

Teacher Planning Packet 2017-2018



Day Programs

www.mcdowellec.com
Phone: 205.387.1806

105 DeLong Road
Nauvoo, Alabama 35578

Welcome to the McDowell Environmental Center!

Welcome to the most incredible field trip experience your students will ever have! At McDowell Environmental Center (MEC), our philosophy is to teach students in the great outdoors and give them an experience impossible to have in an indoor classroom. They will learn by seeing nature up close... wading into a stream to catch invertebrates, touching sandstone canyon walls, identifying trees using a dichotomous key... You get the idea!



We offer the best in hands-on environmental science in a 1,140-acre outdoor classroom. We also offer fun, team-building classes that work wonders for the group dynamics of your class and individual challenges that build students' self-confidence. Our instructors have been trained in a child-centered, experiential approach to teaching and are passionate about sharing the natural world with students and adults.

Once you contact us and confirm your trip, we will guide your planning process. **Please read through this packet very thoroughly as the first step in planning your trip.** If you plan to bring multiple grade levels, consult with us about how to provide different classes for each grade level. Each class variance allows students who are returning to receive new information and experiences.

We can't wait to meet you and your students! This trip will be the most magical and educational trip of their lives!

Jen Kopnicky, Director
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TRIP COST: \$26 per person

For every ten students who attend, one adult may come free. Additional adults may attend for full price. **Please note that lunch may be an option for day groups, but has an added cost of \$7, making the price \$37.** To utilize the Climbing Wall, Power Pole, and Trust Swing, add \$10 per field group/per class.

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PROGRAM DETAILS

Facilities

Our diverse forests, streams, canyons, ponds, waterfalls, meadows, hiking trails, and ropes course serve as our classroom, rain or shine. In case of truly inclement weather, we use indoor teaching areas.

Meals

Depending on the number of residential students in attendance at the time, we *may* be able to provide lunch for day groups, for an additional cost of \$7.00. If our dining hall is full, or we are unable to provide your group with lunch, your group will need to bring their own lunches. We can provide water coolers and a picnic location for your students' lunch.

Services Provided

Our experienced staff handles the entire program for you. We plan, teach and supply materials for all classes. We are here to help with pre-trip planning and are available to make a presentation for teachers, students, parents or school administration as needed.

The Lead Teacher's Role

Most of the Lead Teacher's responsibilities deal with pre-trip preparations. The enclosed *Contract* (pgs. 5-6) lists your responsibilities and the Lead Teacher Timeline (pg. 3) helps you to sequence them. During the program we encourage you to be a participant, learning along with your students.

Making a Reservation

To make a reservation, call or email us (see previous page for contact information). New schools must send a non-refundable confirmation fee within 2 weeks of your request to be placed on the calendar. The fee is \$200.00 for reservations of 50 or fewer students, and \$400.00 for reservations of more than 50 students. The confirmation fee is waived for annually returning schools. We try to honor all date requests, however, this is not guaranteed. Availability is based upon space that residential groups have not filled.

Cancellation & Billing Policy

In the event of cancellation, the school is responsible for a payment of 10% of the number of participants on the Reservation Confirmation. An accurate count of student participants is due at least 60 days prior to your scheduled trip date. Once the 60-day deadline has passed, the school is responsible for a payment of 90% of the number of reserved student participants noted on the Reservation Confirmation.

Risk Acknowledgement Forms

If you choose Climbing Wall, Trust Swing, Power Pole, or Team Challenge classes, you must have Acknowledgement of Risk forms (pgs. 17 & 19) signed by parents for the students. It is important that you bring all of the original ***Student/Adult Acknowledgement of Risk Forms*** on arrival day.

Emergency Guidelines

Upon your arrival you will be briefed on emergency procedures by the MEC staff. If advanced medical care is required, the patient can be taken to Walker Baptist Medical Center in Jasper, 15 miles away. One chaperone or teacher must drive separately so that a vehicle will be at the center in the event that an emergency should occur.

Students with Special Needs

We can customize our classes to make them fun and accessible for most students. Please discuss any special needs with us ahead of time so that we can be prepared to meet them.

Teacher and Chaperone Guidelines

There must be a minimum of 1 adult chaperone for each field group. MEC recommends a 1:10 adult/student ratio including teachers. Chaperones can help make your trip easier, but if not chosen properly, they can make it more difficult. It is worthwhile to take the time to choose your chaperones carefully.

