

Odyssey Elementary Science offers elementary students (3-5) the opportunity to explore science through supplementary lessons that include text, simple experiments, reinforcement questions, and cross-curricular activities. Odyssey Science provides interactive instruction that addresses different levels of scientific achievement. Thematic Projects (Levels 4 – 5) are integrated project-based units to support student research, writing, and higher order thinking skills. (This Scope and Sequence is subject to change and the online assignments may be updated at any time.)

Level 3 Science:

Scientific Investigation - The learner will demonstrate understanding of a process of scientific investigation.

Nature of Matter - The learner will demonstrate basic understanding of the nature of matter.

Energy, Force and Motion - The learner will demonstrate general understanding of energy, force, and motion.

Effects on the Shape of Earth - The learner will demonstrate basic understanding of processes that shape Earth.

Ecology - The learner will demonstrate basic understanding of ecology.

Life/Environment Interact - The learner will demonstrate basic understanding of living organisms and how they interact with their environment.

Light & Sound - The learner will demonstrate basic understanding of light and sound.

Astronomy - The learner will demonstrate basic understanding of astronomy.

Eras on Earth - The learner will discover the Mesozoic Eras on Earth.

Level 4 Science:

Scientific Investigation - The learner will demonstrate understanding of a process of scientific investigation.

Changes in Matter & Energy - The learner will demonstrate understanding of common properties, forms, and changes in forms of matter and energy.

Sound - The learner will demonstrate understanding of the physical phenomena of sound.

Solar System & the Universe - The learner will demonstrate understanding of the structure of the solar system and the universe and of the interactions among the Earth and other objects in space.

Living Things - The learner will demonstrate understanding of the characteristics, structures, and functions of living things and of how living things interact with one another and their environment.

Level 4 Thematic Projects:

Time Keeps on Ticking - The student discovers different methods of telling time. For the final project, the student will design a calendar.

Triassic Pet - The student will go back in time and explore the Triassic Time Period and learn various facts about three dinosaurs. For the final project, the student will choose a favorite dinosaur to keep as a pet, and write a persuasive letter to his/her parents convincing them to take that dinosaur home.

Jurassic Pet - The student will go back in time and explore the Jurassic Time Period and learn various facts about three dinosaurs. For the final project, the student will choose a favorite dinosaur to keep as a pet, and write a persuasive letter to his/her parents convincing them to take that dinosaur home.

Cretaceous Pet - The student will go back in time and explore the Cretaceous Time Period and learn facts about three dinosaurs. For the final project, the student will choose a favorite dinosaur to keep as a pet and write a persuasive letter to his/her parents convincing them to take that dinosaur home.

Animals With a Backbone - The student will demonstrate an understanding of the characteristics, structures, and functions of living things, and how living things interact with one another and their environment. The student will also learn how to classify and sort animals. For the final project, the student will create a children's book about animals that have a backbone.

Animals Without a Backbone - The student will demonstrate an understanding of the characteristics, structures, and functions of living things, and how living things interact with one another and their environment. The student will also learn how to classify and sort animals. For the final project, the student will create a children's book about animals that have a backbone.

Help the Endangered! - The student will learn about the difference between endangered and extinct species, reasons why animals become endangered, and possible solutions. For the final project, the student will create a campaign to raise money and awareness for animals.

Ready, Set, Rainforest! - The student will learn about plants and animals in different types of rain forests. For the final project, the student will create a rain forest exhibit for the American Museum of Natural History.

Reduce, Reuse, Recycle, Reclaim - The student will discover solutions to several pollution problems. For the final project, the student will create a poster describing one pollution problem and propose a solution to that problem.

Sunny Side of the Solar System - The student will recognize that the Sun is a star and that energy from the Sun can be captured and used for various energy needs on Earth. For the final project, the student will produce an electronic report about the Sun.

Level 5 Science:

Scientific Investigation - The learner will demonstrate competency in the process of completing scientific investigations.

Changes in Matter - The learner will demonstrate knowledge of how changes in matter are related to atoms and molecules.

Electricity and Matter - The learner will examine how electricity interacts with matter.

Light - The learner will demonstrate understanding of the basic characteristics of light.

Organisms - The learner will demonstrate an understanding that organisms are made up of cells and will explain how cells grow, develop, and reproduce.

Classifying Living Things - The learner will use classification systems to describe groups of living things.

Life Cycle & Reproduction - The learner will examine differences in the life cycles and reproduction of living things.

Weather - The learner will demonstrate understanding of the general characteristics of the atmosphere and how weather conditions and weather phenomena occur and can be predicted.

Forever Changing Earth - The learner will demonstrate understanding of how the Earth's surface is constantly changing.

Human Body - Identify personal interests, capabilities, and values. Identify personal strengths and weaknesses and develop ways to maximize strengths. Describe conditions that contribute to disease, such as contaminated food or water, lack of immunization, poor nutrition, and improper hygiene. Explain the roles of sleep and rest in fitness.

Level 5 Thematic Projects:

Here's to Your Health - The student will learn about habits that contribute to disease and about preventative measures. For the final project, the student will communicate “Healthy Habits” to his/her classmates by using a life-sized poster design or by producing a Healthy Habits brochure.

Sleep On It - The student will learn about sleep, the stages of sleep, why he/she needs it, how lack of sleep affects the body, and how it is part of a personal fitness program. For the final project, the student will keep a sleeping habits log and prepare a “Sleep” brochure for his/her classmates.

Ener-gee Whiz - The student will learn to recognize and describe different types of energy, explain and trace the flow of energy in a system, and identify sources of energy that organisms need to stay alive and grow. For the final project, the student will track his/her energy usage and consider substitute forms of energy and conservation.

You're a Natural...Resource - The student will learn about natural resources and discover the difference between renewable and nonrenewable resources. For the final project, the student will create a museum exhibit.

Rainy Days and Sunny Days - The student will learn about characteristics of the atmosphere, why different types of weather occur, and how meteorologists develop forecasts using pressure systems, fronts and other features on weather maps. For the final project, the student will choose several cities, keep a log of their weather and decide which one to visit based on its weather.

Make it a Habitat - The student will learn about the growing list of endangered animals, how they became endangered and what is being done to protect them. For the final project, the student will write a persuasive letter supporting the construction of an endangered species zoo.

Cuddly Caterpillars - The student will demonstrate an understanding of the characteristics, structures, and functions of butterflies and their environment. For the final project, the student will create a magazine about the life cycle of a butterfly.

To the Moon and Beyond - The student will learn about the Moon and how its movement around Earth produces the cyclical phases. He/she will also study the goals and historic facts about the Apollo space program. For the final project, the student will make a persuasive presentation in support of funding new space missions.

Drugs: Refuse to Abuse - The student will learn about the dangerous effects of using illegal drugs such as marijuana and cocaine, and how to resist peer pressure. For the final project, the student will choose to prepare either a print or multimedia “Drug Abuse Awareness” campaign.