

Programs at a Glance

All

Wednesday

10:00 AM - 11:30 AM

Revamp Your Review Session! Using Technology to Create Escape Rooms

Assessment

Tuesday

10:00 AM - 11:00 AM

Let's Use Claim-Evidence-Reasoning (CER) to Increase Student Voice

11:30 AM - 12:30 PM

Addressing Student Growth Through Assessment

2:30 PM - 3:30 PM

What Is CER, and Why Should I Use It?

2:30 PM - 3:30 PM

Why Standards-Based Grading is a Powerful Tool for Learning.

Wednesday

10:00 AM - 11:00 AM

Creating Assessments Based on Science Practices

12:30 PM - 1:30 PM

How to Move Students from Confusion to Clarity Using a CER

Biology/Life Science

Tuesday

8:00 AM - 9:00 AM

The Practical Approach to Cultivating Engagement in a Diverse Population of Science Students

8:00 AM - 9:30 AM

Trout ARE Made of Trees: HOFNOD is more than Fishing!

8:30 AM - 9:30 AM

Building a Better (Food) Web

8:30 AM - 9:30 AM

Roots & Shoots: Making Positive Change Happen

8:30 AM - 9:30 AM

Who is Baby Whale's Father? DNA Fingerprinting Solves the Mystery!

10:00 AM - 11:00 AM

Colorful World of Electrophoresis! Molecules in ACTION!

10:00 AM - 11:00 AM

What's the Hype With HyperDocs?

10:30 AM - 11:30 AM

Lab in a Box: A Free Biotechnology Loaner Program from Genes in Space

10:30 AM - 12:00 PM

Exploring Opportunities to Learn Through Science Tasks

11:30 AM - 12:30 PM

Amazing Informational Texts and the Next Generation Life Science Standards: Grades K-3

11:30 AM - 12:30 PM

Bioconservation Meets Technology

11:30 AM - 12:30 PM

Examine How to Promote Vertical Articulation Through the Use of Engineering Challenges

11:30 AM - 12:30 PM

Investigating Cell Structure and Function Beyond Paper Exercises!

11:30 AM - 1:00 PM

Starla's Hands-On Body Systems: Seeing 'Eye-to-Eye'

12:00 PM - 1:00 PM

Are You a Night Owl? A Morning Lark? The Answer May Be in Your Genes...

12:30 PM - 2:00 PM

Understanding Global Change to Design, Evaluate and Refine Solutions from HHMI BioInteractive

1:00 PM - 2:00 PM

Biotechnology: The Intersection of Engineering, Biology, and Chemistry

1:00 PM - 2:00 PM

Creating A Paperless Science Classroom

1:00 PM - 2:00 PM

DNA Forensics Solves the Murder Mystery of Dr. Ward

1:00 PM - 2:00 PM

From Cascading Science & Engineering Practices to a Coherent Story About Phenomena

1:30 PM - 3:00 PM

Teach Biology and Chemistry Using 3D Models

2:00 PM - 3:30 PM

Teaching Evolution in Middle School

2:30 PM - 3:30 PM

Keep Calm and Love Heredity-Classroom Resources for Teaching Genetics and Genomics

2:30 PM - 3:30 PM

To Taste or Not to Taste! PTC Genotype Determination

Wednesday

8:00 AM - 9:00 AM

Making Sense of Sharks

8:30 AM - 9:30 AM

NGSS Infusion Ideas for High School Biology

8:30 AM - 9:30 AM

Utilize Instructional Online Tools and Resources to Support and Facilitate the NGSS/NJSLS Process

8:30 AM - 10:00 AM

P51 Glow Labs: Investigate DNA Structure: The Central Dogma and Enzyme Activity Using

Fluorescence

9:30 AM - 10:30 AM

Modeling in the High School Biology Class

10:00 AM - 11:00 AM

Chemistry with a Conscience

10:00 AM - 11:00 AM

Visual Perception: The Art of the Brain

10:30 AM - 12:00 PM

Anatomy in Clay MANIKEN Muscles!

