Plan a Field Trip to the Institute

Research has shown that early experiences in science, especially field-based experiences, are essential for promoting interest in science, developing science-related skills and knowledge, and building a scientifically-literate population. Due to the great diversity of ecosystems present on its property, its classroom and laboratory facilities, and its program options, Pierce Cedar Creek Institute is able to offer educators and students a wide variety of field-based learning experiences and opportunities. Plus, thanks to donations made to the ScienceStrong—Explore, Experience, Engage initiative, the Institute also has funds available to offset or reduce the cost of a field trip. Contact Dr. Sara Parr Syswerda, education director, at 269-721-4434 with questions about field trip options, including field trip grant opportunities, programs, meals, and housing resources.

Program Registration: Please fill out this <u>program interest form</u> to sign up for a program. Additional time for hiking and/or lunch can be built into program schedules. Custom quotes for longer multi-day or multi-week programs are available from Dr. Sara Parr Syswerda.

Program Constraints: Due to staffing constraints, the Institute can only handle two classes of students at any one time. Many of the programs include outdoor components, and students will go outside during field trips even if the weather is cold, rainy, or snowy. Please ensure your students dress for the weather and wear appropriate footwear for being outside. Programs may be cancelled due to thunderstorms, large snow events, or other weather-related emergencies. The programs are designed to be very interactive, and thus we are unable to accommodate younger siblings at programs.

Preschool and Young Kindergarten Programs

Pumpkin Life Cycles — 1 hour Available as a field trip or in-school program in October Standards Covered: K-ESS3-1 Students will explore the pumpkin life cycle through a short book, acting out the pumpkin life cycle, dissecting pumpkins, and planting a pumpkin patch for inside their classroom.

Five Senses — 1 hour Available as a field trip or in-school program year round Standards Covered: K-LS1-1 Students will explore their five senses through hands on activities that will get students up and moving and exploring their environment.

Animals in Winter — 1 hour Available as a field trip or in-school program in November and December Standards Covered: K-LS1-1 Students will learn about what animals in Michigan do during winter through hands on activities and building a model of an animal hibernating. Germs — 1 hour Available as a field trip or in-school program year round Standards Covered: K-2-ETS1-1 Students will learn about germs, make observations about disease transmission, and collect evidence about how washing hands can remove germs from their hands.

Bird Life Cycles — 1 hour Available as a field trip or in-school program in April Standards Covered: K-ESS3-1, K-2-ETS1-2 Students will learn about the different birds of Michigan, act out the bird life cycle, and create their own model bird to take home.

<u>Kindergarten Programs</u> Forces and Motion (Physical Science) Program — 2 hours Available as a field trip program in January and February Standards Covered: K-PS2-1, K-PS2-2 Students will explore pushes and pulls through a variety of indoor and outdoor activities. Students should be prepared to go outside.

<u>First Grade Programs</u> Parental Care (Life Science) Program — 2 hours Available as a field trip program in April or May Standards Covered: 1-LS1-2 Students will explore pond plants and animals and learn about parental care.

<u>Second Grade Programs</u> Erosion Prevention Engineering (Earth Science) Program — 1 hours Available as a field trip program year round Standards Covered: 2-ESS2-1 Students will design and test a strategy to reduce water erosion on soil.

Seed Dispersal Engineering (Life Science) Program — 2 hours Available as a field trip program in April or May Standards Covered: 2-LS2-2 Students will design and test a tool to help disperse seeds to help restore native grassland plants.

Third Grade Programs

Animal Adaptations (Life Science) — 2 hours Available as a field trip program in February Standards Covered: 3-LS4-3, 3-LS4-2

Students will learn about different animal habitats and life requirements. Students will learn about animal adaptations and the connection between structure and function. Students will design their own organism to fit their environment.

Extreme Weather Engineering (Earth Science) Program — 2 hours Available as a field trip program in fall or spring Standards Covered: 3-ESS3-1 Students will develop their own building that is resistant to high winds. They will then test their buildings in low and high wind settings.

Water Clean Up (Physical Science) Program — 2 hours Available as a field trip program year round Standards Covered: 3-PS2-4 Students will learn about pollution in local waterways. They will then design their own devices to remove two kinds of litter from the water.

Fourth Grade Programs

Glaciers (Earth Science) Program — 2 hours Available as a field trip program in September – November. Standards Covered: 4-ESS2-1, 4-ESS2-2 Students will learn about the impact of glaciers on the landscape of Michigan. Students will go on a hilly two mile hike and then return to the building to participate in hands on activities to demonstrate how ice, water, and wind can change the landscape.

Solar Oven Engineering (Physical Science) Program— 2 hours Available as an in school program or field trip in April or May Standards Covered: 4-PS3-4, 4-PS3-2 Students will build and test solar ovens to cook s'mores and measure temperature change as solar energy is converted into heat (thermal) energy.