

Main Criteria: National Theatre for Children

Secondary Criteria: New York State Learning Standards and Core Curriculum, Next Generation Science Standards (NGSS)

Subject: Science

Grades: 3, 4, 5

National Theatre for Children

How electricity is made

New York State Learning Standards and Core Curriculum

Science

Grade 3 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.2.	Observe the way one form of energy can be transferred into another form of energy present in common situations (e.g., mechanical to heat energy, mechanical to electrical energy, chemical to heat energy).
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues that affect their home, school, or community, and carry out a remedial course of action

New York State Learning Standards and Core Curriculum

Science

Grade 4 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.2.	Observe the way one form of energy can be transferred into another form of energy present in common situations (e.g., mechanical to heat energy, mechanical to electrical energy, chemical to heat energy).
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
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New York State Learning Standards and Core Curriculum

Science

Grade 5 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.1.	Analysis, Inquiry, and Design: Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.
CATEGORY / CLUSTER / KEY IDEA	S1:	SCIENTIFIC INQUIRY: The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.
STANDARD / CONCEPTUAL UNDERSTANDING	S1.2.	Construct explanations independently for natural phenomena, especially by proposing preliminary visual models of phenomena.
EXPECTATION / CONTENT SPECIFICATION	S1.2c.	Differentiate among observations, inferences, predictions, and explanations
STRAND / DOMAIN / UNIFYING THEME	NY.1.	Analysis, Inquiry, and Design: Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.
CATEGORY / CLUSTER / KEY IDEA	S2:	SCIENTIFIC INQUIRY: Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.
STANDARD / CONCEPTUAL UNDERSTANDING	S2.1.	Use conventional techniques and those of their own design to make further observations and refine their explanations, guided by a need for more information.
EXPECTATION / CONTENT SPECIFICATION	S2.1d.	Use appropriate tools and conventional techniques to solve problems about the natural world, including: measuring; observing; describing; classifying; sequencing
STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.1.	Describe the sources and identify the transformations of energy observed in everyday life.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.4.	Observe and describe the properties of sound, light, magnetism, and electricity.
STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.5:	Energy and matter interact through forces that result in changes in motion.
STANDARD / CONCEPTUAL UNDERSTANDING	4.5.2.	Observe, describe, and compare effects of forces (gravity, electric current, and magnetism) on the motion of objects.
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues at the local level and plan and carry out a remedial course of action.

Next Generation Science Standards (NGSS)

Science

Grade 4 - Adopted: 2013

STRAND	NGSS.4-PS.	PHYSICAL SCIENCE
TITLE	4-PS3.	Energy
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-PS3-2.	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
STRAND	NGSS.4-ESS.	EARTH AND SPACE SCIENCE
TITLE	4-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

How energy is used unwisely

New York State Learning Standards and Core Curriculum

Science

Grade 3 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues that affect their home, school, or community, and carry out a remedial course of action

New York State Learning Standards and Core Curriculum

Science

Grade 4 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
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New York State Learning Standards and Core Curriculum

Science

Grade 5 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL	4.4.4.	Observe and describe the properties of sound, light, magnetism, and electricity.

UNDERSTANDING		
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
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Next Generation Science Standards (NGSS)

Science

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STRAND	NGSS.4-PS.	PHYSICAL SCIENCE
TITLE	4-PS3.	Energy
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-PS3-2.	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
STRAND	NGSS.4-ESS.	EARTH AND SPACE SCIENCE
TITLE	4-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Next Generation Science Standards (NGSS)

Science

Grade 5 - Adopted: 2013

STRAND	NGSS.5-ESS.	EARTH AND SPACE SCIENCE
TITLE	5-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	5-ESS3-1.	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

How we use natural resources

New York State Learning Standards and Core Curriculum

Science

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**New York State Learning Standards and Core Curriculum
Science**

Grade 5 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.1.	Describe the sources and identify the transformations of energy observed in everyday life.
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.
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Next Generation Science Standards (NGSS)

Science

Grade 4 - Adopted: 2013

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PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

The science of energy and technology

**New York State Learning Standards and Core Curriculum
Science**

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STANDARD / CONCEPTUAL UNDERSTANDING	4.4.1.	Describe a variety of forms of energy (e.g., heat, chemical, light) and the changes that occur in objects when they interact with those forms of energy.