11:00 AM - 12:00 PM

Exploring Adaptations from High Tech to No Tech

11:30 AM - 12:30 PM

Increasing Social Emotional Wellness of Students in Biology Classes

12:00 PM - 1:30 PM

The Opioid Epidemic: Exploring the Genetic Associations of Opioid Abuse

12:30 PM - 1:30 PM

"Success...NOW that's what I'm talking about!"

Programs at a Glance

12:30 PM - 1:30 PM	Developing Assessments to Support the Teaching and Learning of Science Crosscutting Concepts
1:30 PM - 2:30 PM	Hands-On Cellular Transport Modeling Activity
1:30 PM - 3:00 PM	Hypothesis Testing and the Meaning of Statistical Significance
2:00 PM - 3:00 PM	Taking Mendel Molecular: Add Genotyping to Wisconsin Fast Plant labs!
2:30 PM - 3:30 PM	Making a Performance Assessment: Where to start?

Chemistry

Tuesday

8:00 AM - 9:30 AM	Incorporating Simulations, Animations, and Videos into Your Chemistry Curriculum
8:30 AM - 9:30 AM	How to Create Digital Learning Games
10:30 AM - 12:00 PM	Exploring Opportunities to Learn Through Science Tasks
1:00 PM - 2:00 PM	Integrating Technology Into the Secondary Classroom
1:00 PM - 2:00 PM	Is Science Eurocentric?
1:30 PM - 3:00 PM	Teach Biology and Chemistry Using 3D Models
2:30 PM - 3:30 PM	AP Chemistry Round Table and Discussion
2:30 PM - 3:30 PM	Elementary & Middle School Demonstrations and Lab Activities on a Dime

Wednesday

8:30 AM - 9:30 AM	NGSS and Chemistry: Making it Happen
8:30 AM - 9:30 AM	Understanding Polymerization Reactions
8:30 AM - 9:30 AM	Utilize Instructional Online Tools and Resources to Support and Facilitate the NGSS/NJSLS Process
10:00 AM - 11:00 AM	Chemistry with a Conscience
11:30 AM - 12:30 PM	Using a Short Film to Teach Chemistry
1:00 PM - 2:00 PM	Using NGSS Practices to Explore Chemistry Concepts: Constructing Explanations
1:30 PM - 2:30 PM	Princeton American Chemical Society Outreach Supporting NGSS
2:30 PM - 3:30 PM	Middle School Chemistry Design Challenges - Letting Your Kids Safely "Play" with Chemicals.

Common Core

Tuesday

8:30 AM - 9:30 AM	Building Linguistic Competence in Science
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Wednesday

12:30 PM - 1:30 PM	"Success...NOW that's what I'm talking about!"
1:00 PM - 2:00 PM	Literacy in Science: A Team Approach to CER's

Computational Thinking

Tuesday

12:30 PM - 1:30 PM	Computational Thinking Infused Through Robots in 21st Century Digital Classroom
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Earth/Space Science

Tuesday

8:30 AM - 10:00 AM	Inspired by Germany: Understanding Global Climate Change to Take Local Action
10:00 AM - 11:30 AM	Ocean Science: Hands-On Lesson
10:30 AM - 11:30 AM	Lab in a Box: A Free Biotechnology Loaner Program from Genes in Space
1:00 PM - 2:00 PM	The Observable Universe, From Earth to the Quasars
2:30 PM - 3:30 PM	Measuring Sea Level

Wednesday

8:30 AM - 10:00 AM	Helping Students Understand Earth, Sun & Moon Relationships in NGSS/NJSLS Grades 5-8
8:30 AM - 10:00 AM	New GLOBE NGSS-Aligned Weather Curriculum
12:30 PM - 1:30 PM	NJESTA & NASA Presents: Earth Rise with NASA Data
1:30 PM - 3:00 PM	Virtual and Augmented Reality Experiences in STEM Education
2:30 PM - 3:30 PM	ENSO & Coastal Upwelling