Teacher Credit

McDowell Environmental Center, an AMSTI affiliate, provides people of all ages the vital tools needed to understand the environment in which they live. Teachers are given a certificate, reflecting the time spent in classes and activities at MEC which most school systems accept for professional development credit.

State Standards

Our curriculum is correlated to multi-state Courses of Study standards for Science, Social Studies, Physical Education, and Language Arts, as well as Next Generation Science Standards. Please see our website for detailed information about how our classes correlate to these standards:

www.mcdowellec.com

LEAD TEACHER TIMELINE

As Soon As Possible

- Email **Reservation Confirmation** (as well as **deposit** for new schools)
- New Schools: Arrange a parent and/or student pre-trip meeting at your school
- Recruit *physically-active* chaperones: at least one for every field group
- Arrange for transportation through your school or private charter
- Collect a deposit from students to secure their spot on the trip (suggestion)

3 MONTHS prior

- Email the completed and signed 3-page **Contract** (pgs. 5-6)
- Send out the **Student & Adult Risk Forms** (pgs. 17 & 19) (if taking ropes classes)

1 MONTH prior

- Email the **Field Group Lists** (example on pg. 7)
- Confirm your final numbers of participating students and adults
- Collect all **Student/Adult Risk Forms**
- Collect the remainder of student payment (suggestion)
- Have a meeting with your chaperones to prepare them for the trip expectations (see pgs. 18-20)

1 WEEK prior

- Contact us by email or phone to check for any last minute updates and details
- Make enough copies of the Field Group Lists for all of your chaperones and co-teachers

DAY of the TRIP

- Be sure everyone has appropriate clothes for weather, and water bottles
- Hand out copies of the Field Group Lists to all of your chaperones and co-teachers
- Bring the original **Student/Adult Risk Forms** and **Signed Risk Form Cover Sheet** (pg. 21)

ARRIVAL at CAMP:

- Meet the MEC staff greeters at the Welcome Center
- Give any last-minute group changes to the staff greeters
- Relax and have a great time!

Helpful Hints For Planning Your Trip

Here are some helpful hints for planning your day trip to the McDowell Environmental Center:

Have your students wear nametags.

They can be as simple as pieces of masking tape with the student's names on them. This allows our staff and your chaperones to call the students by name in class.

Divide the students into Field Groups of 10-12.

By dividing them before you come, no time is wasted once you get here, and we can move right into the classes. Also, please assign one or two chaperones to each field group.

Plan snacks into your trip.

Especially for younger students (1st, 2nd and 3rd grade), it is a good idea to plan for snacks. Possible snack times include: on the bus, immediately after you get here, mid-morning, or right before you leave. ***Please let us know when you plan these, so that we can adjust our schedule accordingly. Also, if students are taking their snacks with them to MEC classes, have them carry their own snacks in a light backpack.***

Bring signed *Student/Adult Risk Forms* and *Risk Form Cover Sheet* (pgs. 17 & 19, 21)

If your students are taking *Team Challenge, Power Pole, Climbing Wall, or Trust Swing* they need to have a signed risk form to participate. Please **alphabetize** these forms prior to your arrival to expedite the check in process of these forms.

Have students bring a change of shoes and possibly clothes.

If your students are taking *Pond, Aquatic Adventures or Stream Studies* they will get wet and muddy and may need a change of shoes and clothes.

Have students bring water bottles.

Students need to keep themselves hydrated while outside as their activities are often physical in nature.

Have students dress appropriately.

Rain gear, warm clothes (if cold) and hats are great! Closed-toed shoes only: no sandals or crocs.

McDowell Environmental Center DAY Contract

EMAIL to pc@campmcdowell.com

Please email this contract 3 months prior to your visit.