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Next Generation Science Standards (NGSS)

Science

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TITLE	4-PS3.	Energy
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-PS3-2.	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
STRAND	NGSS.4-ESS.	EARTH AND SPACE SCIENCE
TITLE	4-ESS3.	Earth and Human Activity
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PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

The science of natural resources

New York State Learning Standards and Core Curriculum

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CLUSTER / KEY IDEA		
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.1.	Describe the sources and identify the transformations of energy observed in everyday life.
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Next Generation Science Standards (NGSS)

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PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

The uses of electricity

New York State Learning Standards and Core Curriculum

Science

Grade 3 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.L4.	The Living Environment: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	L4.6:	Plants and animals depend on each other and their physical environment.
STANDARD / CONCEPTUAL UNDERSTANDING	4.6.2.	Describe the relationship of the Sun as an energy source for living and nonliving cycles.
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues that affect their home, school, or community, and carry out a remedial course of action
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.2.	Make informed consumer decisions by applying knowledge about the attributes of particular products and making cost/benefit trade-offs to arrive at an optimal choice

New York State Learning Standards and Core Curriculum

Science

Grade 4 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.L4.	The Living Environment: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
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New York State Learning Standards and Core Curriculum

Science

Grade 5 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.1.	Analysis, Inquiry, and Design: Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.
CATEGORY / CLUSTER / KEY IDEA	S1:	SCIENTIFIC INQUIRY: The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.
STANDARD / CONCEPTUAL UNDERSTANDING	S1.2.	Construct explanations independently for natural phenomena, especially by proposing preliminary visual models of phenomena.
EXPECTATION / CONTENT SPECIFICATION	S1.2c.	Differentiate among observations, inferences, predictions, and explanations
STRAND / DOMAIN / UNIFYING THEME	NY.1.	Analysis, Inquiry, and Design: Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.
CATEGORY / CLUSTER / KEY IDEA	S2:	SCIENTIFIC INQUIRY: Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.
STANDARD / CONCEPTUAL UNDERSTANDING	S2.1.	Use conventional techniques and those of their own design to make further observations and refine their explanations, guided by a need for more information.
EXPECTATION / CONTENT SPECIFICATION	S2.1d.	Use appropriate tools and conventional techniques to solve problems about the natural world, including: measuring; observing; describing; classifying; sequencing
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UNDERSTANDING		
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.
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STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues at the local level and plan and carry out a remedial course of action.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.2.	Make informed consumer decisions by seeking answers to appropriate questions about products, services, and systems; determining the cost/benefit and risk/benefit tradeoffs; and applying this knowledge to a potential purchase.

Next Generation Science Standards (NGSS)

Science

Grade 4 - Adopted: 2013

STRAND	NGSS.4-ESS.	EARTH AND SPACE SCIENCE
TITLE	4-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Next Generation Science Standards (NGSS)

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Grade 5 - Adopted: 2013

STRAND	NGSS.5-ESS.	EARTH AND SPACE SCIENCE
TITLE	5-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	5-ESS3-1.	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

What YOU can do to conserve energy

New York State Learning Standards and Core Curriculum

Science

Grade 3 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.L4.	The Living Environment: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	L4.7:	Human decisions and activities have had a profound impact on the physical and living environments.
STANDARD / CONCEPTUAL UNDERSTANDING	4.7.1.	Identify ways in which humans have changed their environment and the effects of those changes.
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD /	7.1.1.	Analyze science/technology/society problems and issues that affect their home,

CONCEPTUAL UNDERSTANDING		school, or community, and carry out a remedial course of action
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.2.	Make informed consumer decisions by applying knowledge about the attributes of particular products and making cost/benefit trade-offs to arrive at an optimal choice

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Science

Grade 5 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.1.	Describe the sources and identify the transformations of energy observed in everyday life.
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues at the local level and plan and carry out a remedial course of action.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.2.	Make informed consumer decisions by seeking answers to appropriate questions about products, services, and systems; determining the cost/benefit and risk/benefit tradeoffs; and applying this knowledge to a potential purchase.

