Oxford Area School District Science Scope and Sequence - Quarter 1:

Grade 3

Biologic Science

3.1.3A

Organisms & Cells

- Describe characteristics of living things that help to identify and classify them.
- Describe the basic needs of living things and their dependence on light, food, air, water, and shelter.
- Illustrate how plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.
- Identify the structures in plants that are responsible for food production, support, water transport, reproduction, growth, and protection.

*Science as Inquiry

Biologic Science

3.1.3B

Genetics

- Understand that plants and animals closely resemble their parents.
- PATTERNS Identify characteristics that appear in both parents and offspring.

*Science as Inquiry

Biologic Science

3.1.3C

Evolution

- Recognize that plants survive through adaptations, such as stem growth towards light and root growth downward in response to gravity.
- Recognize that many plants and animals can survive harsh environments because of seasonal behaviors (e.g. hibernation, migration, trees shedding leaves).
- Describe animal characteristics that are necessary for survival.
- CONSTANCY AND CHANGE Recognize that fossils provide us with information about living things that inhabited the Earth long ago

*Science as Inquiry

Oxford Area School Science Scope and Sequence – Quarter 2:

Grade 3

Physical Science

3.2.3A

Chemistry

- Differentiate between properties of objects such as size, shape, and weight and properties of materials that make up the objects such as color, texture, and hardness.
- Differentiate between the three states of matter, classifying a substance as a solid, liquid, or gas.
- Recognize that all objects and materials in the world are made of matter.
- Demonstrate how heating and cooling may cause changes in the properties of materials including phase changes.
- Use basic reactions to demonstrate observable changes in properties of matter (e.g., burning, cooking).
- CONSTANCY AND CHANGE Recognize that everything is made of matter.

*Science as Inquiry

Physical Science 3.2.3B Physics

- Explain how movement can be described in many ways.
- Explore energy's ability to cause motion or create change.
- Explore how energy can be found in moving objects, light, sound, and heat.
- Explore temperature changes that result from the addition or removal of heat.
- Identify and classify objects and materials that are conductors or insulators of electricity.
- Identify and classify objects and materials as magnetic or non-magnetic.
- Recognize that light travels in a straight line until it strikes an object or travels from one material to another.
- ENERGY Recognize that light from the sun is an important source of energy for living and nonliving systems and some source of energy is needed for all organisms to stay alive and grow.

*Science as Inquiry

Earth & Space Science 3.3.3A Earth Structure

- Explain and give examples of the ways in which **soil** is formed.
- Identify the physical properties of minerals and demonstrate how minerals can be tested for these different physical properties.
- Connect the various forms of precipitation to the weather in a particular place and time.
- Explain how air temperature, moisture, wind speed and direction, and precipitation make up the weather in a particular place and time.

*Science as Inquiry

Earth & Space Science 3.3.3B Origin & Evolution of the Universe

- Relate the rotation of the earth and day/night, to the apparent movement of the sun, moon, and stars across the sky.
- Describe the changes that occur in the observable shape of the moon over the course of a month.

*Science as Inquiry

Oxford Area School District Science Scope and Sequence – Quarter 3:

Grade 3

Technology & Engineering Education 3.4.3A Scope of Technology

- Identify how the natural made world and the human made world are different.
- Identify that some systems are found in nature and some systems are made by humans.
- Describe how various relationships exist between **technology** and other fields.

Technology & Engineering Education 3.4.3B Technology & Society

- Describe how using technology can be good or bad.
- Explain how materials are re-used or recycled.
- Identify and define products made to meet individual needs versus wants.
- Illustrate how people have made tools to provide food, clothing, and shelter.

Technology & Engineering Education 3.4.3C T & E Design

- Recognize **design** is a creative process and everyone can design solutions to problems
- Explain why the **design** process requires creativity and consideration of all ideas.
- Recognize that all products and **systems** are subject to failure; many products and systems can be fixed.

Technology & Engineering Education 3.4.3D Abilities for a Technological World

- Identify people's needs and wants and define some problems that can be solved through the design process.
- Observe, analyze and document how simple **systems** work.
- Collect information about everyday products and systems by asking questions.