School: _____ Grade(s): _____ Reserved date: _____

Address: _____ City: _____ State: _____ Zip: _____

Lead Teacher: _____ Email: _____

School Phone: (____) _____ Cell Phone: (____) _____

Secondary School Contact: _____ Email: _____

Best way to contact (circle one): School Phone / Cell Phone / Email Best Time to Contact:

_____ **Arrival time:** _____ (8:30am recommended) **Departure time:** _____ (*2:30pm is recommended)

Are you bringing a snack for your students? YES / NO If so, what time during the schedule? _____

STUDENTS: # of boys : _____ # of girls: _____ TOTAL # of STUDENTS: _____

***ADULTS:** # of men: _____ # of women: _____ TOTAL # of ADULTS: _____

Please include all **teachers in the adult count* **TOTAL #:** _____

FIELD GROUPS: _____ (limit to 12 students/group)

RESPONSIBILITIES OF THE CENTER: Assist with pre-trip planning; provide complete educational programming; inform participants of their responsibilities, camp rules and emergency procedures; prepare meals and evening snacks; clean and maintain facilities and grounds; and provide a safe and wholesome atmosphere.

RESPONSIBILITIES OF THE LEAD TEACHER: Make a reservation (new schools- submit deposit) and return contract; arrange transportation; arrange for one physically-able chaperone for each field group; communicate with students, parents and chaperones about the trip; collect fees & medicines; email field group lists one month prior to trip; mail risk acknowledgement forms at least 2 weeks prior to your trip; participate in the program with chaperones and students; and submit final payment.

DAMAGE: The Center reserves the right to send home any child who becomes ill, destroys property, behaves aggressively or takes any other action detrimental to other students or the program. The school will be responsible for providing transportation in such cases, and for any damage to the facilities and equipment. No refunds will be made under these conditions. The Center cannot be held responsible for loss or damage to property brought to the Center. Please encourage students to leave valuables and large amounts of cash at home.

INVOICE: On your last day at McDowell, we will give you an invoice for the balance of your payment. Payment is due within 30 days after your trip.

I agree to the terms of this contract and agree that my group will abide by all McDowell policies.

Signature of Lead Teacher

Date

Please complete the next page...

McDowell Environmental Center DAY Contract

DAYTIME CLASS SELECTION

Choose 3-6 hours depending on your schedule.

Choose extra classes for large groups- all students will not be able to take the same classes.

Class descriptions are on pages 8-15 of Teacher Planning Packet.

<u>Skills-Based Classes</u>		<u>Science Classes</u>	
<input type="checkbox"/> Navigation	1.5 hr or 3 hr	<input type="checkbox"/> Down to Earth	3 hr
<input type="checkbox"/> Meet a Map	1.5 hr	<input type="checkbox"/> Meet a Tree	3 hr
<input type="checkbox"/> Survival Skills	1.5 hr or 3 hr	<input type="checkbox"/> Value of a Tree	3 hr
<u>Team Building Classes</u>		<input type="checkbox"/> Aquatic Adventures	1.5 hr or 3 hr
<input type="checkbox"/> Trust Swing (5th & up)*	1.5 hr	<input type="checkbox"/> Stream Studies	3 hr
<input type="checkbox"/> Power Pole (7th & up)*	1.5 hr	<input type="checkbox"/> Rock Query	3 hr
<input type="checkbox"/> Climbing Wall (5th & up)*	1.5 hr	<input type="checkbox"/> Forest Connections	1.5hr or 3 hr
<input type="checkbox"/> Team Challenge (5th & up)*	3 hr	<u>Recreation & Humanities Classes</u>	
<input type="checkbox"/> Team Adventure	1.5 hr	<input type="checkbox"/> Native Americans & Earth	3 hr
		<input type="checkbox"/> Authors & Explorers	3 hr
		<input type="checkbox"/> Nature Hike	1.5 hr or 3 hr
		<input type="checkbox"/> Mysterious Medley	1.5 hr or 3 hr

*Classes that require Student and Adult Risk Forms

GROUP PROFILE

Have any of your teachers and chaperones attended MEC before? _____

Have any of your students attended MEC before? _____ If so, approximately how many? _____

How will your group be arriving at MEC? (#'s if known) _____ Bus(es) _____ Car(s)

Please list any **objectives, themes, goals, vocabulary, teaching philosophies or local environmental issues** that you would like for us to emphasize while you are here:

What specific **student needs** should we be aware of? (i.e. social/emotional/behavioral concerns, severe allergic reactions, physical limitations, learning needs, etc...)

How would you characterize your school? (Choose all that apply)

Private Public Religious Affiliation Waldorf Montessori

Below grade level Above grade level At grade level Urban Suburban Rural

FIELD GROUP LISTS

**Please confirm the number of field groups your school will be allotted with MEC before creating this list!*

Divide your class into field groups of 10 to 12 students and at least 1 adult.

