Grade 3 Science Curriculum Overview

The Sharon Public Schools endorse a philosophy of science education that sustains the idea that the best science learning takes place as students are actively engaged in the process of science. Process science encourages students to participate in learning activities in which they describe objects and events, ask questions, make meaning, assemble content knowledge, test ideas, employ math skills, and communicate results through verbal and written means. We expect students to refine and redefine their science process skills as thinking critically and creatively leads to a more comprehensive and memorable science experience. Learning experiences in the four content strands of Life Science, Earth/Space Science, Physical Science, and Technology/Engineering are spiraled so that students are provided with experiences in each of the strands in multiple years. These foundations in science are provided for and enhanced by a strong science program, which contributes to a student's conceptual and applied understanding of science.

Earth/Space Science: The Earth in the Solar System Unit

In this unit students integrate previously learned knowledge about the sun, moon, and the physical earth with the concept that Earth is influenced by its place in the solar system. They investigate interactions that cause day and night, the seasons, and the phases of the moon. They conduct experiments to learn about gravity. Students also research information that has been gathered from technological advances.

Understanding **Students will understand that**	**Essential Questions**	**Knowledge** **Students will know the/that**	**Skills** **Students will be able to**	**Technology** **Possible products or outcomes**
Earth is part of a system called the "solar system" that includes the sun, planets, and many moons. Earth is the third planet from the sun.	• What is the solar system? • How does earth's place in space affect living conditions that can sustain life? • What is the sun's importance in the solar system?	• The solar system includes the sun (a star) and the objects that orbit around it. • Planets, moons, asteroids, comets, and dust particles orbit around the sun. • Earth is the third planet from the sun. • The sun is a medium-sized star that is the star closest to Earth. It is the center of our solar system and it provides the light and heat energy necessary for life on Earth.	• Create a labeled diagram of the solar system. • Identify Earth's position in the solar system and how that position allows life on Earth to sustain itself. • Explain the importance of the sun.	• Create a class slideshow of the planets in our solar system using *Kid Pix*. • Use *Kid Pix* to create a labeled diagram of the solar system. • Use *Kidspiration* to make a graphic organizer to compare/contrast the Earth with your planet of study. • Use *Timeliner* to create a custom timeline of the planets' distances from the sun. • Use websites listed below to explore the solar system. http://kids.msfc.nasa.gov http://starchild.gsfc.nasa.gov/ http://seds.lpl.arizona.edu/billa/tnp http://www.enchantedlearning.com/subjects/astronomy/

Grade 3 Science Learning Standards

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
				http://www.dustbunny.com/afk/ http://www.kidsastronomy.com/solar_system.htm
Earth rotating on its axis causes day and night.	• What causes day and night?	• The Earth spins or rotates on its invisible axis. • Earth does a complete rotation every twenty-four hours. • It is daytime when our part of Earth faces the sun. • It is nighttime when our part of Earth faces away from the sun.	• Use a sphere to demonstrate the spinning movement of rotation. • Explain that the Earth's rotation causes day and night.	
The seasons are caused by Earth's revolving around the sun.	• What is the difference between rotation and revolution? • What causes the seasons?	• Earth rotates on its axis and Earth revolves around the sun. • It takes one year for the Earth to revolve around the sun. • Seasons change as Earth revolves around the sun and the angle of sunlight differs.	• Using a model, demonstrate the difference between rotation and revolution. • Explain that seasons change as Earth travels (revolves) around the sun.	• Participate in the *Global Sun Temperature Project*: http://k12science.ati.stevens-tech.edu/curriculum/tempproj3/en/index.shtml • Use *Science Court,* "Seasons", as a whole class presentation activity. • Use NASA *Seasons* website to learn what causes the seasons. http://kids.msfc.nasa.gov/Earth/Seasons/Seasons.htm
Gravity is an invisible force that pulls objects towards Earth.	• What is gravity? • What is the effect of gravity on different features of the solar system?	• Gravity is an invisible force that pulls objects towards Earth. • The amount of gravity is different on different planets and moons.	• Explain what gravity is. • Explain how life on Earth would be different without gravity.	• Use websites to see your weight on other planets in the Solar System. http://kids.msfc.nasa.gov/Puzzles/Weight.asp http://www.exploratorium.edu/ronh/weight • Use Teachers' Domain, "*What is Weightlessness*", to learn about gravity. http://www.teachersdomain.org/K2/sci/phys/howmove/zweightlessness/index.html
The appearance of the moon changes throughout the month.	• What do we see in the night sky? • What are the phases of the moon?	• The positions of the stars and the moon do not remain the same in the night sky. • The moon reflects light from the sun.	• Describe how things change in the night sky. • Demonstrate how the moon gets its light by using a flashlight and a sphere.	• Use *Moon Links* website for links to video clips and photos of moon phases. http://www.lmsd.org/staff/elemtech/gr_1_moon/gr1_moon.htm