Technology & Engineering Education 3.4.3E The Designed World

- Identify the technologies that support and improve quality of life.
- Identify some processes used in agriculture that require different procedures, products, or systems.
- Recognize that tools, machines, products, and systems use energy in order to do work.
- Recognize that information and communication technology is the transfer of messages among people and/or machines over distances through the use of technology.
- Understand that transportation has many parts that work together to help people travel.
- Explain how manufacturing systems design and produce products in quantity.
- Recognize that people live, work, and go to school in buildings which are different types of structures.

Oxford Area School District Science Scope and Sequence – Quarter 4:

Grade 3

Environment & Ecology 4.1.3 Ecology

- Differentiate between the living and non-living components in an **environment.**
- Identify sources of energy.
- Identify **organisms** that are dependent on one another in a given **ecosystem.**
- Define **habitat** and explain how a change in **habitat** affects an **organism.**
- Identify changes in the **environment** over time.

*Science as Inquiry

Environment & Ecology 4.2.3 Watersheds & Wetlands

- Define the term **watershed**.
- Identify the **watersheds** in which you reside.
- Identify plants and animals found in a **wetland.**

*Science as Inquiry

Environment & Ecology 4.3.3 Natural Resources

- Identify the **natural resources** used to make various products.
- Identify local **natural resources.**

*Science as Inquiry

Environment & Ecology 4.4.3 Agriculture & Society

- Identify Pennsylvania crops that provide food for the table and **fiber** for **textiles.**
- Explain how **agriculture** meets the basic needs of humans.
- Use scientific inquiry to investigate what animals and plants need to grow.
- Identify **technology** used in **agriculture**.
- Identify tools and machinery used in agricultural processes.

*Science as Inquiry

Environment & Ecology 4.5.3 Humans & the Environment

- Identify resources humans take from the **environment** for their survival.
- Define the term **pest** and identify various plants and animals that humans may call **pests.**
- Identify different types of pollution and their sources.
- Describe how waste is generated. Identify and propose a solution for a waste issue in the school setting (e.g., litter in the hallway).

*Science as Inquiry

***Science as Inquiry**

- Distinguish between scientific fact and opinion.
- Ask questions about objects, organisms, and events.
- Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.
- Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.
- Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information.
- Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.
- Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.

Science Curriculum - Grade 3			
Big Idea Living things depend on their habitat to meet their basic needs.			
Essential Questions ***What conditions need to be met in order for an organism to survive in its environment?** ***How do changes in the environment affect the ability of living things to meet their basic needs?**		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*All living things depend directly or indirectly on air, water and soil. * Polluted air, water and soil can be harmful to living things. * Air, water and soil pollution can be prevented or reduced. * People depend on other living things and non-living things to provide for their basic needs. * People depend on agriculture for their basic needs including food, clothing and shelter. * Living things depend on other living things in their environment for survival. * Changes in the environment may affect the survival of living things in that environment.	*Identify ways living things and non-living things contribute to the survival of living things in their environment. * Illustrate how water, oxygen and carbon dioxide cycle through the environment. * Identify substances that can cause air, water and/or soil pollution and list ways to reduce their effects. * Explain why laws and regulations exist to help prevent extinction and give examples. * Identify a technological resource that can be used to aid the survival of a living organism. * Explain how an organism	Science Fusion 2017	

* The survival of living things is affected by changes in the food, water, shelter and space available to them. * Living things adapt to changing environmental conditions or they may become extinct. * Laws and regulations exist to help protect organisms from becoming extinct. * Technological resources may be used to aid an organism's survival.	may respond/adapt to changes in its food, water, shelter or space. * Explain why laws and regulations exist to help prevent extinction and give examples.		
Vocabulary			

Science Curriculum - Grade 3	
Big Idea Aquatic, terrestrial, and human-made ecosystems consist of diverse living and non-living components that change over time and across geographic areas	
Essential Questions **How do the living and nonliving parts of ecosystems interact and change over time?** **How are aquatic, terrestrial, and human-made systems similar and different?**	**Standards**