Engineering

Tuesday

Programs at a Glance

8:00 AM - 9:00 AM	Active Physics and NGSS/NJSLS-S: A Focus on the "E" in STEM
11:30 AM - 12:30 PM	Examine How to Promote Vertical Articulation Through the Use of Engineering Challenges
12:30 PM - 1:30 PM	Computational Thinking Infused Through Robots in 21st Century Digital Classroom
12:30 PM - 2:00 PM	Entrepreneurship Meets STEM

Wednesday

1:00 PM - 2:00 PM	Project RED STEM Curriculum
1:30 PM - 3:00 PM	Think Like an Engineer with Phenomenal Science Instruction!
2:00 PM - 3:30 PM	Force & Motion: Pushes & Pulls

Environmental Science

Tuesday

8:00 AM - 9:00 AM	Junior Solar Sprints
8:00 AM - 9:00 AM	The Practical Approach to Cultivating Engagement in a Diverse Population of Science Students
8:00 AM - 9:30 AM	Trout ARE Made of Trees: HOFNOD is more than Fishing!
8:30 AM - 9:30 AM	Roots & Shoots: Making Positive Change Happen
10:00 AM - 11:00 AM	The Optimistic Environmentalist
12:30 PM - 2:00 PM	Understanding Global Change to Design, Evaluate and Refine Solutions from HHMI BioInteractive
1:00 PM - 2:00 PM	From Cascading Science & Engineering Practices to a Coherent Story About Phenomena
2:00 PM - 3:30 PM	Teaching Evolution in Middle School
2:30 PM - 3:30 PM	Measuring Sea Level

Wednesday

8:00 AM - 9:30 AM	Man vs. Wild: Lessons on the Earth and Human Impacts
12:30 PM - 1:30 PM	NJESTA & NASA Presents: Earth Rise with NASA Data
1:30 PM - 3:00 PM	Hypothesis Testing and the Meaning of Statistical Significance
2:00 PM - 3:00 PM	Come see Nat Geo's Environmental Science Programs!
2:30 PM - 3:30 PM	ENSO & Coastal Upwelling

Forensics

Tuesday

9:30 AM - 10:30 AM	Forensic Soil/Sand Analysis Using Historical Case Studies /Podcasts	(NGSS/NJSLS-S/Earth Science/History)
11:30 AM - 1:00 PM	Starla's Hands-On Body Systems: Seeing 'Eye-to-Eye'	
1:00 PM - 2:00 PM	DNA Forensics Solves the Murder Mystery of Dr. Ward	

Wednesday

10:30 AM - 11:30 AM	Forensics: How to Analyze Skeletons: Case Studies (biology, math, history)
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Genetics

Tuesday

2:30 PM - 3:30 PM	Keep Calm and Love Heredity-Classroom Resources for Teaching Genetics and Genomics
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Integrated/General

Tuesday

8:00 AM - 9:00 AM	STEM Activities for the Differentiated Classroom
10:00 AM - 11:00 AM	From Storylines and Story Maps: Communicating Results
10:30 AM - 11:30 AM	NGSS District Partnership Program: Supporting Colleagues With the Implementation of the NGSS
11:00 AM - 12:00 PM	101 Websites for Science
11:00 AM - 12:30 PM	How to Maintain and Repair Your Microscopes, Balances and other Lab Equipment
11:00 AM - 12:30 PM	How to Maintain and Repair Your Microscopes, Balances and other Lab Equipment
11:30 AM - 12:30 PM	Addressing Student Growth Through Assessment
11:30 AM - 12:30 PM	Doing Science Safely
11:30 AM - 12:30 PM	Making Science Learning Lifelong, Lifewide and Lifedeeep: The Importance of Out-of-School Learning
11:30 AM - 1:00 PM	Don't Be LEFT Out: Why Science Notebooking is RIGHT for Your Class!
12:00 PM - 1:30 PM	3-D Assessment Design Process
1:00 PM - 2:30 PM	Using Phenomena to Engage Students in Science