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
		• Phases of the moon result from how much of the sun we can see being reflected by the moon. Moon phases occur in a monthly pattern.	• Analyze recorded observations to realize that the phases of the moon change in a predictable pattern during the month.	
We have learned a lot about the solar system and the universe from advances in technology and space travel. The planets in our solar system have different characteristics.	• What can we learn about the solar system from space travel? • How do the planets in our solar system differ?	• Humans must adapt to the different conditions of space travel. • Technology, including satellites, computers, and telescopes have enabled us to know more about how the planets differ.	• Explain how humans must adapt to life in space. (Bring food, water, protection from temperature extremes, strategies to deal with less gravity, etc) • Compare information about the different planets in the solar system.	• Create an alien/astronaut that can survive on a planet other than Earth with appropriate adaptations. Draw your alien/astronaut in *Kid Pix* and write a paragraph using a word processor to describe your creation explaining the reason for the adaptations. • Create an *Inspiration* web of the planets in our solar system, giving two facts about each planet. • Join the Monster Exchange Project. http://www.monsterexchange

Physical Science: How Do the States of Matter Differ? Unit

In this unit students use science process skills to build upon knowledge learned in previous grades. They investigate the states of matter by carrying out tests, collecting and recording data, analyzing results, and communicating their findings to others.

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
Solids, liquids, and gases are determined by their basic properties.	• What are the properties of matter? • What are the three states of matter? • How do the three states of matter compare to each other? • How do molecules move in matter?	• A solid has a definite shape. • The molecules in a solid are densely packed together. • A liquid flows freely and assumes the shape of its container. • The molecules in a liquid move about in all directions and collide into each other. • A gas has no fixed shape and no volume. • The molecules in a gas are far apart and move quickly in all directions.	• List the characteristics of solids, liquids, and gases. • Compare the properties of solids, liquids, and gases.	• Using *Inspiration,* compare/contrast physical properties of solids and liquids. • Draw and label the three states of matter using *Kid Pix*. • Use the Chem4Kids website to enhance student learning. http://chem4kids.com/files/matter_states.html

Grade 3 Science Learning Standards

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
Matter can change from one state to another by adding or removing heat.	• How can matter change from a solid to a liquid? • How can matter change from a liquid to a solid? • What are the properties of gases?	• Adding heat can cause matter to change from a solid to a liquid. • Taking away heat can cause matter to change from a liquid to a solid. • A gas has no particular shape or size. Its molecules are in constant motion.	• Describe at least two examples of how heat can change matter from a solid to a liquid. • Demonstrate that removing heat can change matter from a liquid to a solid. • Explain the characteristics of gases.	• Use these BBC interactive websites to explore changes in states of matter. http://www.bbc.co.uk/schools/scienceclips/ages/8_9/solid_liquids.shtml http://www.bbc.co.uk/schools/scienceclips/ages/9_10/gases.shtml http://www.bbc.co.uk/schools/scienceclips/ages/9_10/changing_state.shtml
Changes in matter can be classified as chemical or physical changes. Each state of matter has different properties.	• What is a chemical change in matter? • How do you know whether the changes you observe are physical or chemical changes? • What chemical reaction occurs when yeast becomes active? • What state of matter is a mixture of cornstarch and water? • How do the states of matter differ?	• In a chemical change or reaction, one substance changes into another. • In a physical change, matter changes from one form to another without becoming a new substance. Physical changes can usually be reversed. • When yeast becomes active, the chemical reaction produces alcohol and gas. This reaction is why yeast is used to make things rise in baking. • Mixing cornstarch and water produces an unusual mixture (colloid) that easily changes from solid to liquid and back again. • Different states of matter have different properties.	• Describe at least two examples of chemical changes in matter. • Describe at least two examples of physical changes in matter. • Compare and contrast physical and chemical changes. • Explain why yeast is used in baking. • Describe the unique reaction of cornstarch and water. • Explain how the states of matter differ?	• Use Teachers' Domain, "*Using Salt to Melt Ice*", to learn about chemical changes. http://www.teachersdomain.org/K2/sci/phys/descwrld/zsalt/index.html