Next Generation Science Standards (NGSS)

Science

Grade 4 - Adopted: 2013

STRAND	NGSS.4-ESS.	EARTH AND SPACE SCIENCE
TITLE	4-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Next Generation Science Standards (NGSS)

Science

Grade 5 - Adopted: 2013

STRAND	NGSS.5-ESS.	EARTH AND SPACE SCIENCE
TITLE	5-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	5-ESS3-1.	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

What are energy and electricity

New York State Learning Standards and Core Curriculum

Science

Grade 3 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.1.	Describe a variety of forms of energy (e.g., heat, chemical, light) and the changes that occur in objects when they interact with those forms of energy.
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues that affect their home, school, or community, and carry out a remedial course of action

New York State Learning Standards and Core Curriculum

Science

Grade 4 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.1.	Describe a variety of forms of energy (e.g., heat, chemical, light) and the changes that occur in objects when they interact with those forms of energy.

UNDERSTANDING		
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues that affect their home, school, or community, and carry out a remedial course of action

New York State Learning Standards and Core Curriculum

Science

Grade 5 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.P4.	The Physical Setting: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
CATEGORY / CLUSTER / KEY IDEA	P4.4:	Energy exists in many forms, and when these forms change energy is conserved.
STANDARD / CONCEPTUAL UNDERSTANDING	4.4.4.	Observe and describe the properties of sound, light, magnetism, and electricity.
STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues at the local level and plan and carry out a remedial course of action.

Next Generation Science Standards (NGSS)

Science

Grade 4 - Adopted: 2013

STRAND	NGSS.4-PS.	PHYSICAL SCIENCE
TITLE	4-PS3.	Energy
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-PS3-2.	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

What are energy resources

New York State Learning Standards and Core Curriculum

Science

Grade 3 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.

STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues that affect their home, school, or community, and carry out a remedial course of action
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New York State Learning Standards and Core Curriculum

Science

Grade 4 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
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New York State Learning Standards and Core Curriculum

Science

Grade 5 - Adopted: 2005

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Next Generation Science Standards (NGSS)

Science

Grade 4 - Adopted: 2013

STRAND	NGSS.4-PS.	PHYSICAL SCIENCE
TITLE	4-PS3.	Energy
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-PS3-2.	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
STRAND	NGSS.4-ESS.	EARTH AND SPACE SCIENCE
TITLE	4-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:

PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.
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What is and how to be Energy Efficient

New York State Learning Standards and Core Curriculum

Science

Grade 3 - Adopted: 2005

STRAND / DOMAIN / UNIFYING THEME	NY.7.	Interdisciplinary Problem Solving: Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.
CATEGORY / CLUSTER / KEY IDEA	7.1:	The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.
STANDARD / CONCEPTUAL UNDERSTANDING	7.1.1.	Analyze science/technology/society problems and issues that affect their home, school, or community, and carry out a remedial course of action

New York State Learning Standards and Core Curriculum

Science

Grade 4 - Adopted: 2005

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New York State Learning Standards and Core Curriculum

Science

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		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-PS3-2.	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
STRAND	NGSS.4-ESS.	EARTH AND SPACE SCIENCE
TITLE	4-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	4-ESS3-1.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

Next Generation Science Standards (NGSS)

Science

Grade 5 - Adopted: 2013

STRAND	NGSS.5-ESS.	EARTH AND SPACE SCIENCE
TITLE	5-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	5-ESS3-1.	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.