

# Update on the New York State Science Learning Standards

*East Rockaway Board of Education  
Curriculum Presentation  
April 18, 2023*

# East Rockaway School District Mission Statement

*The East Rockaway School District respects our diverse community and proud traditions by engaging every student in an innovative and challenging educational program which inspires learners to become self-directed, ethical, creative, and globally conscious citizens.*

What  
Drives  
Us?

## VALUES AND PRIORITIES

21st Century  
Learning

Results Will  
Follow

Kids First,  
Always

Commitment to  
Continuous  
Learning

The Power of  
Feedback

# Building on the Past; Preparing for the Future





## Three Dimensional Teaching and Learning:

Refers to the thoughtful and deliberate integration of three distinct dimensions

**Phenomenon Driven**

(Science)

**Problem Driven**

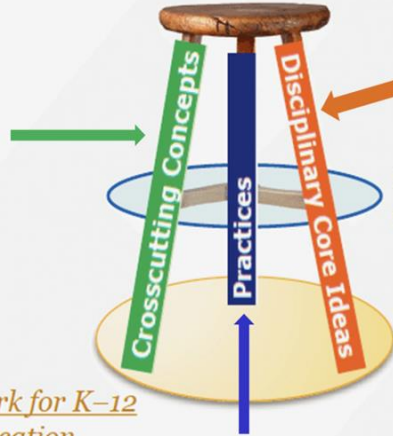
(Engineering)

**Performance Expectations**

“...what students should know and be able to do.”

### What students look for

- Concepts that bridge disciplinary boundaries
- Used by students to organize and connect thinking



*A Framework for K–12  
 Science Education*

### How students learn

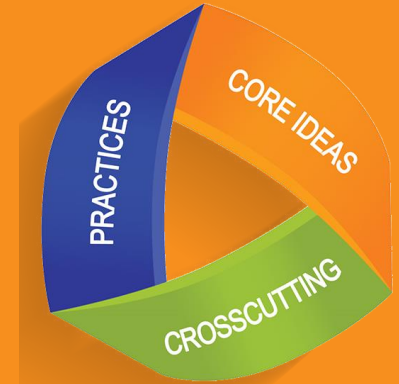
Activities students do to gain understandings

**What students learn**  
 Physical Sciences; Life Sciences; Earth & Space Sciences; Engineering, Technology & Applications of Science

*Connections to the Nature of Science and Engineering Applications*



*Common Core Math and Literacy*



# “Shifts” Required by NYSSLS:

- ★ Reduce the scope of disciplinary content to allow classrooms to dive deeper into the content knowledge
- ★ Emphasis placed on inquiry-based learning
- ★ Identifying, observing, and deconstructing phenomena to better understand content knowledge
- ★ Emphasis placed on application of skills rather than the transfer of content knowledge

## Shift from:

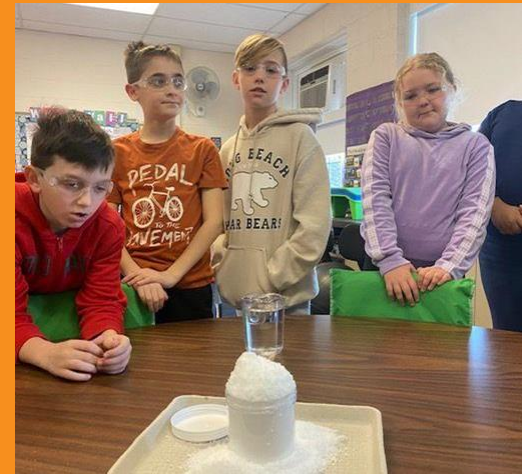
- Know → Do
- Getting the “Right Answer” → Process
- Proficiency → Reflection & Refinement
- Memorization → Application





# Implementation of NYSSLS in East Rockaway

- ★ Elementary Schools have adopted Science 21
- ★ Science 21 is an inquiry-based elementary science program designed and aligned to the New York State PK-12 Science Learning Standards
- ★ Our subscription to Science 21 through PNW BOCES includes materials “kits” for hands-on experiences and ongoing professional training
- ★ Students use the *Science and Engineering Practices* to help them make sense of the *Disciplinary Core Ideas* and connect across topics using the *Crosscutting Concepts*



# Implementation of NYSSLS in East Rockaway

- ★ 6<sup>th</sup>-7<sup>th</sup> grade team: working to realign teaching practices to accommodate 3D learning standards across the middle school grade band
- ★ Teachers in the science department have formed a professional learning community (PLC) to collaboratively design 3D lessons
- ★ High School Regents Courses have aligned curriculum to NYSSLS requirements and expectations
- ★ Science staff members are and will continue to receive professional development in house and with the support of our BOCES partners

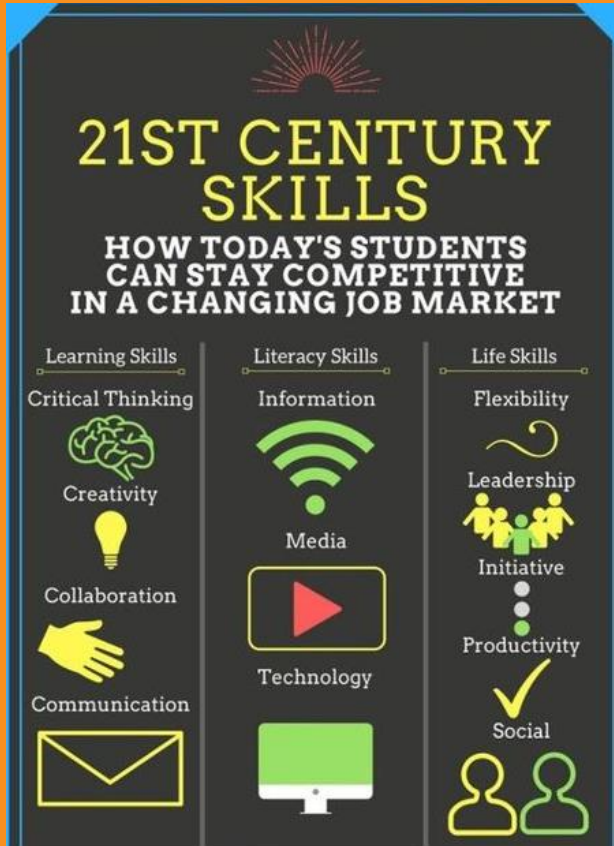


# NYSSLS Aligned Exams Roll Out Schedule

Spring 2024	June 2025	June 2026
<p><b>New Elementary 5th Grade Test</b>            *8th grade test not taken by our students</p>	<p><b>Biology Regents</b>  <b>Earth &amp; Space Science Regents</b></p>	<p><b>Chemistry Regents</b>  <b>Physics Regents</b></p>



# Connecting NYSSLS to 21<sup>st</sup> Century Skills



- Creative problem solving through the engineering practices
- Communication and collaboration skills through hands-on science experiences
- Critical thinking about phenomena, not simple regurgitation
- Integrated development of 21<sup>st</sup> Century competencies



Thank you for your attention.

Are there any questions?