Programs at a Glance

1:30 PM - 2:30 PM	Transitioning to Standards-Based Grading in Science Through Lesson Embedded Assessments
1:30 PM - 3:00 PM	Let's Go on a Quest: Scaffolded Problem-Based Learning
2:00 PM - 3:30 PM	Making Crosscutting Concepts Explicit in Instruction and Assessment
2:30 PM - 3:30 PM	100Kin10 Listening Session
2:30 PM - 3:30 PM	Knowing Science Users Group: Open Forum
2:30 PM - 3:30 PM	Why Standards-Based Grading is a Powerful Tool for Learning.
3:00 PM - 4:00 PM	NJSTA Executive Board Meeting

Wednesday

8:00 AM - 9:00 AM	50 Word Science
8:00 AM - 9:00 AM	Student-Driven Comparative Anatomy on a Budget
8:30 AM - 9:30 AM	Learn About Free, Phenomenon-Based Materials for Grades 6-8 Science
8:30 AM - 10:00 AM	Spectacularly Merging Art, Science & History: Connecting NGSS Practices Beyond the Sciences
10:00 AM - 11:00 AM	Assessing Students' Levels of Reasoning in NGSS Assessments
10:00 AM - 11:00 AM	Creating Assessments Based on Science Practices
11:00 AM - 12:00 PM	How to Develop a Capstone Take-Action Plan to Achieve United Nations Sustainability Goals
11:30 AM - 12:30 PM	Utilizing Mass Media in the Science Classroom
11:30 AM - 1:00 PM	Basic Maintenance and Repair of Your Microscopes and Balances
11:30 AM - 1:00 PM	Basic Maintenance and Repair of Your Microscopes and Balances
12:00 PM - 1:00 PM	Hop Onboard the CSEP Train!
12:00 PM - 1:30 PM	Using Natural Phenomena to Drive NGSS-aligned Instruction and Assessment
12:30 PM - 1:30 PM	How to Move Students from Confusion to Clarity Using a CER
1:00 PM - 2:00 PM	Literacy in Science: A Team Approach to CER's
1:00 PM - 2:00 PM	Read, Write and THINK Like a Scientist
2:00 PM - 3:00 PM	Think "Small"!
2:00 PM - 3:30 PM	Argument-Driven Inquiry: 3D Investigations that Integrate Science, Literacy and Mathematics
2:00 PM - 3:30 PM	Finishing the Job: Modifying "NGSS-Aligned" Curriculum Materials
2:30 PM - 3:30 PM	21st Century Science Using 21st Century Tools
2:30 PM - 3:30 PM	STEM Non-Fiction Reading for Middle School

Leadership

Wednesday

11:30 AM - 12:30 PM	Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)
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Literacy

Wednesday

11:30 AM - 12:30 PM	Scaffolding CERs for all Skill Levels: Promoting Independence
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Modeling

Tuesday

12:30 PM - 1:30 PM	Modeling: Building Student Understanding
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NGSS Articulated Curriculum K-12

Wednesday

10:00 AM - 11:00 AM	Curricular Articulation and Building NGSS Alignment Within a Spiraling Curriculum
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NGSS/NJSLS-S

Tuesday

8:00 AM - 9:00 AM	Upcycle Favorite Activities into NGSS Lessons
8:00 AM - 9:30 AM	Introduction to Engineering Design for Science Instruction
8:30 AM - 9:30 AM	Building a Better (Food) Web
8:30 AM - 9:30 AM	Promoting the Science & Engineering Practices Using Digital Media and Tools
8:30 AM - 9:30 AM	Who is Baby Whale's Father? DNA Fingerprinting Solves the Mystery!
8:30 AM - 10:00 AM	Family STEAM Nights
8:30 AM - 10:00 AM	Inspired by Germany: Understanding Global Climate Change to Take Local Action
8:30 AM - 10:00 AM	What NGSS-Aligned Classrooms Look Like and Sound Like