Grade 3 Science Learning Standards

Space Science: Weather Unit

In this unit students observe and record weather phenomena. They build upon their knowledge of the water cycle as they investigate to discover how clouds and precipitation form. Different experiments help them to discover the properties of air and how it affects weather. Using their knowledge of what causes weather to change, students begin to make weather predictions.

Understanding **Students will understand that**	**Essential Questions**	**Knowledge** **Students will know the/that**	**Skills** **Students will be able to**	**Technology** **Possible products or outcomes**
Weather is what happens in the air outside. The elements of weather are air, water, sunlight, and land. Climate is the pattern of weather in a certain area over many years.	• What causes weather? • How is weather different from climate?	• Weather is what happens in the air outside. • Weather is caused by the interactions of air, water, sunlight, and land. • Climate is the pattern of weather in a certain area over many years.	• Define what weather is. • Name the four elements of weather. • Differentiate between climate and weather.	• Use the Graph Club to graph observations of the type of weather and temperature for a month. • Use a word processor to write an important poem based on the model of Margaret Wise Brown's *The Important Book*. • Use Weather.com to collect daily temperature readings for a city in each of the climate zones. Graph your data in the Graph Club. http://www.weather.com • Use the following CD- ROM resources for a classroom center: *A Field Trip to the Sky, The Nine Planets, and World Book*.
The water cycle affects weather.	• How do the states of matter change in the water cycle? • How do clouds affect weather? • What causes precipitation?	• In the water cycle, water changes to a gas when it evaporates, then returns to a liquid when condensation occurs. • Clouds form when water vapor is cooled and tiny drops of water form. • Stratus clouds mean change, cumulous clouds mean fair weather, and cumulonimbus clouds mean thunderstorms. • The temperature of the air determines whether precipitation falls as rain, snow, sleet, or hail.	• Explain the water cycle. • Explain that different types of clouds signify different types of weather. • Explain that changing temperatures affect the kind of precipitation that falls.	• Use *Kid Pix* to draw a picture of a cloud and a scene depicting activities appropriate for the resulting weather. • Use *Kidspiration* to illustrate the water cycle. • Use *Science Court, "*Water Cycle*",* as a whole class presentation activity. • Use *Kidspiration*, "Clouds", template to web the different types of clouds. • Use these websites to explore how the water cycle works. *Thirstin's Water Cycle* http://www.epa.gov/safewater/kids/flash/flash_watercycle.html *The Hydrologic Cycle* - http://observe.arc.nasa.gov/nasa/earth/hydrocycle/hydro2.html

Grade 3 Science Learning Standards

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
Air is an invisible mixture of gases that surround the Earth. Air has weight and takes up space.	• What are the physical properties of air? • How does air pressure affect weather?	• Air is made up of different gases. • Air is invisible. • Air takes up space. • Air has weight and that weight is called air pressure. • Air pressure affects weather. • High pressure brings dry, nice weather. • Low pressure brings wet weather. • A barometer is used to measure air pressure.	• Describe the properties of air. • Explain how air pressure affects weather.	• Use *Kidspiration* to web the physical properties of air.
Hot air rises. Wind is moving air and its speed and direction can be measured.	• How does the sun's energy affect weather? • What causes wind? • How can wind speed be measured? • How can wind direction be determined?	• The sun's energy provides light and heat to Earth. • Moving air, caused by rising and cooling temperatures, causes wind to blow. • Wind speed can be measured by using the Beaufort scale. • Wind direction can be measured by using a windsock and a compass.	• Describe the wind cycle. • Estimate wind speed by observing what is happening outside and referring to the Beaufort scale. • Measure wind direction by using a windsock and a compass.	• Use *The Big Wind* to explore wind and wind speeds. http://www.mountwashington.org/discovery/arcade/wind/index.html
A storm is an extreme kind of weather characterized by low pressure, heavy precipitation, and strong winds.	• How do storms form?	• Storms are caused when different kinds of air masses meet. • The edge where two different air masses meet is called the front. • Hurricanes, tornadoes, and cyclones have very high wind speeds. • Floods and blizzards bring large amounts of precipitation. Thunder and lightning storms can bring high winds and a lot of precipitation.	• Explain how storms are formed. • Describe at least two different kinds of storms.	• Use a word processor to write a haiku about a storm. • Use interactive website, *Tornado Story,* to explore differences in tornado intensities. http://www.whyfiles.org/013tornado/index.html • Use BrainPop website to view Quicktime video on hurricanes. http://www.brainpop.com/science/weatherandclimate/hurricanes/