Concepts	Competencies	Resources	Assessments
*Pennsylvania has many types of ecosystems (aquatic, terrestrial, and human-made) with associated living and non-living components. *Aquatic systems can be lentic or lotic. Lentic systems consist of still water (e.g. ponds, lakes, swamps). Lotic systems consist of moving water (e.g. creeks, rivers, streams). *Terrestrial systems can be forest, meadow, school yard, corn fields, etc. *Plants and animals in an ecosystem have physical and behavioral responses to seasonal change. *Soil is a system composed of weathered rock and decomposed organic remains with living and non-living components. *Interactions occur between living (e.g. plants and animals) and nonliving (e.g. soil, water, temperature) parts of an ecosystem. *Wetlands are a major habitat	*Compare and contrast the living and nonliving components of aquatic, terrestrial and human-made ecosystems. *Describe how an organism interacts with the living and nonliving parts of its ecosystem. *Explain how seasonal changes affect the organisms in a local ecosystem. *Compare the components and interactions in a local ecosystem with a similar one in a different geographic area. *Demonstrate how water changes from one phase to another within the environment (e.g., evaporation, condensation, etc.). *Demonstrate how water changes from one phase to another within the environment (e.g., evaporation, condensation, etc.). *Demonstrate how water changes from one phase to another within the environment	Science Fusion 2017	

in Pennsylvania for plants and animals. *Water changes form and function within the environment.	(e.g., evaporation, condensation, etc.).		
Vocabulary aquatic, terrestrial, human-made, aquatic systems, terrestrial systems, evaporation, condensation			

Science Curriculum - Grade 3			
Big Idea The survival of living things is dependent upon their adaptations and ability to respond to natural changes in and human influences on the environment			
Essential Questions **How do organisms survive in their environment?** **How do the characteristics of organisms affect their ability to survive when change occurs in their environment?**		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*A habitat consists of food, water, shelter and space in a suitable arrangement. *When a habitat changes it affects the organism. *An organism must be able to adapt to changes in the environment or move to another location, otherwise it will die. *Organisms have physical and behavioral adaptations that	*Explain how the characteristics of an organism determine where it lives and how it survives in its environment. *Identify some natural and human caused events that can change an environment. *Explain how a particular change in the environment can affect the survival of an organism in that environment.	Science Fusion 2017	

enable them to survive in their habitat. (e.g., physical – shape of beaks, thickness of fur or fat, flat leaf vs. needle; behavioral – migration, hibernation, playing dead). *The parts and characteristics of organisms (e.g. feathers, hibernation, leaf size) affect the ways they meet their needs in different environments (e.g. wetlands, forests, ocean). *Characteristics of organisms are inherited from their parents. *Natural events and human activities can change the environment. *Organisms are made of parts and have characteristics that make them similar and different.	*Identify an organism that has become extinct in Pennsylvania and explain how it became extinct. *Identify and explain the physical and behavioral characteristics of organisms that enable them to survive in their habitats. *Describe how inherited characteristics help organisms survive in their habitats.		
Vocabulary shelter			

Science Curriculum - Grade 3	
Big Idea Humans depend upon the management and practices of agricultural systems	
Essential Questions **How is agriculture important to our daily lives?**	**Standards**

How has agricultural production changed over time? How are agricultural products produced, processed, distributed, and consumed in our society?			
Concepts	**Competencies**	**Resources**	**Assessments**
*Agricultural products provide people's basic needs and wants including food, clothing and shelter *Agriculture produces products and by-products for human use. *Food, clothing and some shelter are provided through agricultural practices. *Common Pennsylvania crops provide food for the table and fiber for textiles used in clothing and shelter. *Food, clothing and some shelter are provided through agricultural practices. *Technology, including various tools and machinery, assist in the production of agricultural products (food and fiber). *Various types of energy are used in the production of food and fiber. *Agricultural systems includes production, processing,	*Explain how agriculture impacts daily lives. *Compare and contrast the journey of two agricultural products from their source to the consumer. *Illustrate how water, oxygen and carbon dioxide cycle through the environment. *Explain how agriculture impacts daily lives. *Describe how agricultural products and practices have changed over time. *Recognize ways that humans benefit from the use of water resources (e.g., agriculture, energy, recreation). *	Science Fusion 2017	

distribution and consumption of products. *Plants and animals are natural resources that people use. *Different resources and raw materials are used to produce food and fiber products. *Agricultural practices and products have changed over time and may have caused negative impacts on the environment.			
Vocabulary			