Programs at a Glance

9:30 AM - 10:30 AM Science/History)	Forensic Soil/Sand Analysis Using Historical Case Studies /Podcasts (NGSS/NJSLS-S/Earth
9:30 AM - 10:30 AM	How Did You Support Your Claim? Helping Students Identify the Correct Evidence!
9:30 AM - 10:30 AM	You Can Never Talk Too Much...The Productive Science Classroom
9:30 AM - 11:00 AM	NGSS/NJSLS-S Claim, Evidence, Reasoning--Analyzing and Interpreting Data to Construct
Explanations	
10:00 AM - 11:00 AM	Equitable Access to Science Learning
10:00 AM - 11:00 AM	From Storylines and Story Maps: Communicating Results
10:00 AM - 11:00 AM	Then & Now
10:00 AM - 11:30 AM	Ocean Science: Hands-On Lesson
10:30 AM - 11:30 AM	NGSS District Partnership Program: Supporting Colleagues With the Implementation of the NGSS
11:00 AM - 12:00 PM	Learning Through Stories: Using Case Studies to Apply Knowledge
11:30 AM - 12:30 PM	Amazing Informational Texts and the Next Generation Life Science Standards: Grades K-3
11:30 AM - 12:30 PM	Bioconservation Meets Technology
11:30 AM - 12:30 PM	Investigating Cell Structure and Function Beyond Paper Exercises!
11:30 AM - 1:00 PM	Don't Be LEFT Out: Why Science Notebooking is RIGHT for Your Class!
12:00 PM - 1:30 PM	3-D Assessment Design Process
12:00 PM - 1:30 PM	Beyond Claims-Evidence-Reasoning: Taking Down Scaffolds to Increase Student Reasoning
12:30 PM - 1:30 PM	Classroom Collaborations Between Grade Levels
12:30 PM - 1:30 PM	Modeling: Building Student Understanding
1:00 PM - 2:00 PM	Biotechnology: The Intersection of Engineering, Biology, and Chemistry
1:00 PM - 2:00 PM	Is Science Eurocentric?
1:00 PM - 2:30 PM	Appendixes to the NJSLS-S
1:00 PM - 2:30 PM	Using Phenomena to Engage Students in Science
1:30 PM - 2:30 PM	Transitioning to Standards-Based Grading in Science Through Lesson Embedded Assessments
1:30 PM - 3:00 PM	Let's Go on a Quest: Scaffolded Problem-Based Learning
2:00 PM - 3:30 PM	Building a Future of Problem-Based Learning
2:00 PM - 3:30 PM	Making Crosscutting Concepts Explicit in Instruction and Assessment
2:30 PM - 3:30 PM	Knowing Science Users Group: Open Forum
2:30 PM - 3:30 PM	What Is CER, and Why Should I Use It?

Wednesday

8:00 AM - 9:00 AM	Making Sense of Sharks
8:00 AM - 9:00 AM	Middle School NJSLS-S lessons that really work !!!
8:00 AM - 9:00 AM	Student-Driven Comparative Anatomy on a Budget
8:00 AM - 9:30 AM	Man vs. Wild: Lessons on the Earth and Human Impacts
8:30 AM - 9:30 AM	NGSS and Chemistry: Making it Happen
8:30 AM - 9:30 AM	NGSS Infusion Ideas for High School Biology
8:30 AM - 9:30 AM	Understanding Polymerization Reactions
8:30 AM - 10:00 AM	Hello Science, Meet Creative Arts!
8:30 AM - 10:00 AM	Helping Students Understand Earth, Sun & Moon Relationships in NGSS/NJSLS Grades 5-8
8:30 AM - 10:00 AM	Leveraging PLCs to Deepen Student and Teacher Engagement With the NGSS/NJSLS
8:30 AM - 10:00 AM	New GLOBE NGSS-Aligned Weather Curriculum
8:30 AM - 10:00 AM	Spectacularly Merging Art, Science & History: Connecting NGSS Practices Beyond the Sciences
9:30 AM - 10:30 AM	Evolution of Science Education
9:30 AM - 10:30 AM	Exploring the Student Response Process Using an NGSS-Aligned Physics Performance Assessment
9:30 AM - 10:30 AM	Supporting Students Forming Hypotheses/Asking Questions through Scaffolding
9:30 AM - 11:00 AM	Using Video Phenomenon
10:00 AM - 11:00 AM	Assessing Students' Levels of Reasoning in NGSS Assessments
10:00 AM - 11:30 AM	Increasing Opportunities for Equitable Access in Group Work for All Students
10:30 AM - 11:30 AM	Forensics: How to Analyze Skeletons: Case Studies (biology, math, history)
10:30 AM - 11:30 AM	Learning About Digital and Analog Signals through GPS Geocaching
10:30 AM - 11:30 AM	Quick and Easy Experiments Using the Latest Technology
10:30 AM - 11:30 AM	Then & Now
10:30 AM - 12:00 PM	Elementary Energy (Grade 2-4)
11:00 AM - 12:00 PM	Come see Nat Geo's exciting K-5 Science program!
11:00 AM - 12:30 PM	Equitable Access to Science Learning
11:30 AM - 12:30 PM	Scaffolding CERs for all Skill Levels: Promoting Independence