Grade 3 Science Learning Standards

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
Weather predictions can be made based on air temperature and pressure, types of clouds, and the wind speed and direction.	• What information is needed to predict the weather?	• Weather predictions are based on air temperature and pressure, the types of clouds, and the wind speed and direction.	• Use tools to gather weather data such as computer data, compass and windsock, Beaufort wind scale, observations of clouds, thermometer, barometer, etc. • Predict weather based on that information.	• Use *Kidspiration* to web weather instruments and their uses. • Use interactive website EdHeads *Predict the Weather, Report the Weather* to explore weather prediction. http://edheads.org/activities/weather/index.htm

Life Science: Organisms Interact With the Environment Unit

In this unit students will review the importance of the sun's energy as they investigate ecosystems and habitats for many animal species. They will also look at how the adaptations by many species allow them to survive, particularly in severe weather. The impact of humans on the environment will be explored. The hands-on experience of observing the metamorphosis of a frog from a tadpole is a part of this unit.

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
The sun's energy is important for all living things.	• Why do living things need the sun?	• All living things depend on the sun's energy for survival.	• Explain the importance of sunlight to all living things.	• Use *Kidspiration* to create a web of the importance of sunlight to all living things. • Use the following website to enhance student learning: http://www.harcourtschool.com/activity/science_up_close/413/deploy/interface.html
Ecosystems are made up of all the plants and animals living in an environment. Habitats vary depending on the ecosystem's characteristics.	• What is an ecosystem? • How are habitats different?	• An ecosystem is made up of all the plants and animals living in a specific environment. • Habitats are where animals naturally live and the type of habitat determines which animals that live there. • There are five major habitats in the United States and they are: woodlands, mountains, deserts, plains, and wetlands.	• Identify the components of an ecosystem. • Explain what a habitat is. • Explain that different habitats are a home to different types of organisms.	• Use *Kidspiration* to web the five major habitats, including examples of plants and animals that live in each of the habitats. • Use the following webquest to learn about habitats: http://www.osage.k12.mo.us/ues/johnson/Ecosystems/ecoquest.html • Use the following websites to enhance student learning: http://www.geography4kids.com/files/land_ecosystem.html http://www.bbc.co.uk/schools/scienceclips/ages/8_9/habitats.shtml

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
				http://www.bbc.co.uk/schools/revisewise/science/living/03b_act.shtml http://www.hitchams.suffolk.sch.uk/habitats/index.htm http://pbskids.org/eekoworld/index_flash.html http://www.uen.org/utahlink/activities/view_activity.cgi?activity_id=3792 http://dnr.wi.gov/org/caer/ce/eek/nature/habitat/index.htm http://www.scholastic.com/magicschoolbus/games/habitat/ http://www.harcourtschool.com/activity/science_up_close/314/deploy/interface.html
Animals are classified by the characteristics of their species.	• How are animals classified?	• Animals can be classified based on their characteristics.	• Sort animals by similar characteristics into the major families of mammals, birds, reptiles, amphibians, and insects.	• Make a classroom database of animals with fields such as habitat, animal classifications, vertebrate vs. non-vertebrate. • Use BBC Schools website, *Variation* to explore how organisms can be grouped. http://www.bbc.co.uk/schools/scienceclips/ages/6_7/variation.shtml • Use *Kidspiration,* "Animal Classification", to group animals by the characteristics they share. • Use the following website to enhance student learning: http://www.hhmi.org/coolscience/critters/index.html http://www.wwtlearn.org.uk/index0.html?games/whoeatswhom.htm&2 http://www.lpzoo.org/education/zebra/module_2/student/solitaire.html
Organisms depend on each other for survival.	• How do organisms depend on each other? • What is a food chain? • What are lichens? • What is decomposition?	• Animals, plants, and humans are living things that grow, reproduce, and need food, air, and water. • Plants are producers and are the basis for most food chains.	• Explain how plant and animal species are dependent on each other for survival. • Explain that plants are producers and are the basis for most food chains.	• Use *Kidspiration* to create a graphic organizer of the food chain. • Use *Kid Pix* to draw the decomposition cycle. • Use the following websites to enhance student learning:

