

Air Air is all around us. It is everywhere solids and liquids are not. If you can't see air, how do you know its there? How strong is air? Try some activities that will answer these questions.

Amphibians Frogs, toads, salamanders, and newts are all amphibians. Explore the unique characteristics of these creatures.

Animal and Plant Adaptations - A look at the ways plants and animals adapt to their habitats.

Animal Behavior Why does a raccoon wash its food? Why can bugs walk on the surface of water? Conduct experiments that demonstrate the answers to these and other animal behavior questions. *Suitable for after school programs.*

Animals Prepare for Winter How do animals and plants prepare for winter? Learn how living things adapt to the cold season.

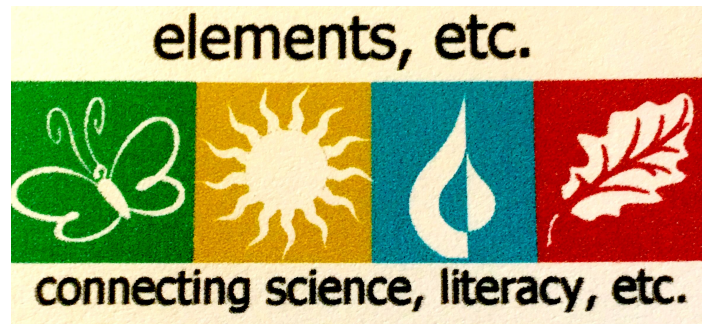
Arctic Animals How do the animals of the Arctic cope with the cold temperatures that characterize their environment? What do they eat? Learn how these animals are able to survive in their habitat.

Archeology for Kids Archeologists study physical evidence of earlier human life and culture. Explore the tools and methods an archaeologist uses to make discoveries about cultures of the past and present.

Baby Animals Do baby animals look like their parents? How are babies cared for? Do some babies take care of themselves? Learn about the many ways animal babies are the same and different.

Bats There are some crazy myths about bats. What do you know about bats? Learn about these fascinating nocturnal creatures.

Birds What makes a bird a bird? What is the largest bird? What is the smallest bird? Learn the answers and more about these feathered creatures.



Bones Animals that have bones are vertebrates. Bones protect organs, give us shape, and help us move. View x-rays of different animals. Compare them to the human skeleton. Program can focus specifically on humans or on vertebrates in general.

Build It! Some shapes are stronger than others are. Use a variety of materials build bridges, nests. How can paper support weight? *Suitable for after school programs*

Bubbles Are bubbles strong? How do we create bubbles? *(This is an outdoor program!)*

Built to Last (Nature's Engineers) Explore the engineering feats found in nature. Learn how nature has inspired some human engineering feats!

Cape Cod Habitats Discover the major habitats of Cape Cod (pond, marsh, ocean, woods)

Care and Keeping of Your Brain Your brain needs exercise just as your muscles do. How can you exercise your brain? *Suitable for children age 5+*

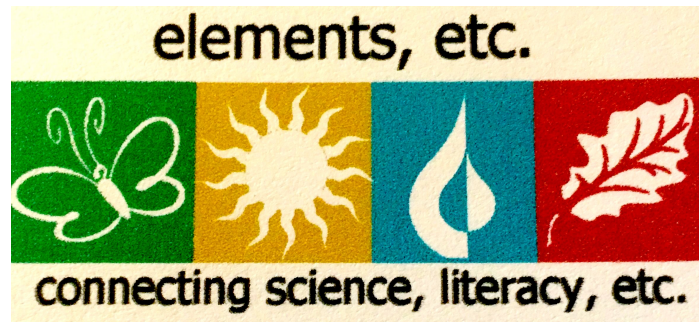
Clues to the Past Explore earth's history and the timeline of living things beginning with the oldest fossils found, fossils that are older than dinosaurs.

Color and Camouflage Find out how and why plants, and both prey and predators use color and camouflage.

Color and Light How do we use color? Learn about primary and secondary colors. How are colors used in nature? *Suitable for after school and family programs.*

Cranberries The bogs of Cape Cod are a perfect habitat to grow cranberries but cranberries weren't always cultivated. Cranberries are an important crop on Cape Cod. Learn the history of the cranberry and its cultivation. *Suitable for children age 5+*

Critter Scene Investigations Learn how science helps solve mysteries/crimes. *Suitable for after school programs.*



Dental Health What does the dentist do? Learn how to take care of your teeth and why it is so important.

Desert Living When you think about a desert do you think about a hot and dry place? Does it rain in the desert? Does it snow? Is it ever cold? The answer to these questions is YES. Learn how plants and animals have adapted to this environment.

Dinosaurs Dinosaurs roamed the earth for millions of years. Then they disappeared. How do we know what we know what we know about dinosaurs?

