

NH Frameworks For Science Literacy (K–12)

Earth Space Science

ESS1 – The Earth and Earth materials, as we know them today, have developed over long periods of time, through constant change processes.

1. Atmosphere, Climate, and Weather
 - Dust Bowls and Failed Levees
 - House of Seasons (A)
 - Nature Rules!
 - Piece It Together
 - Poetic Precipitation
 - Thunderstorm (The)
 - Water Models
 - Wet Vacation
2. Composition and Features
 - Branching Out
 - Geysers Guts
 - Great Stony Book (The)
 - People of the Bog
 - Water Models
3. Fossils
 - Great Stony Book (The)
 - Old Water
4. Observation of the Earth from Space
 - None*
5. Processes and Rates of Change
 - Great Stony Book (The)
 - Old Water
 - People of the Bog
6. Rock Cycle
 - Wetland Soils in Living Color
7. Water
 - A–Maze–Ing Water
 - Branching Out!
 - Capture, Store, and Release
 - Color Me A Watershed
 - Common Water
 - Drop in the Bucket (A)
 - Get the Ground Water Picture
 - Geysers Guts
 - Grave Mistake (A)
 - Great Stony Book (The)
 - Great Water Journeys
 - Imagine!
 - Incredible Journey (The)
 - Just Passing Through
 - Macroinvertebrate Mayhem
 - Piece It Together
 - Poetic Precipitation
 - Pucker Effect (The)
 - Rainy–Day Hike
 - Reaching Your Limits
 - Sparkling Water
 - Stream Sense
 - Sum of the Parts
 - Water Models
 - Where Are the Frogs?

ESS2 – The Earth is part of a solar system, made up of distinct parts, which have temporal and spatial interrelationships.

1. Earth, Sun and Moon
None
2. Energy
None
3. Solar System
None
4. View from Earth
None

ESS3 – The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time.

1. Size and Scale
None
2. Stars and Galaxies
None
3. Universe
None

ESS4 – The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. Design Technology
None
2. Tools
None
3. Social Issues (Local and Global)

AfterMath	Humpty Dumpty
A–Maze–Ing Water	Irrigation Interpretation
Back to the Future	Just Passing Through
CEO (The)	Long Haul (The)
Color Me A Watershed	Macroinvertebrate Mayhem
Common Water	Perspectices
Dilemma Derby	Price is Right (The)
Dust Bowls and Failed Levees	Reaching Your Limits
Easy Street	Sparkling Water
Every Drop Counts	Sum of the Parts
Grave Mistake (A)	Super Bowl Surge

ESS4 – The growth of scientific knowledge in Earth Space Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

3. Social Issues (Local and Global) (cont.)

Water Bill of Rights
Water Concentration
Water Meter
Water Works
Wet–Work Shuffle
Whose Problem Is It?

4. Career Technical Education Connections

CEO (The)
Wet–Work Shuffle

Life Science

LS1 – All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, and species).

1. Classification

None

2. Living Things and Organization

Aqua Bodies

Aqua Notes

Let's Even Things Out

Life Box (The)

Macroinvertebrate Mayhem

Salt Marsh Players

Thirsty Plants

Water Address

3. Reproduction

None

LS2 – Energy flows and matter recycles through an ecosystem.

1. Environment

Humpty Dumpty

Life Box (The)

Life in the Fast Lane

Macroinvertebrate Mayhem

People of the Bog

Piece It Together

Salt Marsh Players

2. Flow of Energy

None

3. Recycling of Materials

Thirsty Plants

LS3 – Groups of organisms show evidence of change over time (e.g. evolution, natural selection, structures, behaviors, and biochemistry).

1. Change

Life in the Fast Lane

Macroinvertebrate Mayhem

Where Are the Frogs?

2. Evolution

None

3. Natural Selection

None

LS4 – Humans are similar to other species in many ways, and yet are unique among Earth's life forms.

1. Behavior
 - Piece It Together
 - Salt Marsh Players
2. Disease
 - No Bellyachers
 - Poison Pump
 - Super Sleuths
3. Human Identity
 - Aqua Bodies
 - Aqua Notes

LS5 – The growth of scientific knowledge in Life Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. Design Technology
 - None*
2. Tools
 - None*
3. Social Issues (Local and Global)
 - Irrigation Interpretation
 - Poison Pump
4. Career Technical Education Connections
 - Poison Pump

Physical Science

PS1 – All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size/amount of substance).

1. Composition

Hangin' Together
Molecules in Motion
What's the Solution?
Where Are the Frogs?

2. Properties

Adventures in Density	Incredible Journey (The)
Cold Cash in the Icebox	Is There Water on Zork?
H2Olympics	Molecules in Motion
Hangin' Together	Water Match
Imagine!	What's the Solution?

PS 2 – Energy is necessary for change to occur in matter. Energy can be stored, transferred and transformed, but cannot be destroyed.

1. Change

Energetic Water
Molecules in Motion

2. Conservation

None

3. Energy

Energetic Water
Incredible Journey (The)

PS 3 – The motion of an object is affected by force.

1. Forces

None

2. Motion

Water in Motion

PS4 – The growth of scientific knowledge in Physical Science has been advanced through the development of technology and is used (alone or in combination with other sciences) to identify, understand and solve local and global issues.