Science Curriculum - Grade 3			
Big Idea Sustainable use of natural resources is essential to provide the needs and wants of all living things now and in the future			
Essential Questions **How are natural resources used to provide for the needs and wants of living things?** **What actions can humans take to ensure continued use of our natural resources?**		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*All living things are dependent upon natural resources. *There are renewable and non-renewable natural resources *Natural resources can be managed in a variety of ways	*Explain how the environment provides for the needs of the people. *Identify how renewable and nonrenewable resources are used in the local community.	Science Fusion 2017	

(e.g., conservation and exploitation). *Natural resources include plants, animals, water, air, minerals and fossil fuels. *Natural resources have varying life spans. *Products and by-products come from natural resources and may be recycled, reused, composted, incinerated or discarded. *Human practices and changes in technology impact the environment.	*Identify products and by-products of trees, plants and animals, (e.g., plastics, metal, aluminum, fabric, paper, cardboard). *Describe and give examples of everyday human activities and this may change the environment (e.g., food production, water consumption, solid waste production). *Identify products and by-products of natural resources and how they can be recycled, reused, composted, incinerated or discarded.		
Vocabulary			

Science Curriculum Grade 3			
Big Idea The health of all living things is directly related to the quality of the environment			
Essential Questions **What factors influence the quality of the environment?** **How can humans promote a healthy environment?**		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**

*Natural processes and human practices impact the quality of the environment. *Any change within the environment may positively or negatively impact the health of living organisms (e.g., fire can be both positive and negative; flood, pollution, balance of predator/prey relationship, abundant food sources, building dams). *Biological pests compete with humans for resources and need to be controlled to ensure a healthy environment. *Environmental management practices are needed to ensure a quality environment. *Human and animal health can be affected by air, land and/or water pollution. *Humans can promote a healthy environment by preventing and/or decreasing air, water, and soil pollution.	*Describe actions that can prevent or reduce waste pollution. *Identify different methods for controlling specific pests in the home, school and community and their impacts on the environment. *Describe a change that can occur in the environment and explain the positive and negative effects on the system. *Identify things that cause sickness when put into the air, water and soil.	Science Fusion 2017	
Vocabulary			

Science Curriculum - Grade 3

Big Idea People acting individually and/or as groups influence the environment			
Essential Questions Why is it important to recognize human impact on the environment?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*The health of an environment is dependent upon the quality of its parts. (i.e. air, water and soil). *Human actions affect environmental health. *Environmental health can be impacted by air, water, soil and land pollution. *	*Identify examples of air, water, soil and land pollutants, their sources, and their effects on the environment. *Identify litter, its effect on the environment and how it can be reduced. *Identify methods of managing pests and impacts of those methods on the environment. *	Science Fusion 2017	
Vocabulary			

Science Curriculum - Grade 3			
Big Idea Environmental laws and regulations impact humans, the environment, and the economy in both positive and negative ways.			
Essential Questions **How are natural resources used to provide for the needs and wants of living things?** **What actions can humans take to ensure continued use of our natural resources?**			
Concepts	**Competencies**	**Resources**	**Assessments**

*Environmental laws and regulations exist, are managed and enforced at the local and state agencies. *Certain laws and regulations impact what we do with natural resources and waste materials (e.g., recycling). *Certain laws and regulations impact what we do in our schools and home.	*Identify ways in which the environment is managed, conserved and protected. *Describe the role of the local and state agencies that deals with environmental laws and regulations. *Explain how a given law or regulation influences our daily routines at home and in school. *Describe the impact of a given law or regulations on what humans do with natural resources and waste materials.		
Vocabulary			

Science Curriculum - Grade 3			
Big Idea A force is required to change an object's speed or direction			
Essential Questions How could you demonstrate that a force can change an object's motion (speed or direction)?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*An object's change in position can be observed and measured. *Changes in speed or direction of motion are caused by forces.	*Design and conduct an investigation to answer a question about an object, organism or an event making and recording observations using appropriate tools and instruments.	Science Fusion 2017	

*An object's position can be described in terms of its relationship to another object or a stationary background. *The greater the force the greater the change in motion	*Measure, describe, or classify organisms, objects and/or materials by basic characteristics, their changes, and their uses.		
Vocabulary			