Eclipse! Solar and lunar eclipses happen when the sun, moon, and earth are aligned. There are about two to five solar eclipses per year, but only one to two of these are total solar eclipses. Lunar eclipses happen two to three times in a typical year. Learn how solar and lunar eclipses are the same and how they are different from each other.

Eggs What animals lay eggs? Chickens aren't the only ones! Why don't eggs break when they are sat upon? What are eggshells made of?

Endangered Species - Some animals endangered. Why? How can we protect these animals?

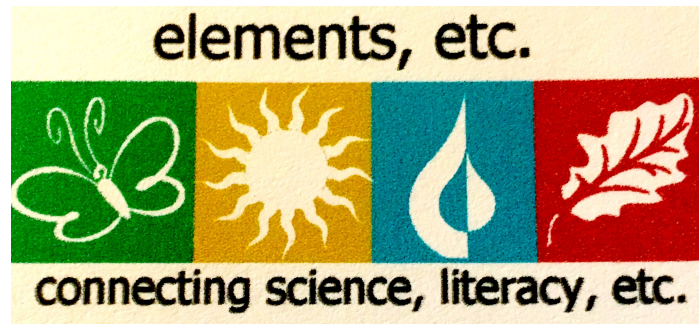
Fantastic Fall Fall brings many changes. Learn about the way living things change as summer ends and fall begins.

Farm Life What is a farm? Do farmers raise animals and plants? Farms can be both very large and quite small. What does the farmer do to keep the farm running?

Fish Fish are an important part of the food chain. Fish need food, shelter, air, space, and water just like us. What makes a fish a fish?

Five Senses How do your senses help you experience the world? Come and see, hear, taste, touch, and smell as you learn about senses.

Food Chains and Webs What is a producer, a primary consumer, a secondary consumer, predator, prey, a decomposer? All these are necessary for survival. Learn about the interdependence of living things.



Force and Motion What are some ways to make objects move? What is friction? Gravity? Who was Newton and what are his laws? Discover the answers to these questions. *Suitable for ages 5+*

Habitats A habitat is a place where plants and animals live. Learn about habitats that are suited to different animals and why this is so. This can be Cape Cod centric or not.

Healthy Bodies Your body is a marvelous machine! How can you keep your body healthy? Learn about the skeleton, basic body parts, and healthy habits.

Hidden Worlds Use magnifying glasses, microscopes, and other magnifiers to examine things in an up close and personal way. *Suitable for after school programs.*

Incredible Insects Have you ever noticed insects? Why do they exist? Learn how insects are an important part of many habitats (EVEN MOSQUITOES!)

Investigating Magnets How do magnets work? Visit 5-10 stations and complete activities to learn about magnetic energy. *Suitable for after school and family programs.*

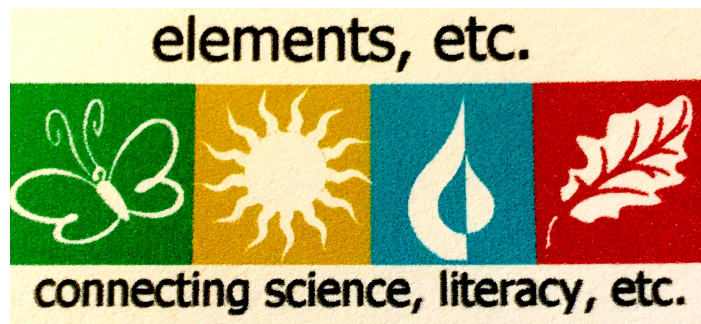
Kitchen Science Conduct 3-4 experiments using materials found in the kitchen. *Suitable for after school programs.*

Life at the Shore (Sea Life) Many animals make their home where the ocean meets the beach. Learn about the animals that live close to shore and are visible at low tide.

Life in the Marsh The marsh is an important habitat on Cape Cod. Who lives in the marsh? How do marshes protect us?

Life Cycles - Explore the life cycles of both plants (tree) and animals (butterfly, for example)

Life Under a Log Learn about decomposers and their important contribution to food chains. *Suitable for after school programs.*



Light and Shadow Natural or manmade? Light can be either. Can light be bent? What has to be present to make a shadow? Conduct experiments to learn about light energy.

Lighthouses Why are there so many lighthouses on Cape Cod? What was the life of a lighthouse keeper like? Learn how lighthouses, even in the age of electronics, help mariners safely navigate the waters of Cape Cod.

Living Things (living vs. non-living, basic needs of all living things)

Matter Learn about the states of matter. How does matter change from one state to another? Can you change it back? If sand can be poured, is it liquid? Find the answer to these and other questions about the states of matter.

Nature at Night Who is awake when you are asleep? Explore the fascinating nocturnal world.