Programs at a Glance

11:30 AM - 12:30 PM	Using a Short Film to Teach Chemistry
11:30 AM - 1:00 PM	NGSS/NJSLS-S Instructional Practices: Developing and Using Models to Teach Science
12:00 PM - 1:00 PM	Integrated-STEM Curriculum for Grades 9, 10, and 11--Resources and Reflections
12:00 PM - 1:00 PM	Tricked Into Thinking
12:00 PM - 1:30 PM	The Opioid Epidemic: Exploring the Genetic Associations of Opioid Abuse
12:00 PM - 1:30 PM	Using Driving Question Boards and IQWST® Storylines to Motivate Student Learning
12:00 PM - 1:30 PM	Using Natural Phenomena to Drive NGSS-aligned Instruction and Assessment
12:30 PM - 1:30 PM	Developing Assessments to Support the Teaching and Learning of Science Crosscutting Concepts
12:30 PM - 1:30 PM	Strengthening Students' Hands-On Lab Skills Using Virtual Labs
1:00 PM - 2:00 PM	Designing and Customizing an Elementary Science Curriculum
1:00 PM - 2:00 PM	How We Survived A Zombie Apocalypse STEAM Style
1:30 PM - 2:30 PM	Hands-On Cellular Transport Modeling Activity
1:30 PM - 2:30 PM	Princeton American Chemical Society Outreach Supporting NGSS
2:00 PM - 3:00 PM	Giving CER New Life: Using a Zombie Outbreak Scenario to Teach Scientific Explanation Construction
2:00 PM - 3:00 PM	Think "Small"!
2:00 PM - 3:30 PM	Finishing the Job: Modifying "NGSS-Aligned" Curriculum Materials
2:00 AM - 3:30 PM	NGSS/NJSLS-S and Interdisciplinary Instruction
2:30 PM - 3:30 PM	Let's Explore the NGSS Using the Phenomenon of Light
1:00 PM - 2:30 PM	Appendixes to the NJSLS-S

Pedagogy

Wednesday

2:00 PM - 3:30 PM	CANCELLED: Argument-Driven Inquiry: 3D Investigations that Integrate Science, Literacy and Mathematics
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Performance Assessment Writing

Wednesday

2:30 PM - 3:30 PM	Making a Performance Assessment: Where to start?
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Physics/Physical Science

Tuesday

8:00 AM - 9:00 AM	Active Physics and NGSS/NJSLS-S: A Focus on the "E" in STEM
9:30 AM - 10:30 AM	Elementary Engineers
10:00 AM - 11:00 AM	Colorful World of Electrophoresis! Molecules in ACTION!
11:00 AM - 12:00 PM	The Physics of SCUBA Diving
1:00 PM - 2:00 PM	The Observable Universe, From Earth to the Quasars
2:30 PM - 3:30 PM	Elementary & Middle School Demonstrations and Lab Activities on a Dime

Wednesday

8:30 AM - 9:30 AM	Learn About Free, Phenomenon-Based Materials for Grades 6-8 Science
9:30 AM - 10:30 AM	Exploring the Student Response Process Using an NGSS-Aligned Physics Performance Assessment
10:30 AM - 11:30 AM	Learning About Digital and Analog Signals through GPS Geocaching
10:30 AM - 12:00 PM	Elementary Energy (Grade 2-4)
12:00 PM - 1:30 PM	Using Driving Question Boards and IQWST® Storylines to Motivate Student Learning
2:00 PM - 3:30 PM	Force & Motion: Pushes & Pulls