At least one adult must be with a field group at all times.

It is important to group students in socially compatible groups.

If you are bringing multiple grade levels, group by grade.

If teachers are "floating," and not assigned a group, please still list all teachers' names on the bottom.

* **EMAIL** to pc@campmcdowell.com

Please email this list 1 month prior to your visit.

Please organize field group lists in the following format (or one similar):

Excel Spreadsheets will suffice as well!

Field Group #1	Field Group #2	Field Group # 3	Field Group #4
1. STUDENT NAME	1. STUDENT NAME	1. STUDENT NAME	1. STUDENT NAME
2. STUDENT NAME	2. STUDENT NAME	2. STUDENT NAME	2. STUDENT NAME
3. STUDENT NAME	3. STUDENT NAME	3. STUDENT NAME	3. STUDENT NAME
4. STUDENT NAME	4. STUDENT NAME	4. STUDENT NAME	4. STUDENT NAME
5. STUDENT NAME	5. STUDENT NAME	5. STUDENT NAME	5. STUDENT NAME
6. STUDENT NAME	6. STUDENT NAME	6. STUDENT NAME	6. STUDENT NAME
7. STUDENT NAME	7. STUDENT NAME	7. STUDENT NAME	7. STUDENT NAME
8. STUDENT NAME	8. STUDENT NAME	8. STUDENT NAME	8. STUDENT NAME
9. STUDENT NAME	9. STUDENT NAME	9. STUDENT NAME	9. STUDENT NAME
10. STUDENT NAME	10. STUDENT NAME	10. STUDENT NAME	10. STUDENT NAME
11. STUDENT NAME	11. STUDENT NAME	11. STUDENT NAME	11. STUDENT NAME
12. STUDENT NAME	12. STUDENT NAME	12. STUDENT NAME	12. STUDENT NAME
Mrs. Parent (Chaperone)	Mrs. Parent (Chaperone)	Mr. Parent (Chaperone)	Mrs. Parent (Chaperone)
Mr. Parent (Chaperone)	Mrs. Teacher (Teacher)	Mrs. Teacher (Teacher)	Mr. Teacher (Teacher)
Ms. Teacher (Teacher)			

Mr. Teacher & Mrs. Teacher will float.

CURRICULUM GUIDE

Mission Statement

The Mission of McDowell Environmental Center is to connect people to the environment, teach respect for the Earth and its beings, and to promote a commitment to lifelong learning.

Program Objectives

- The students will increase awareness and understanding of the environment.
- The students will develop a sense of responsibility for the environment.
- The students will gain a better sense of cooperation and community.

Outdoor environmental education embraces teachable moments which happen regularly in an outdoor classroom. The MEC Instructors are professional educators with college degrees. Each instructor will have their own teaching style and choose activities for classes that best suit their personality. Your students will not stay with the same instructor for the entire time. Because of this, your student groups will not have an identical experience in every class. Instructors will cover the key terms and principles of each class, which are correlated to multi-state Courses of Study, as well as Next Generation Science Standards.

DAYTIME CLASSES

Science Classes:

DOWN TO EARTH

Lesson Overview: Through observation and exploration of habitats at Camp McDowell, learners assess the impact of a reclaimed coal mine on the local ecosystem. Learners observe sedimentary rock types associated with coal formation, as well as the weathering and erosion processes that result in sedimentation. Learners close the class by discussing the need for the responsible use of natural resources.

Total Time: 3 hours

Hiking Distance: ~1.5 miles

Activity Level: Moderate hike; includes a ladder and stream crossings that are not universally accessible.

Learning Goals: By the end of this session, learners will be able to consider the geosphere in the following ways:

1. Identify that sandstone and coal are sedimentary rocks that tell the geologic history of our area, and observe the modern impact of weathering on those rocks.
2. Observe and describe the impact of coal mining on the geosphere and biosphere in the region.
3. Link commonly used materials to finite resources extracted from Earth and discuss the reasons for producing and conserving those resources (ESS3.A; ESS3.C)

Scientific Practices Highlighted: Analyzing and Interpreting Data, Constructing Explanations

Crosscutting Concepts Addressed: Scale, Proportion, and Quantity, Cause and Effect

MEET A TREE

Lesson Overview: Learners explore the relationship of Earth's four spheres to one of the forest's principal plants: the tree. Students discuss how energy cycles in trees, the structure and functions of trees in the forest ecosystem, and identify common Alabama tree species.