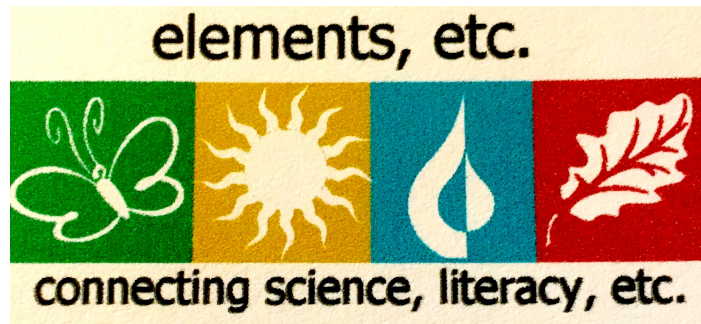
Nature's Engineers What have we learned from the way animals build their homes. Animals were the first engineers, building sturdy homes adapted to their environment. What have humans learned from nature's engineers?

Night Sky (Space) What is in the sky at night? Learn about stars, the moon, the other planets (Poor Pluto is it a planet or not?)

Ocean Habitats Learn about the plants and animals that live in the three layers of the ocean.

Oil Spill Oil is dangerous for most animals, but for birds, it is very dangerous. How do animal rescuers clean animals? How do people remove oil from the water? 3-4 activities will demonstrate. *Suitable for after school programs.*

Optical Illusions Things are not always as they seem. Sometimes your brain plays tricks on you. Learn about the different kinds of optical illusions. Try some activities and "see" what you will see!



Our Moon Some planets have many satellites but Earth has only one, our moon. Why does it change size? Does it rotate? What is it made of? Learn about earth's lone satellite.

Owls Learn about these fascinating nocturnal creatures. Dissect an owl pellet. Program is suitable for any age. *Owl pellet dissection suitable for older children.*

Pets Pets have basic needs to keep them healthy. Having a pet requires a lot of responsibility. What pet would be best for you?

Plant and Animal Adaptations A broad look at the way plants and animals use color, patterns, counter shading, mimicry, distraction to survive.

Plants and Seeds Many plants begin as a seed. How do seeds become plants? Do plants need special care? Why they are important?

Pond Life Who lives in and near the pond? Learn about plant and animal life in this fascinating habitat.

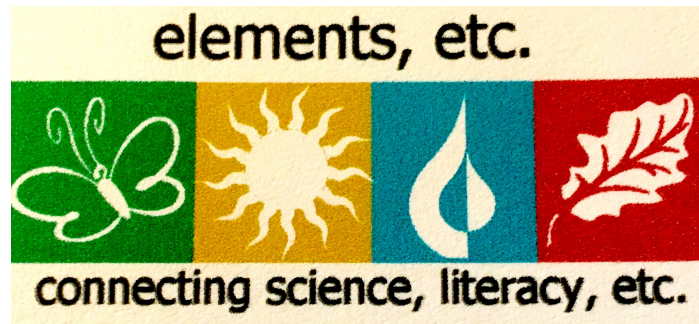
Rain Forest A rain forest is a special habitat. Rain forests are warm and wet. Learn about the plants and animals that live in the layers of the rain forest.

Reptiles Turtles, snakes, lizards, crocodiles, and alligators are reptiles. Explore the unique characteristics of these creatures.

Rocks A geologist studies rocks. Rocks are a piece of the planet Earth. Learn about the different types of rocks and how those rocks were formed. This program is suitable for all levels. It is more involved for older children.

Saltwater Marsh Cape Cod is home to many marshes. Marshes are a special habitat. Marshes change with the tide. Learn why marshes are so important to the plants and animals that spend time in the marsh AND to humans that live near them! This program can be adapted for **Wetlands**.

Save the Planet We only have one planet. Humans are polluting the planet. Some animals and plants will not survive. How can we help keep our planet healthy? Why is that so important?



Sharks Sharks have lived on earth for 350 million years. There are more than 500 species of sharks. Sharks can lose as many as 10,000 teeth in a lifetime! Learn about these fascinating creatures!

Simple Machines - Explore the six simple machines.

Sled Dogs/Iditarod The Iditarod commemorates a relay that happened in 1925. It has been a race since 1973. Learn how mushers care for their dogs before, during, and after the race.

Sound Conduct experiments to learn about sound energy. *Suitable for after school and family programs.*

Static Electricity Conduct experiments to learn about static electricity. *Suitable for after school programs.*

Trees Learn about the largest plants on earth.

Water Water can take three forms: solid, liquid, or gas. How does water change its form? Learn about cohesion, surface tension, and buoyancy.

Weather Weather is happening all day, every day. What are the signs that the weather is changing? Clouds are a clue. Learn some weather folklore.

Whales Cape Cod is home to a number of whale species during part of the year. Where do they live when they aren't here? Learn about these ocean mammals.

Wild Weather Blizzards, hurricanes, tornadoes...how does this wild weather happen?

Wonderful Winter How do animals and plants prepare for winter? Explore how living things adapt to the cold season.