Main Criteria: National Theatre for Children

Secondary Criteria: Maryland College and Career-Ready Standards, Next Generation Science Standards (NGSS)

Subject: Science

Grades: K, 1, 2

National Theatre for Children

How energy is used unwisely

Maryland College and Career-Ready Standards

Science

Grade **K** - Adopted: **2008**

STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.A.1.**	**Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.**
INDICATOR / PROFICIENCY LEVEL	**1.A.1.a.**	**Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.**
INDICATOR / PROFICIENCY LEVEL	**1.A.1.b.**	**Seek information through reading, observation, exploration, and investigations.**
STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.B.1.**	**Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.**
INDICATOR / PROFICIENCY LEVEL	**1.B.1.b.**	**Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.**
STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.C.1.**	**Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.**
INDICATOR / PROFICIENCY LEVEL	**1.C.1.a.**	**Describe things as accurately as possible and compare observations with those of others.**

Maryland College and Career-Ready Standards

Science

Grade **1** - Adopted: **2008**

STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.A.1.**	**Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.**
INDICATOR / PROFICIENCY LEVEL	**1.A.1.a.**	**Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.**
INDICATOR / PROFICIENCY LEVEL	**1.A.1.b.**	**Seek information through reading, observation, exploration, and investigations.**
STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.B.1.**	**Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.**
INDICATOR / PROFICIENCY LEVEL	**1.B.1.b.**	**Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.**
STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC /	**1.C.1.**	**Communicating Scientific Information: Ask, 'How do you know?' in appropriate**

INDICATOR		situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.
STRAND / TOPIC / STANDARD	MD.6.0.	Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.
TOPIC / INDICATOR	6.B.1.	Environmental Issues: Recognize that caring about the environment is an important human activity.
INDICATOR / PROFICIENCY LEVEL	6.B.1.c.	Give reasons why people should take care of their environments.

Maryland College and Career-Ready Standards

Science

Grade **2** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.
STRAND / TOPIC / STANDARD	MD.6.0.	Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.
TOPIC / INDICATOR	6.A.1.	Natural Resources and Human Needs: Recognize and explain how Earth's natural resources from the natural environment are used to meet human needs.
INDICATOR / PROFICIENCY LEVEL	6.A.1.a.	Describe natural resources as something from the natural environment that is used to meet one's needs.
INDICATOR / PROFICIENCY LEVEL	6.A.1.b.	Identify water, air, soil, minerals, animals, and plants as basic natural resources.
INDICATOR / PROFICIENCY LEVEL	6.A.1.c.	Explain that food, fuels, and fibers are produced from basic natural resources.
INDICATOR / PROFICIENCY LEVEL	6.A.1.d.	Identify ways that humans use Earth's natural resources to meet their needs.
INDICATOR / PROFICIENCY LEVEL	6.A.1.e.	Explain that some natural resources are limited and need to be used wisely.
STRAND / TOPIC / STANDARD	MD.6.0.	Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.
TOPIC /	6.B.1.	Environmental Issues: Recognize and describe that the activities of individuals or

INDICATOR		groups of individuals can affect the environment.
INDICATOR / PROFICIENCY LEVEL	6.B.1.a.	Identify and describe that individual and group actions, such as turning off lights, conserving water, recycling, picking up litter, or joining an organization can extend the natural resources of the environment.
INDICATOR / PROFICIENCY LEVEL	6.B.1.b.	Identify and describe that individual and group actions, such as leaving lights on, wasting water, or throwing away recyclables, can limit the natural resources of the environment.

Next Generation Science Standards (NGSS)

Science

Grade **K** - Adopted: **2013**

STRAND	NGSS.K-ESS.	EARTH AND SPACE SCIENCE
TITLE	K-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	K-ESS3-3.	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

How we can use energy efficiently

Maryland College and Career-Ready Standards

Science

Grade **K** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.