1. Design Technology
Cold Cash in the Icebox
2. Tools
None
3. Social Issues (Local and Global)
None
4. Career Technical Education Connections
None

Science Process Skills

SPS1: Scientific Inquiry and Critical Thinking Skills

1. Making Observations and Asking Questions

Adventures in Density	Price is Right (The)
Capture, Store, and Release	Pucker Effect (The)
Cold Cash in the Icebox	Rainy-Day Hike
Drop in the Bucket (A)	Reaching Your Limits
Energetic Water	Stream Sense
Every Drop Counts	Sum of the Parts
Geyser Guts	Thunderstorm (The)
Great Stony Book (The)	Water Concentration
H2Olympics	Water in Motion
Hangin' Together	Water Match
Irrigation Interpretation	Water Meter
Is There Water on Zork?	Water Models
Life in the Fast Lane	Water Works
Money Down the Drain	What's the Solution?
Pass the Jug	Where Are the Frogs?
People of the Bog	Wish Book

2. Designing Scientific Investigations

Cold Cash in the Icebox
Energetic Water
Is There Water on Zork?
Sparkling Water
Water in Motion

3. Conducting Scientific Investigations

Adventures in Density	Sparkling Water
Cold Cash in the Icebox	Thirsty Plants
H2Olympics	Where Are the Frogs?
Is There Water on Zork?	

4. Representing and Understanding Results of Investigations

AfterMath	Dilemma Derby
A-Maze-Ing Water	Drop in the Bucket (A)
Back to the Future	Easy Street
Branching Out!	Every Drop Counts
Capture, Store, and Release	Get the Ground Water Picture
Choices and Preferences, Water Index	Geyser Guts
Cold Cash in the Icebox	Grave Mistake (A)
Color Me A Watershed	Great Stony Book (The)
Common Water	Great Water Journeys
	Hangin' Together

SPS1: Scientific Inquiry and Critical Thinking Skills (cont.)

4. Representing and Understanding Results of Investigations (cont.)

House of Seasons (A)	Rainy-Day Hike
Humpty Dumpty	Reaching Your Limits
Incredible Journey (The)	Salt Marsh Players
Irrigation Interpretation	Sparkling Water
Is There Water on Zork?	Sum of the Parts
Just Passing Through	Super Sleuths
Life in the Fast Lane	Thunderstorm (The)
Long Haul (The)	Water Address
Macroinvertebrate Mayhem	Water Concentration
Molecules in Motion	Water Meter
Money Down the Drain	Water Models
Old Water	Water Works
Pass the Jug	Wet Vacation
People of the Bog	Wetland Soils in Living Color
Piece It Together	Wet-Work Shuffle
Poetic Precipitation	What's the Solution?
Poison Pump	Where Are the Frogs?
Price is Right (The)	Whose Problem Is It?
Pucker Effect (The)	Wish Book

5. Evaluating Scientific Explanations

Energetic Water
Grave Mistake (A)
Is There Water on Zork?
Life Box (The)

SPS2: Unifying Concepts of Science.

1. Nature of Science

<i>None</i>	
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2. Systems and Energy

Humpty Dumpty	
Sum of the Parts	

3. Models and Scale

Every Drop Counts	
Water Models	

4. Patterns of Change

Easy Street	Life in the Fast Lane
Let's Even Things Out	Water Concentration

SPS2: Unifying Concepts of Science. (cont.)

5. Form and Function

None

SPS3: Personal, Social, and Technological Perspectives

1. Collaboration in Scientific Endeavors

Nature Rules!

2. Common Environmental Issues, Natural Resources Management and Conservation

Dilemma Derby

Perspectives

Easy Street

Price is Right (The)

Hot Water

Pucker Effect (The)

Humpty Dumpty

Rainy-Day Hike

Life in the Fast Lane

Super Bowl Surge

Money Down the Drain

Water Court

Pass the Jug

3. Science and Technology; Technological Design and Application

CEO (The)

Price is Right (The)

Super Bowl Surge

SPS4: Science Skills for Information, Communication and Media Literacy

1. Information and Media Literacy

CEO (The)

Perspectives

Dust Bowls and Failed Levees

Water: Read All About It

Great Water Journeys

Whose Problem Is It?

Hot Water

Wish Book

Nature Rules!

2. Communication Skills

CEO (The)

Salt Marsh Players

Dust Bowls and Failed Levees

Super Bowl Surge

Great Water Journeys

Water Bill of Rights

Hangin' Together

Water Concentration

Hot Water

Water Court

House of Seasons (A)

Water in Motion

Molecules in Motion

Water Models

Nature Rules!

Water: Read All About It

Old Water

Wet Vacation

Poetic Precipitation

Wet-Work Shuffle

Price is Right (The)

Where Are the Frogs?

SPS4: Science Skills for Information, Communication and Media Literacy (cont.)

3. Critical Thinking and Systems Thinking
 - Humpty Dumpty
 - Super Bowl Surge
 - What's the Solution?

4. Problem Identification, Formulation, and Solution
 - Cold Cash in the Icebox
 - Humpty Dumpty
 - Super Bowl Surge

5. Creativity and Intellectual Curiosity
 - Super Bowl Surge

6. Interpersonal and Collaborative Skills
 - Pass the Jug
 - Water Meter
 - Water Works

7. Self Direction
 - None*

8. Accountability and Adaptability
 - None*

9. Social Responsibility
 - Dilemma Derby
 - Perspectives