




NEXT GENERATION SCIENCE STANDARDS

MARLBOROUGH ELEMENTARY SCHOOL





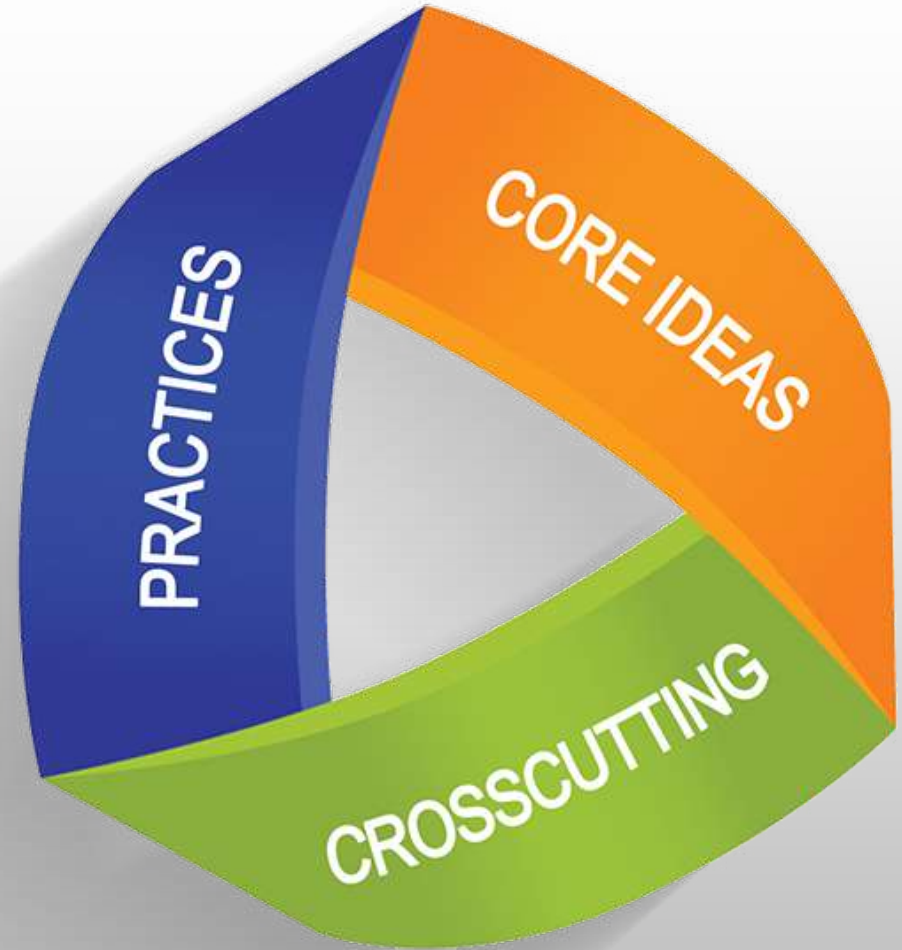
NEXT GENERATION SCIENCE STANDARDS

- ADOPTED BY STATE OF CONNECTICUT: NOVEMBER 4, 2015
 - NGSS ASSESSMENT REPLACES CMT SCIENCE ASSESSMENT
 - 5TH GRADE STUDENTS TESTED
 - 2017 – 18: BASE-LINE YEAR (NO POINTS ON OUR NEXT GENERATION REPORT CARD)
 - 2018 – 19: HIGH-STAKES IMPLEMENTATION (POINTS ON NEXT GENERATION REPORT CARD)
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3 DIMENSIONS OF SCIENCE LEARNING

- CHILDREN EXPLORE CONNECTIONS THROUGH THE FOUR DOMAINS OF SCIENCE:
 - ENGINEERING
 - EARTH AND SPACE SCIENCE
 - PHYSICAL SCIENCE
 - LIFE SCIENCE

CHILDREN WORK TO BUILD A DEPTH OF SKILLS AND KNOWLEDGE ACROSS SCIENTIFIC DOMAINS.



CROSSCUTTING CONCEPTS

- APPLICABLE TO ALL ASPECTS OF SCIENCE
 - PATTERNS
 - SIMILARITY AND DIVERSITY
 - SCALE, PROPORTION AND QUANTITY (SIZE, TIME AND ENERGY)
 - ENERGY AND MATTER
 - STRUCTURE AND FUNCTION
 - STABILITY AND CHANGE
 - SYSTEM AND SYSTEM MODELS
 - CAUSE AND EFFECT (CONTINUUM OF SIMPLE TO MULTIFACETED)

MYSTERY SCIENCE

- KINDERGARTEN – 3RD GRADE
- RESOURCES FOR 4TH – 6TH GRADE
- EMBEDDED VIDEO / QUESTIONS / CONTENT READING





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MOSA MACK

- [HTTPS://MOSAMACK.COM/HOME/THERMAL-ENERGY/LESSONS/SOLVE](https://mosamack.com/home/thermal-energy/lessons/solve)
- 4TH – 6TH GRADE
- LESSONS PUSHED OUT TO INDIVIDUAL CHROME BOOKS
- EMBEDDED ASSESSMENTS
- EMBEDDED INFORMATIONAL TEXTS

ENGINEERING / PROGRAMMING



DESIGNING TO ACHIEVE SOLUTIONS

- ☐ ***ENGINEERING STATIONS***
- ☐ ***ROBOTICS***
- ☐ ***BLOCK DESIGN (LIBRARY MEDIA)***
- ☐ ***INTEGRATED INTO LESSONS (BIRDS BEAK, ROLLER COASTER TRACKS)***

STEAM ROOM

- OUTFITTED FOR EASE OF USE
- CENTRALIZED SUPPLIES
- PREPARED TO DEAL WITH 'MESSY' SCIENCE
- SACRED SPACE TO SETUP LABS AND COMPLETE THEM OVER A FEW DAYS
- EASE OF MOVEMENT TO OUTSIDE
- PRE K THROUGH 5TH USE THE STEAM ROOM