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
		• Lichens are an example of interdependency, since lichens are really two plants that function as one: fungus and alga. • Lichens are an indicator species that can alert us to air pollution. • Living things have a predictable life cycle and decompose when dead.	• Identify lichens. • Explain that lichen are an indicator species that can alert us to air pollution. • Explain that living things decompose when they die.	http://planetpals.com/foodchain.html http://www.geography4kids.com/files/land_foodchain.html http://pbskids.org/eekoworld/index_flash.html • Use *Kidspiration* to create a web identifying what living things need to survive. • Use BBC Schools website, *Plants and Animals in the Local Environment* to explore what living organisms need to survive. http://www.bbc.co.uk/schools/scienceclips/ages/6_7/plants_animals_env.shtml
Animals adapt to their environment in a variety of ways, including adaptation to severe weather.	• What adaptations do animals have that help them survive in their environment? • How do animals survive harsh seasonal changes in their environment?	• Animals have special adaptations that allow them to survive. • Animals cope with severe weather in a variety of ways.	• Match animals to their adaptations such as camouflage. • Identify ways animals cope with severe seasonal changes in their environment.	• Create a new animal and write about it in the word processor. Draw a picture of it in *Kid Pix*. • Use the following websites to enhance student learning: http://www.bbc.co.uk/schools/scienceclips/ages/10_11/interdependence.shtml http://EnchantedLearning.com http://www.ecokids.ca/pub/eco_info/topics/climate/adaptations/index.cfm http://www.lpzoo.org/education/zebra/stories/story_colors.htm http://www.lpzoo.org/education/zebra/student/formfunction/c.html http://teacher.scholastic.com/activities/explorer/ecosystems/be_an_explorer/map/caterpillar_play.htm
Humans cause the endangerment of organisms. All species have ecological importance.	• What causes organisms to be endangered?	• The actions of humans can cause organisms to be endangered. • All species have ecological importance.	• Define the terms: endangered, threatened, and extinct. • Discuss the ecological importance of all species.	• Use the following websites to enhance student learning: http://www.fws.gov/endangered/kids/ http://www.enchantedlearning.com/coloring/endangered.shtml http://www.amnh.org/nationalcenter/Endangered/index.html http://pbskids.org/eekoworld/index_flash.html

Grade 3 Science Learning Standards

Understanding Students will understand that	Essential Questions	Knowledge Students will know the/that	Skills Students will be able to	Technology Possible products or outcomes
The life cycle of a frog involves metamorphosis.	• What is the life cycle of a frog?	• Frog metamorphosis is a part of its life cycle.	• Sequence the stages of frog metamorphosis. • Compare the metamorphosis of a frog to a different organism such as a butterfly or a mealworm.	• Use *Kid Pix* to draw and label the life cycle of a frog. • Use the digital camera and *Timeliner*, chart the life cycle of your classroom African Water frog. • Use the following websites to enhance student learning: http://EnchantedLearning.com http://allaboutfrogs.org http://www.exploratorium.ed/frogs/

Use the following websites to enhance student learning:

