



MIDDLE SCHOOL PROGRAM GUIDE

www.OutdoorAdventureLab.org



ABOUT US

Outdoor Adventure Lab offers safe, transformative experiences for youth and adults through dynamic outdoor education and recreation programs. With a strong focus on STEM education, our mission is to empower youth to excel academically through outdoor education programming that aligns with Pennsylvania standards. We also provide opportunities for participants to build character, develop leadership skills, and foster collaboration through engaging recreational activities in the great outdoors.

Our facility is part of the Musser Scout Reservation, a 1,100-acre woodland in Pennsburg steeped in history that offers both ecological and program diversity.

We offer a wide selection of hands-on programming focused on STEM, outdoor adventure, and team building. Groups of 10 or more are welcome to visit us. Programming can be customized to fit your group's needs. Whether you are coming to us to help bring your classroom to life or to explore and have fun, we're excited to help you make it happen!



ABOUT THIS GUIDE

This guide will give you an overview of the programs we offer focused on 6th through 8th Grades. This is not a fully comprehensive list of everything we can provide.

This guide breaks down our programs and our three main models we typically design trips using. Our recommended models for a program are 1) Education Focused, 2) Outdoor Adventure and Teambuilding, or 3) Hybrid of the two. A group program typically consists of 4-6 activities.

We are excited to offer outdoor activities for all! If you want to design your own visit, feel free to contact us and we would be happy to discuss your needs and how we can make them a reality.

Once you have found some activities that peak your interest visit outdooradventurelab.org/field-trips to fill out our online interest form to begin the booking process.

**THIS IS A LIVING DOCUMENT AND IS
SUBJECT TO CHANGES AND UPDATES**

THE SOUND OF SCIENCE

Grades 6 - 8

See sound waves come to life! This interactive demonstration teaches how sound is created, transmitted, and received.

SAS: 3.4.7.C

PA HABITATS

Grades 6 - 8

Come explore PA wildlife and their natural habitats. Join us for a nature hike to observe what these habitats look like. Learn to identify some natural hazards in our environment.

SAS: 4.4.7.C; 4.7.7.A

WILD WATER

Grades 6 - 8

Join us as we discover how water travels around our planet. Follow water through all four stages of the water cycle and explore different bodies of water.

SAS: 3.5.7.A; 4.1.7.A

WATER TESTING

Grades 6 - 8

Students will collect water to test for pH, dissolved oxygen, nitrates, and turbidity to determine the health of our local waterways. We will learn about ways to improve water health and lessen human impacts.

SAS: 4.1.7.B

REDUCE, REUSE, RECYCLE

Grades 6 - 8

In this lesson, students will investigate renewable energy sources and their impact on the environment. They will identify renewable and nonrenewable resources. We will discuss the nonrenewable resources we use and what renewable resources we could move to, to replace them.

SAS: 4.2.7.B & D; 4.3.7.B

DECOMPOSERS

Grades 6 - 8

Learn how fungi, molds, worms and more break down organic waste to form nutrient rich soil. How might we use composting to reduce household waste?

SAS: 4.2.7.D

AMAZING ANIMALS

Grades 6 - 8

Learn about the unique adaptations and behaviors of animals living in the wild as we take a guided nature walk on the reservation! Discover what adaptations animals and plants have made to survive in their changing habitat.

SAS: 3.3.7.A; 4.6.7.A 4.7.7.A & B;

ENERGY AND ELECTRICITY

Grades 6 - 8

Lets explore various sources of energy; both renewable and nonrenewable. Discover how these resources are turned into electricity and how to produce energy in a sustainable way.

SAS: 3.4.7.B; 4.8.7.A

POLLUTION, NO THANKS

Grades 6 - 8

Explore every day pollutants in our environment and discover what small changes each of us can make to reduce this pollution's effects on our environment!

SAS: 4.3.7.A&B

HOW THINGS WORK

Grades 6 - 8

Explore the effects of various types of motion. Push, pull, change speed, change directions. Learn how motion makes things work.

SAS: 3.4.7C

FORESTS

Grades 6 - 8

Learn all about trees and their key role in Pennsylvania's ecosystem. Use Dichotomous Keys to identify them, cores and cookies to age them, and nature journals to document them.

SAS: 3.3.7.A

ANCIENT ANIMALS

Grades 6 - 8

Have you ever visited a zoo and seen a Dodo bird or Woolly Mammoth exhibit there? How many Rhinos and Gorillas have you seen? Join us as we learn about animals that are extinct and those who are endangered. Discover what may have led to their extinction and what we can do to try to prevent the endangered from going extinct.

SAS: 4.7.7.C

WEATHER WONDERS

Grades 6 - 8

Have you ever wondered how clouds form? In this activity, students will learn about the science behind cloud formation. Create a cloud in a bottle, identify clouds, and use weather instruments.

SAS: 3.5.7C

FOOD CHAINS

Grades 6 - 8

How are living things connected by what they eat? How does energy move through food chains? Learn about food chains and how they link all living things together!

SAS: 4.6.7.A

FORCES OF NATURE

Grades 6 - 8

In this hands-on activity, students will use erosion tables to simulate the effects of natural disasters wind and water on different landforms, and observe the effects these weather events have on the natural environment.

SAS: 3.5.7.A; 4.3.7.B

PESKY PESTS

Grades 6 - 8

Discover the impact of pests and invasive species on ecosystems and learn how to identify and prevent the spread of these "alien invaders". Investigate real-life examples of invasive species and brainstorm solutions to combat this environmental issue.

