	Form, function, material selection Graphic Design – icon & sprite creation, digital app creation,		