Earth/Space Science - The Earth in the Solar System

Moon Links - http://www.lmsd.org/staff/elemtech/gr_1_moon/gr1_moon.htm
Phases of the Moon - http://aa.usno.navy.mil/faq/docs/moon_phases.html
NASA Kids - http://kids.msfc.nasa.gov
NASA's Starchild - http://starchild.gsfc.nasa.gov/
The Nine Planets - http://seds.lpl.arizona.edu/billa/tnp
Zoom Astronomy - http://www.enchantedlearning.com/subjects/astronomy/
Astronomy for Kids - http://www.dustbunny.com/afk/
Astronomy: Our Place in Space - http://ology.amnh.org/astronomy/index.htm
KidsAstronomy.com - http://www.kidsastronomy.com/solar_system.htm
Solar System Trading Cards - http://amazing-space.stsci.edu/resources/explorations/trading/game.htm
NASA's Seasons - http://kids.msfc.nasa.gov/Earth/Seasons/Seasons.htm
NASAtoon animation explaining our seasons - http://kids.msfc.nasa.gov/news/2002/news-spring.asp

Physical Science

Changing State - http://www.bbc.co.uk/schools/scienceclips/ages/9_10/changing_state.shtml
Solids and Liquids - http://www.bbc.co.uk/schools/scienceclips/ages/8_9/solid_liquids.shtml
Gases Around Us - http://www.bbc.co.uk/schools/scienceclips/ages/9_10/gases.shtml

Earth/Space Science - Weather:

Thirstin's Water Cycle - http://www.epa.gov/safewater/kids/flash/flash_watercycle.html
The Hydrologic Cycle - http://observe.arc.nasa.gov/nasa/earth/hydrocycle/hydro2.html
Weather Watch - http://teacher.scholastic.com/activities/wwatch/
The Weather Game - http://www.cotf.edu/ete/modules/k4/online/Wonline1.html
National Weather Service Kids Page - http://www.nws.noaa.gov/om/reachout/kidspage.shtml

Tornado Story (interactive twister) - whyfiles.org/013tornado/index.html
Natural Disasters - http://www.brainpop.com/science/naturalhazards/naturaldisasters/index.weml
Hurricanes - http://www.brainpop.com/science/weatherandclimate/hurricanes/
What Forces Affect Our Weather? http://www.learner.org/exhibits/weather
Hurricane Storm Science - http://www.miamisci.org/hurricane/index.html
The Weather Channel - http://www.weather.com
NASAtoon animation explaining our seasons - http://kids.msfc.nasa.gov/news/2002/news-spring.asp
Sunrise and Sunset - http://www.sunrisesunset.com/
The Big Wind - http://www.mountwashington.org/discovery/arcade/wind/index.html

Organisms Interact with their Environment

http://www.harcourtschool.com/activity/science_up_close/413/deploy/interface.html
http://www.osage.k12.mo.us/ues/johnson/Ecosystems/ecoquest.html
http://www.geography4kids.com/files/land_ecosystem.html
http://www.bbc.co.uk/schools/scienceclips/ages/8_9/habitats.shtml
http://www.hitchams.suffolk.sch.uk/habitats/index.htm
http://pbskids.org/eekoworld/index_flash.html
http://dnr.wi.gov/org/caer/ce/eek/nature/habitat/index.htm
http://www.scholastic.com/magicschoolbus/games/habitat/
http://www.harcourtschool.com/activity/science_up_close/314/deploy/interface.html
http://www.bbc.co.uk/schools/scienceclips/ages/6_7/variation.shtml
http://www.hhmi.org/coolscience/critters/index.html
http://www.wwtlearn.org.uk/index0.html?games/whoeatswhom.htm&2
http://www.lpzoo.org/education/zebra/module_2/student/solitaire.html
http://planetpals.com/foodchain.html
http://www.geography4kids.com/files/land_foodchain.html
http://www.lpzoo.org/education/zebra/stories/story_colors.htm
http://www.lpzoo.org/education/zebra/student/formfunction/c.html
http://teacher.scholastic.com/activities/explorer/ecosystems/be_an_explorer/map/caterpillar_play.htm
http://www.bbc.co.uk/schools/scienceclips/ages/6_7/plants_animals_env.shtml
http://www.bbc.co.uk/schools/scienceclips/ages/10_11/interdependence.shtml
http://EnchantedLearning.com
http://www.ecokids.ca/pub/eco_info/topics/climate/adaptations/index.cfm
http://www.fws.gov/endangered/kids/
http://www.enchantedlearning.com/coloring/endangered.shtml
http://www.amnh.org/nationalcenter/Endangered/index.html
http://allaboutfrogs.org
http://www.exploratorium.edu/frogs/