Science Leaders/Supervision

Tuesday

8:00 AM - 9:00 AM	If You Build it, They Will Come. Creating a School Science Festival
8:00 AM - 9:00 AM	Upcycle Favorite Activities into NGSS Lessons
8:30 AM - 9:30 AM	Building Linguistic Competence in Science
8:30 AM - 10:00 AM	What NGSS-Aligned Classrooms Look Like and Sound Like
9:30 AM - 10:30 AM	Plan 2020: A Journey in K-12 Science in Service to Three-Dimensional Teaching and Learning
10:00 AM - 11:00 AM	Equitable Access to Science Learning
11:30 AM - 12:30 PM	Doing Science Safely
12:00 PM - 1:30 PM	Beyond Claims-Evidence-Reasoning: Taking Down Scaffolds to Increase Student Reasoning

Programs at a Glance

1:00 PM - 2:30 PM Appendixes to the NJSL-S

Wednesday

8:30 AM - 10:00 AM	Leveraging PLCs to Deepen Student and Teacher Engagement With the NGSS/NJSL
9:30 AM - 10:30 AM	Evolution of Science Education
10:00 AM - 11:00 AM	Curricular Articulation and Building NGSS Alignment Within a Spiraling Curriculum
10:00 AM - 11:00 AM	Let's Improve Student Achievement through STEM Teacher Actions and STEM Certification
11:00 AM - 12:30 PM	Equitable Access to Science Learning
1:00 PM - 2:00 PM	Designing and Customizing an Elementary Science Curriculum
2:00 PM - 3:30 PM	NJSELA Annual Meeting
1:00 PM - 2:30 PM	Appendixes to the NJSL-S

Social Emotional Wellness of Students

Wednesday

11:30 AM - 12:30 PM Increasing Social Emotional Wellness of Students in Biology Classes

STEM/STEAM

Tuesday

8:00 AM - 9:00 AM	If You Build it, They Will Come. Creating a School Science Festival
8:00 AM - 9:00 AM	Junior Solar Sprints
8:00 AM - 9:00 AM	STEM Activities for the Differentiated Classroom
8:00 AM - 9:00 AM	Students Teaching Parents Science? Getting Families Involved
8:00 AM - 9:30 AM	Introduction to Engineering Design for Science Instruction
8:30 AM - 10:00 AM	Family STEAM Nights
9:30 AM - 10:30 AM	Elementary Engineers
9:30 AM - 10:30 AM	Plan 2020: A Journey in K-12 Science in Service to Three-Dimensional Teaching and Learning
9:30 AM - 10:30 AM	Teaching Tech with Arduino
10:00 AM - 11:00 AM	Let's Use Claim-Evidence-Reasoning (CER) to Increase Student Voice
11:00 AM - 12:00 PM	How to Encourage Girls in Elementary School to Enjoy and Continue Interest in STEM-Related Courses
11:00 AM - 12:00 PM	Learning Through Stories: Using Case Studies to Apply Knowledge
11:00 AM - 12:30 PM	Full S.T.E.A.M Ahead: A Year Later
11:30 AM - 12:30 PM	Making Science Learning Lifelong, Lifewide and Lifedeep: The Importance of Out-of-School Learning
11:30 AM - 12:30 PM	Raspberry Pi in the Classroom
12:30 PM - 1:30 PM	Classroom Collaborations Between Grade Levels
12:30 PM - 2:00 PM	Entrepreneurship Meets STEM
1:00 PM - 2:00 PM	Satellites in the K12 Classroom
2:00 PM - 3:00 PM	Creating and Exploring Your Own Virtual Reality with CoSpaces
2:00 PM - 3:30 PM	Building a Future of Problem-Based Learning
2:30 PM - 3:30 PM	100Kin10 Listening Session