Total Time: 3 hours

Hiking Distance: ~.75 miles

Activity Level: Low to moderate; can be modified for all abilities

Learning Goals: By the end of this session, learners will be able to describe the value of Alabama trees to the forest ecosystem in the following ways:

1. Tree species have unique physical characteristics that can be used to identify them, and all trees have specific parts that function together to transfer energy and nutrients, allowing the tree to grow.
2. Trees are an important component of forest ecosystems that impact and are impacted by the atmosphere, biosphere, geosphere, and hydrosphere.
3. Energy can be traced throughout the life cycle of a tree.

Scientific Practices Highlighted: Asking Questions, Developing and Using Models

Crosscutting Concepts Addressed: Energy and Matter, Structure and Function

VALUE OF A TREE

Lesson Overview: Learners will explore the economic, ecologic, and recreational value of forest communities while hiking through a variety of types of forests at Camp McDowell. Learners will discuss and observe the impact of using forests as resources, and explore aspects of forestry management.

Total Time: 3 hours

Hiking Distance: 1 mile

Activity Level: Can be modified to meet some accessibility needs with notification

Learning Goals: At the end of this session, learners will be able to discuss the role of forests as resources, and how forest ecosystems are impacted by use in the following ways:

1. Forests are a renewable resource that are harvested for production of lumber and paper products, but different methods of harvesting impact forest health in different ways.
2. Forest ecosystems are always changing as a result of natural and human impacts, but healthy forests are characterized by high biodiversity and dominance of regionally important tree species. Some species have specific reproductive strategies that are interrupted by human interactions.
3. Forests are economically valuable beyond traditional harvesting, and sustainable forestry management considers economic, environmental, and recreational activities associated with forest resources.

Scientific Practices Highlighted: Obtaining, Evaluating, and Communicating Information, Constructing Explanations

Crosscutting Concepts Addressed: Energy and Matter, Structure and Function

AQUATIC ADVENTURES

Lesson Overview: Learners will predict how different characteristics of freshwater environments impact the types of organisms found in the environment, observe adaptations specific to those aquatic environments, and identify macroinvertebrates. ***Students should come prepared to get wet in this class. Many students bring rain boots or water shoes.***

Total Time: 1.5 or 3 hours

Hiking Distance: Highly variable; ranges from vehicle transportation to site, small, steep hike to stream bed, or .5 to .75 mile hike.

Activity Level: Varies with site(s) selected by instructor. Accommodations for all abilities available, but requires notice.

Learning Goals: By the end of this session, learners will be able to conduct an experiment on a freshwater environments using observation of, abundance of, and or diversity of macroinvertebrates. They will gain skills in the following areas:

1. Making observations of and characterizing unfamiliar organisms.
2. Considering how changing conditions in freshwater environments (naturally or human-induced) can change the composition of aquatic life in that environment.
3. Constructing a reasonable hypothesis about macroinvertebrates and their aquatic habitats, testing it, and discussing the results.

Scientific Practices Highlighted: Planning and Carrying Out Investigations

Crosscutting Concepts Addressed: Structure and Function, Patterns

STREAM STUDIES

Lesson Overview: Learners will assess the water quality of a stream using chemical testing and bioassessment, and discuss the human and natural impacts to stream quality. Learners will relate the stream to local and regional watersheds, and discuss how changes to individual streams can impact water quality in the watershed. ***Students should come prepared to get wet in this class. Many students bring rain boots or water shoes.***

Total Time: 3 hours

Hiking Distance: .5 - 1 mile

Activity Level: Moderate with a short, steep hike up a stream; not easily modified for all abilities, although a 'lab-based' option can be made available

Learning Goals: By the end of this session, learners will be able to discuss the relationship among biodiversity, water chemistry, and watershed health in the following ways:

1. Stream health is a combination of natural (biologic, geologic, atmospheric, and hydrologic) and human induced (pollution, diversion) factors.
2. Stream health can be monitored using biotic and abiotic assessments.
3. Stream health is an important component of watershed health, and watershed health can be strongly impacted by regional land use choices.