Science Curriculum - Grade 3			
Big Idea Magnets and electricity produce related forces			
Essential Questions What is the evidence that magnets and electricity produce forces?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*Magnets attract or repel other magnets. *Magnets attract certain kinds of materials. *Forces can attract or repel other objects. *Electric charges flowing through a wire can produce a measurable force on magnets and other objects.	*Design and conduct an investigation to answer a question about an object, organism or an event making and recording observations using appropriate tools and instruments. *Measure, describe, or classify organisms, objects and/or materials by basic characteristics, their changes, and their uses. *Identify how technology is used to meet human needs, and describe its positive and negative impacts.	Science Fusion 2017	

Vocabulary

Science Curriculum - Grade 3			
Big Idea Matter has observable and measurable physical properties			
Essential Questions		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
Vocabulary			

Science Curriculum - Grade 3			
Big Idea Different characteristics of plants and animals help some populations survive and reproduce in greater numbers			
Essential Questions How does the variation among individuals affect their survival?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*Individuals of the same kind differ in their characteristics, and sometimes the differences give individuals an advantage in surviving and reproducing. creating a population with	*Measure, describe, or classify organisms, objects and/or materials by basic characteristics, their changes, and their uses.	Science Fusion 2017	

survival and reproductive advantages. *Organisms inherit characteristics from their parents. *Fossils can be compared to one another and to organisms according to their anatomical similarities and differences. *Some organisms that lived long ago are similar to existing organisms, but some are quite different.	*Describe relationships among parts of a natural or human-made system.		
Vocabulary			

Science Curriculum - Grade 3			
Big Idea The earth system changes constantly as air, water, soil, and rock interact, and the earth is a part of a larger sun, earth, moon system			
Essential Questions **What is the evidence that the earth's systems change?** **What predictable patterns of change can be observed on and from earth?**		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*A system is made of parts, and the parts can interact. *Anything on or near the earth is pulled downward by the earth's gravity.	*Construct and use models to explain natural phenomena and make predictions and conduct investigations. *Communicate through speaking, writing, or drawing	Science Fusion 2017	

*Objects in the sky have patterns of movement that can be observed. *The Earth rotates on its axis once every 24 hours, giving rise to the cycle of night and day. The Earth's rotation causes the sun, moon, stars, and planets to appear to orbit the Earth once each day. *When liquid water disappears, it turns into a gas (water vapor) in the air. It can reappear as a liquid when cooled or as a solid when cooled further. Clouds and fog are made up of tiny water droplets or ice crystals. When such droplets or crystals get large enough, they fall as precipitation. *Water from precipitation can seep into the ground, run off, or evaporate. *Most ground water eventually flows through streams, rivers and lakes and returns to the ocean. *Weather variables such as temperature, barometric pressure, wind direction and speed, cloud type, cloud cover,	predictions, observations, and conclusions. *		

and precipitation can be observed measured and recorded to identify patterns. Basic weather conditions change in predictable patterns. *Rock is composed of different combinations of minerals. *Soils develop by the breakdown of rocks by weathering and the addition of organic material. Soil also contains many living organisms. *Earth processes occur over such long time spans and such large areas that maps and models are used to help understand them.			
Vocabulary			

Science Curriculum - Grade 3			
Big Idea All living things are made of parts that have specific functions			
Essential Questions How do the structures and functions of living things allow them to meet their needs?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**

*Parts of living things work together to carry out life functions. *Each plant or animal has different structures that serve different functions in growth, survival, and reproduction. *Most living things need food, water, light, air, and a way to dispose of wastes. *Energy is needed for all organisms to stay alive and grow. *Living things can be grouped based on their similarities and differences. *Tools make it possible to observe living things or the parts of living things that are too small to be seen with the naked eye.	*Describe relationships among parts of a natural or human-made system.		
Vocabulary			

Science Curriculum - Grade 3	
Big Idea Energy exists in many forms and can be changed from one form to another as it moves through a system	
Essential Questions How does energy change from one form to another as it moves	**Standards**

through a system?			
Concepts	**Competencies**	**Resources**	**Assessments**
*Energy can be found in moving objects, light, sound, and heat. *Light from the sun is an important source of energy for living and nonliving systems, and some source of energy is needed for all organisms to stay alive and grow. *Vibrating objects make sound, and sound can make things vibrate. The bigger the vibration, the louder the sound. The faster the vibrations, the higher the perceived pitch. *To have a sound you need to have a source, a medium, and a receiver. *Moving objects in contact with each other produce heat, and electrical, mechanical, and living things often produce heat. *When warmer things are put with cooler things, the warmer things get cooler and the cooler things get warmer until all are at the same temperature.		Science Fusion 2017	