Wednesday

8:30 AM - 9:30 AM	Hydrogen Car Challenge
8:30 AM - 9:30 AM	Implementing Quality STEM/STEAM Instruction
8:30 AM - 10:00 AM	Hello Science, Meet Creative Arts!
9:30 AM - 10:30 AM	Supporting Students Forming Hypotheses/Asking Questions through Scaffolding
9:30 AM - 10:30 AM	Thinking Outside The 3D Printed Box: Using Technology to Enhance Your NGSS Lessons
9:30 AM - 11:00 AM	Using Video Phenomenon
10:00 AM - 11:00 AM	Let's Improve Student Achievement through STEM Teacher Actions and STEM Certification
10:00 AM - 11:30 AM	Increasing Opportunities for Equitable Access in Group Work for All Students
10:30 AM - 11:30 AM	Quick and Easy Experiments Using the Latest Technology
10:30 AM - 12:00 PM	Anatomy in Clay MANIKEN Muscles!
11:00 AM - 12:00 PM	Exploring Adaptations from High Tech to No Tech
11:30 AM - 12:30 PM	Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)
12:00 PM - 1:00 PM	Hop Onboard the CSEP Train!
12:00 PM - 1:00 PM	Integrated-STEM Curriculum for Grades 9, 10, and 11--Resources and Reflections
12:00 PM - 1:00 PM	Tricked Into Thinking

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12:30 PM - 1:30 PM	Strengthening Students' Hands-On Lab Skills Using Virtual Labs
1:00 PM - 2:00 PM	How We Survived A Zombie Apocalypse STEAM Style
1:00 PM - 2:00 PM	Project RED STEM Curriculum
1:30 PM - 3:00 PM	Think Like an Engineer with Phenomenal Science Instruction!
1:30 PM - 3:00 PM	Virtual and Augmented Reality Experiences in STEM Education
2:00 PM - 3:00 PM	Giving CER New Life: Using a Zombie Outbreak Scenario to Teach Scientific Explanation Construction
2:30 PM - 3:30 PM	Let's Explore the NGSS Using the Phenomenon of Light
2:30 PM - 3:30 PM	Middle School Chemistry Design Challenges - Letting Your Kids Safely "Play" with Chemicals.
2:30 PM - 3:30 PM	STEM Non-Fiction Reading for Middle School

Sustainability

Wednesday

11:00 AM - 12:00 PM	How to Develop a Capstone Take-Action Plan to Achieve United Nations Sustainability Goals
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Tuesday

11:00 AM - 12:30 PM	Full S.T.E.A.M Ahead: A Year Later
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Technology

Tuesday

8:00 AM - 9:30 AM	Incorporating Simulations, Animations, and Videos into Your Chemistry Curriculum
8:30 AM - 9:30 AM	How to Create Digital Learning Games
8:30 AM - 9:30 AM	Promoting the Science & Engineering Practices Using Digital Media and Tools
9:30 AM - 10:30 AM	Arduino in the Science Classroom
9:30 AM - 10:30 AM	Arduino in the Science Classroom
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1:00 PM - 2:00 PM	Integrating Technology Into the Secondary Classroom
1:00 PM - 2:00 PM	Satellites in the K12 Classroom
2:00 PM - 3:00 PM	Creating and Exploring Your Own Virtual Reality with CoSpaces

Wednesday

8:30 AM - 9:30 AM	Hydrogen Car Challenge
8:30 AM - 10:00 AM	P51 Glow Labs: Investigate DNA Structure: The Central Dogma and Enzyme Activity Using Fluorescence
9:30 AM - 10:30 AM	Thinking Outside The 3D Printed Box: Using Technology to Enhance Your NGSS Lessons
10:00 AM - 11:30 AM	Revamp Your Review Session! Using Technology to Create Escape Rooms
11:00 AM - 12:00 PM	Come see Nat Geo's exciting K-5 Science program!
1:00 PM - 2:00 PM	Read, Write and THINK Like a Scientist
2:00 PM - 3:00 PM	Come see Nat Geo's Environmental Science Programs!
2:30 PM - 3:30 PM	21st Century Science Using 21st Century Tools