Scientific Practices Highlighted: Asking Questions, Planning and Carrying Out Investigations

Crosscutting Concepts Addressed: Cause and Effect, Systems and System Models

ROCK QUERY

Lesson Overview: Learners will hike into a sandstone canyon to better understand how rocks form and engage with rock samples to discern the relationship between sedimentary, igneous, and metamorphic rocks. Learners will observe and consider the impact of the geosphere on local ecosystems, and, in turn, the role the hydrosphere, atmosphere, and biosphere play in shaping the geosphere.

Total Time: 3 hours

Hiking Distance: ~ 1.5 miles

Activity Level: Moderate to strenuous hike; includes a ladder and stream crossings that are not universally accessible.

Learning Goals: At the end of this lesson, learners will be able to think critically about the geosphere in the following ways:

1. Rocks have unique properties based upon their origin. They can cycle between igneous, sedimentary, and metamorphic as a result of processes like weathering, transport, and mountain building.
2. The geosphere is one of Earth's major systems that shapes and is shaped by all of Earth's other systems (biosphere, hydrosphere, atmosphere), revealing changes over time.
3. Different rock types are found throughout Alabama and allow us to predict places to mine for resources.

Scientific Practices Highlighted: Developing and Using Models, Obtaining, Evaluating, and Communicating Information

Crosscutting Concepts Addressed: Stability and Change, Scale, Proportion, and Quantity

FOREST CONNECTIONS

Lesson Overview: Students will hike through the forest observing the connections between Earth's spheres. Particular focus on specific adaptations and connections among plants and animals in the biosphere. Students will play games to better understand the reason for typical adaptations expressed by forest organisms.

Total Time: 1.5 or 3 hours

Hiking Distance: ~.75 mile

Activity Level: Can be modified for universal accessibility with notification

Learning Goals: At the end of this session, learners will be able to relate the biosphere at Camp McDowell to other spheres in the following ways:

1. Articulate ways in which organisms in the forest are connected to one another through specific adaptations, integrated food webs, and by exploiting specific niches.
2. Link the non-living habitat (atmosphere, geosphere, hydrosphere) to the biosphere.
3. Understand that removing something - living or not - from the habitat can have major consequences for that area.
4. Insects display a wide variety of adaptations tailored to their environment, are vital to the health of ecosystems, and have changed over time to suit specific roles within that environment.

Scientific Practices Highlighted: Constructing Explanations, Planning and Carrying Out Investigations

Crosscutting Concepts Addressed: Structure and Function, Systems and System Models

Recreation and Humanities Classes:

NATIVE AMERICANS & THE EARTH

Lesson Overview: Learners will engage with Native American artifacts, visit a reconstruction of a typical Mississippian Era village, and participate in activities and games to learn respect for natural resources and different cultures.

Total Time: 3 hours

Hiking Distance: .75 mile

Activity Level: Low to moderate; can be modified for alternate abilities, however some experiences require hiking a short but strenuous hill.

Learning Goals: By the end of this session, learners will be able to discuss the relationship between humans and the natural environment through the lens of Alabama's indigenous people in the following ways:

1. Describe the cultural differences between people of European descent and American Indians, and explain the reason for those differences in the past and today.
2. Explain how American Indian culture changed over time because of changing reliance on natural resources and environmental changes.
3. List and locate on a map the four major tribes of American Indians that lived in Alabama before European settlers, and describe how they were impacted by one another through trade.

Scientific Practices Highlighted: Constructing Explanations

Crosscutting Concepts Addressed: Stability and Change, Cause and Effect

AUTHORS & EXPLORERS

Lesson Overview: Learners will connect with and be inspired by natural features by exploring McDowell's woods and journaling their experiences. Learners will be prompted with sensory awareness and observation activities to record and share their experiences using sketches, poetry, and word art. Learners will gain knowledge about the scientific and artistic value of journaling and articulate written expression by relating their experiences to those of famous authors and naturalists.

Total Time: 3 hours

Hiking Distance: varied, .5 to .75 mile

Activity Level: Can be modified for universal accessibility with notification

Learning Goals: At the end of this session, learners will be able to use natural landscapes as inspiration for the following:

1. View and describe the world from different perspectives, including the perspective of a natural object, and consider how perspective impacts understanding of the world.
2. Details and analogies improve descriptive writing and help the author convey information to the reader.
3. Relating their experience to the ways authors, explorers, and scientists use sketching and writing in journals as tools to improve their trade.