Maryland College and Career-Ready Standards

Science

Grade **1** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.
STRAND / TOPIC / STANDARD	MD.6.0.	Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.
TOPIC / INDICATOR	6.B.1.	Environmental Issues: Recognize that caring about the environment is an important human activity.
INDICATOR / PROFICIENCY LEVEL	6.B.1.b.	Recognize and describe that individual and group actions, such as littering, harm the environment.
INDICATOR / PROFICIENCY LEVEL	6.B.1.c.	Give reasons why people should take care of their environments.

Maryland College and Career-Ready Standards

Science

Grade **2** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.
STRAND / TOPIC / STANDARD	MD.5.0.	Physics: Students will use scientific skills and processes to explain the interactions of matter and energy and the energy transformations that occur.
TOPIC / INDICATOR	5.B.1.	Thermodynamics: Identify and describe ways in which heat can be produced.
INDICATOR / PROFICIENCY LEVEL	5.B.1.c.	Identify fuels that are used to produce light and heat in homes and schools.
STRAND / TOPIC / STANDARD	MD.6.0.	Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.

TOPIC / INDICATOR	6.B.1.	Environmental Issues: Recognize and describe that the activities of individuals or groups of individuals can affect the environment.
INDICATOR / PROFICIENCY LEVEL	6.B.1.a.	Identify and describe that individual and group actions, such as turning off lights, conserving water, recycling, picking up litter, or joining an organization can extend the natural resources of the environment.
INDICATOR / PROFICIENCY LEVEL	6.B.1.b.	Identify and describe that individual and group actions, such as leaving lights on, wasting water, or throwing away recyclables, can limit the natural resources of the environment.

Next Generation Science Standards (NGSS)

Science

Grade **K** - Adopted: **2013**

STRAND	NGSS.K-ESS.	EARTH AND SPACE SCIENCE
TITLE	K-ESS3.	Earth and Human Activity
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	K-ESS3-3.	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

How we measure energy

Maryland College and Career-Ready Standards

Science

Grade **K** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
INDICATOR / PROFICIENCY LEVEL	1.A.1.g.	Use whole numbers and simple, everyday fractions in ordering, counting, identifying, measuring, and describing things and experiences.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.

Maryland College and Career-Ready Standards

Science

Grade **1** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what

LEVEL		happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
INDICATOR / PROFICIENCY LEVEL	1.A.1.g.	Use whole numbers and simple, everyday fractions in ordering, counting, identifying, measuring, and describing things and experiences.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.

Maryland College and Career-Ready Standards

Science

Grade **2** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
INDICATOR / PROFICIENCY LEVEL	1.A.1.g.	Use whole numbers and simple, everyday fractions in ordering, counting, identifying, measuring, and describing things and experiences.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.

What renewable resources are

Maryland College and Career-Ready Standards

Science

Grade **K** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.

INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.

Maryland College and Career-Ready Standards

Science

Grade **1** - Adopted: **2008**

STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.A.1.	Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
INDICATOR / PROFICIENCY LEVEL	1.A.1.a.	Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.
INDICATOR / PROFICIENCY LEVEL	1.A.1.b.	Seek information through reading, observation, exploration, and investigations.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.B.1.	Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.
INDICATOR / PROFICIENCY LEVEL	1.B.1.b.	Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.
STRAND / TOPIC / STANDARD	MD.1.0.	Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.
TOPIC / INDICATOR	1.C.1.	Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.
INDICATOR / PROFICIENCY LEVEL	1.C.1.a.	Describe things as accurately as possible and compare observations with those of others.
STRAND / TOPIC / STANDARD	MD.6.0.	Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.
TOPIC / INDICATOR	6.B.1.	Environmental Issues: Recognize that caring about the environment is an important human activity.
INDICATOR / PROFICIENCY LEVEL	6.B.1.a.	Recognize and describe that individual and group actions, such as recycling, help the environment.
INDICATOR / PROFICIENCY LEVEL	6.B.1.b.	Recognize and describe that individual and group actions, such as littering, harm the environment.
INDICATOR / PROFICIENCY LEVEL	6.B.1.c.	Give reasons why people should take care of their environments.