*Electric circuits may produce or use light, heat, sound and magnetic energy. *Electric circuits require a closed pathway through which an electric current can pass. *Materials have different properties. Some materials transfer heat more rapidly than others or some materials conduct electricity better than others.			
Vocabulary			

Science Curriculum - Grade 3			
Big Idea Technology is created, used, and modified by humans.			
Essential Questions In what ways do humans create, use, and modify technologies?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*A difference exists between the natural and the human-made world. *Humans use tools, technology, and devices to help them to do a variety of things.	*Explain and provide examples of the differences between the human-made, and the natural world including how they interact. *Describe how a variety of tools/instruments can be used to adapt the world based on a	Science Fusion 2017	

*Humans must plan, use materials and select appropriate tools to complete a tasks.	need or want. *List technologies that are needed to do a variety of jobs (i.e. teacher, fireperson, baker, doctor etc). *Identify and describe materials found in technological areas. *Demonstrate the ability to plan and create things using a set of problem solving steps.		
Vocabulary			

Science Curriculum - Grade 3			
Big Idea Technological literacy is the ability to use, assess, and manage technology around us.			
Essential Questions What is technology?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*The technology around us may be good or bad. *The technology we use affects the environment in a number of different ways. *Throughout history technology has changed according to people's needs.	*List the good and/or bad characteristics of a technology. *Explain how technology affects the environment. *Describe how a technology in history has affected human needs.	Science Fusion 2017	
Vocabulary			

Science Curriculum Grade 3			
Big Idea Technological design is a creative process with anyone can do which may result in new inventions and innovations			
Essential Questions How does technological design help create inventions and innovations?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*Technological design process involves problem solving and designing solutions to problems. *The design process includes identifying and investigating a problem, generating ideas, developing objects, testing/evaluating, and sharing findings with others. *Asking questions and making observations help a person understand how technology works and may be modified.	*Describe each step in the engineering design process used to solve technological problems. *Utilize the engineering design process to solve a problem. *Explain the reason(s) why a design may not be perfect. *Demonstrate the ability to communicate (i.e. written, oral, or visual) a solution to a problem. *Communicate (i.e. written, oral or visual) an understanding of how something works after observing and asking questions of a problem.	Science Fusion 2017	
Vocabulary			

Science Curriculum - Grade 3			
Big Idea A technological world requires that humans acquire capabilities to solve technological challenges and improve products for the way we live.			
Essential Questions How do human wants and needs affect the products you use?		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**
*A technological world requires an understanding of how things are made and can be improved. *Safety is a major concern for all technological development and use. *Technology may have an effect and influence on society and the environment.	*Investigate and explain how things work and how they may be maintained. *Select and safely use a tool for a specific purpose. *Communicate how technology influences individuals, families, communities, or the environment.	Science Fusion 2017	
Vocabulary			

Science Curriculum - Grade 3			
Big Idea Each area of technology has a set of characteristics that separates it from others; however, many areas overlap in order to meet human needs and wants			
Essential Questions Technology may have an effect and influence on society and the environment.		**Standards**	
Concepts	**Competencies**	**Resources**	**Assessments**

*Technology is designed to have an impact on a living being's health. *Ecosystems can be controlled by technology. *Energy is produced in many forms and should not be wasted. *Technology allows people to send messages to one another in a variety of ways. *Different modes of transportation move people from one place to another. *Many processes and tools are used to make products. *Each structure is designed for a purpose.	*List several types of medical technologies and describe its purpose. *Design and construct a mini-ecosystem (i.e. terrarium, aquarium etc.). *List and describe several alternative energy sources. *Identify different ways a message can be conveyed to another person. *List and provide example of the four modes of transportation. *Demonstrate the ability to use a number of tools to make a product. *List and describe the purpose of several different types of structures.	Science Fusion 2017	
Vocabulary			