SAS: 4.3.7.A; 4.5.7.A&B

SCIENTIFIC METHOD

Grades 6 - 8

Discover the power of the scientific method as we investigate a real world problem and test our hypothesis through hands-on experiments. Learn how to develop a research question, create a hypothesis, design experiments, collect and analyze data, and draw conclusions based on evidence.

SAS: 3.2.7.B & C

SCIENCE ROCKS

Grades 6 - 8

Explore the fascinating world of rocks, minerals, and Earth's processes. Through hands-on activities, participants will learn to classify rocks, investigate the rock cycle, and uncover how geological forces shape our planet.

SAS: 3.5.7.A



EDUCATION FOCUS CONT.

JOURNEY THROUGH THE STARS

Grades 6 - 8

Embark on a journey through the stars with our portable planetarium! In this activity, students will experience a stunning 360-degree view of the night sky and explore the wonders of the universe.

SAS: 3.4.7.D

OZOBOTS

Grades 6 - 8

Learn to code with the mini robot, Ozobot! Discover the basics of coding through drawing lines and using colors, and then watch as the Ozobot follows your commands.

LEAVE NO TRACE

Grades 6 - 8

Do you know how to enjoy time spent in the environment and leave no trace that you were there? Join us as we learn the Seven principals of Leave No Trace.

SOLAR SYSTEMS

Grades 6 - 8

Create a scale model of our solar system to visualize the relative sizes and distances of planets, moons, asteroids, and comets. Use everyday objects like fruits, marbles, and balloons to represent each celestial body.

SAS: 3.4.7.D



OUTDOOR ADVENTURE AND TEAMBUILDING FOCUS

GEOCACHING

Grades 6 - 8

Explore the outdoors and use GPS technology to find hidden geocache containers with hidden trinkets and logbooks. Learn how latitude, longitude, and coordinates work, and practice teamwork and problem solving skills.

ARCHERY ADVENTURES

Grades 6 - 8

Learn the basics of archery including proper stance, grip, and technique from a certified instructor. Practice your new skills with targets and enjoy friendly competition with fellow archers.

GAGA BALL

Grades 6 - 8

Get ready to jump, dodge, and slam your way to victory in this fast-paced and exciting game of Gaga Ball! Players will use their quick reflexes and strategic thinking to outlast their opponents and become the ultimate Gaga Ball champion.

SAS: 10.4.6.A

BOULDERING WALL

Grades 6 - 8

Learn about the basics of rock climbing on our bouldering wall, where students traverse across the wall instead of climbing high.

SAS: 10.4.K.A & B; 10.4.1.A & B; 10.4.2.A & B; 10.4.3.A

MAP & COMPASS

Grades 6 - 8

Have you ever used a map to help you get from one place to the other? How do you use a compass to find the direction you need to go in? Join us as we learn how to use a map and compass to solve a quest!

CROSS THE RIVER

Grades 6 - 8

Work together to get your team across the "river" using limited resources. Teams must work together strategizing and problem solving to create a plan and implement it successfully. Time is limited for this challenge, as it becomes progressively more difficult, so communication skills and adaptability are key.



ESCAPE ROOM

Grades 6 - 8

Teams must work together to solve puzzles and clues in a race against the clock to make their great escape. With limited time and resources, effective communication and problem-solving skills are essential for success.

FISHING FUNDAMENTALS

Grades 6 - 8

Learn the art of fishing with instruction on knot-tying, bait selection, and casting techniques. Practice your new skills on a local fishing hole and enjoy a relaxing day on the water.

NATURE SCAVENGER HUNT

Grades 6 - 8

Explore the outdoors while completing a fun and educational scavenger hunt. Discover local flora and fauna and learn about their importance in the ecosystem

GYM GAMES GALORE

Grades 6 - 8

Get active and have fun with a variety of gym games, including favorites like capture the flag, Gaga Ball, elbow tag, and more? Practice teamwork and sportsmanship while getting a great workout.

HABITAT HIKE

Grades 6 - 8

Taking a guided hike through scenic trails while learning about local flora and fauna, geology, and conservation. Discover the wonders of nature and build teamwork and leadership skills.

MINUTE-TO-WIN-IT

Grades 6 - 8

Get ready for some fast-paced, high energy fun as you and your team compete in a series of wacky time based games. These quick challenges will test your communication, coordination, and problem-solving skills as you work together to beat the clock and your opponents.

WHACKY RELAYS

Grades 6 - 8

Get ready for some hilarious fun with whacky relay races! Teams will compete in a variety of silly races that will have everyone laughing and working together. From egg balancing to water bucket relays, you'll have to work under pressure to make it to the finish line!

HANDICRAFT LEATHERWORK

Grades 2 - 5

Get creative and design your very own leather good (keychain or bracelet) to take home. Our instructors will guide you through the process of selecting your materials and finishing your masterpiece.

EYES, VOICE, BODY

Grades 6 - 8

In this challenge players are tasked with achieving a series of goals, with one problem, each player has lost a sense; their eyes, voice, or both. Can your team successfully work together using non-verbal communication and problem solving to master each level?

SURVIVAL SKILLS

Grades 6 - 8

Learn essential survival skills including fire-building, shelter construction, and navigation. Test your skills with outdoor challenges and build resilience and teamwork.

TREASURE HUNT

Grades 6 - 8

Face off in teams as your team works through a series of clues to discover hidden trinkets and treasures. You'll need to work together to use your wits to solve this treasure mystery puzzle.



HYBRID FOCUS

Chose activities from both the Educational options and the Outdoor Adventure and Teambuilding options, and we will work with you to customize a lesson to incorporate as many of your selections as possible!

REQUEST MORE INFORMATION!

Visit www.OutdoorAdventureLab.org and click on the Field Trips tab. Fill out the interest form to start a conversation with us about your trip!