Science

Grade **2** - Adopted: **2008**

STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.A.1.**	**Constructing Knowledge: Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.**
INDICATOR / PROFICIENCY LEVEL	**1.A.1.a.**	**Describe what can be learned about things by just observing those things carefully and adding information by sometimes doing something to the things and noting what happens.**
INDICATOR / PROFICIENCY LEVEL	**1.A.1.b.**	**Seek information through reading, observation, exploration, and investigations.**
STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.B.1.**	**Applying Evidence and Reasoning: People are more likely to believe your ideas if you can give good reasons for them.**
INDICATOR / PROFICIENCY LEVEL	**1.B.1.b.**	**Develop reasonable explanations for observations made, investigations completed, and information gained by sharing ideas and listening to others' ideas.**
STRAND / TOPIC / STANDARD	**MD.1.0.**	**Skills and Processes: Students will demonstrate the thinking and acting inherent in the practice of science.**
TOPIC / INDICATOR	**1.C.1.**	**Communicating Scientific Information: Ask, 'How do you know?' in appropriate situations and attempt reasonable answers when others ask them the same question.**
INDICATOR / PROFICIENCY LEVEL	**1.C.1.a.**	**Describe things as accurately as possible and compare observations with those of others.**
STRAND / TOPIC / STANDARD	**MD.5.0.**	**Physics: Students will use scientific skills and processes to explain the interactions of matter and energy and the energy transformations that occur.**
TOPIC / INDICATOR	**5.B.1.**	**Thermodynamics: Identify and describe ways in which heat can be produced.**
INDICATOR / PROFICIENCY LEVEL	**5.B.1.c.**	**Identify fuels that are used to produce light and heat in homes and schools.**
STRAND / TOPIC / STANDARD	**MD.6.0.**	**Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.**
TOPIC / INDICATOR	**6.A.1.**	**Natural Resources and Human Needs: Recognize and explain how Earth's natural resources from the natural environment are used to meet human needs.**
INDICATOR / PROFICIENCY LEVEL	**6.A.1.a.**	**Describe natural resources as something from the natural environment that is used to meet one's needs.**
INDICATOR / PROFICIENCY LEVEL	**6.A.1.b.**	**Identify water, air, soil, minerals, animals, and plants as basic natural resources.**
INDICATOR / PROFICIENCY LEVEL	**6.A.1.c.**	**Explain that food, fuels, and fibers are produced from basic natural resources.**
INDICATOR / PROFICIENCY LEVEL	**6.A.1.d.**	**Identify ways that humans use Earth's natural resources to meet their needs.**
STRAND / TOPIC / STANDARD	**MD.6.0.**	**Environmental Science: Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.**
TOPIC / INDICATOR	**6.B.1.**	**Environmental Issues: Recognize and describe that the activities of individuals or groups of individuals can affect the environment.**
INDICATOR / PROFICIENCY LEVEL	**6.B.1.a.**	**Identify and describe that individual and group actions, such as turning off lights, conserving water, recycling, picking up litter, or joining an organization can extend the natural resources of the environment.**
INDICATOR / PROFICIENCY LEVEL	**6.B.1.b.**	**Identify and describe that individual and group actions, such as leaving lights on, wasting water, or throwing away recyclables, can limit the natural resources of the environment.**

Next Generation Science Standards (NGSS)

Science

Grade **K** - Adopted: **2013**

STRAND	**NGSS.K-ESS.**	**EARTH AND SPACE SCIENCE**
TITLE	**K-ESS3.**	**Earth and Human Activity**
		Students who demonstrate understanding can:
PERFORMANCE EXPECTATION	**K-ESS3-3.**	**Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.**