Scientific Practices Highlighted: Developing and Using Models

Crosscutting Concepts Addressed: Patterns, Scale, Proportion, and Quantity

NATURE HIKE

Lesson Overview: Learners hike through the forest on a favorite trail of their instructor's choosing. On the trail, open exploration and inquiry are highly encouraged and learners can practice their observation and interpretive skills on plants, animals, insects, and tracks! May include the use of field guides, dichotomous keys, hand lenses, and nature journals.

Total Time: 1.5 or 3 hours

Hiking Distance: varied, usually .75 mile

Activity Level: Can be modified for universal accessibility with notification

Learning Goals: Vary based on chosen theme, but are integrated with those from other classes chosen by instructor. Each experience is unique and tailored to the interest of the field group.

Scientific Practices Highlighted: varied

Crosscutting Concepts Addressed: varied

MYSTERIOUS MEDLEY

Lesson Overview: Learners get a unique opportunity to experience Camp McDowell like no other group. Instructors build a class tailored to their interests and expertise and correlated to the chosen theme. Learners will explore a topic with their instructor, and experience the excitement of natural investigation and inquiry. The combination of the skillset of the instructor, the passion they bring toward the subject, and the opportunity for open inquiry and investigation result in a one-of-a-kind experience that creates future naturalists.

Total Time: 1.5 or 3 hours

Hiking Distance: Varied

Activity Level: Can be modified for universal accessibility with notification

Learning Goals: Vary based on chosen theme, but are integrated with those from other classes chosen by instructor. Each experience is unique and tailored to the interest of the field group.

Scientific Practices Highlighted: Varied

Crosscutting Concepts Addressed: Varied

Skills-Based Classes:

NAVIGATION - 1.5 hour option

Lesson Overview: Learners will gain experience with a compass and learn how compasses work through demonstrations and kinesthetic activities using a compass. Learners apply their skills by completing an outdoor compass course. **Option recommended for younger learners*

Total Time: 1.5 hours

Hiking Distance: Minimal hiking; walking over mild terrain without a trail is included

Activity Level: Low; Can be modified for most abilities but may not include outdoor course

Learning Goals: At the end of this session, learners will be able to use a compass to:

1. Determine cardinal directions, read compass bearings and apply them properly.
2. Navigate an outdoor course using a compass.
3. Use a map and a compass to discern bearings properly.

Scientific Practices Highlighted: Obtaining, Evaluating, and Communicating Information, Developing and Using Models

Crosscutting Concepts Addressed: Patterns

NAVIGATION - 3 hour option

Lesson Overview: Learners learn how to read a topographic map and use a compass to navigate themselves in the backcountry woods of Camp McDowell. Learners practice group decision making and critical thinking to troubleshoot navigation issues when they arise. ****Option recommended for older learners***

Total Time: 3 hours

Hiking Distance: Strenuous 1.5 mile hike; walking over terrain without a trail is included

Activity Level: High; not easily modified for all abilities

Learning Goals: At the end of this session, learners will be able to use critical thinking skills and group decision making to:

1. Read and create topographic maps.
2. Use a compass and map to navigate off trail.
3. Describe the information contained in maps, the value of being able to interpret that information, and how maps are used for commercial and societal benefit.

Scientific Practices Highlighted: Engaging in Arguments from Evidence, Analyzing and Interpreting Evidence

Crosscutting Concepts Addressed: Patterns; Scale, Proportion, and Quantity

MEET A MAP

Lesson Overview: Learners practice their visual spatial skills creating and using a variety of maps, and work together to solve indoor and outdoor courses.

Total Time: 1.5 hours

Hiking Distance: Minimal hiking; walking over mild terrain without a trail is included

Activity Level: Low; can be universally accessible with prior notice but may omit outdoor portion of course.

Learning Goals: Upon completion of this session, participants will better understand mapping in the following ways:

1. Become familiar with using and interpreting the pieces of maps (e.g. scale, legend, contour intervals, rivers) using different scaled maps of Camp McDowell.
2. Create a map of an area at MEC.
3. Navigate a course to find locations specified on a map.
4. Gather spatial information about the distribution of resources in an area.

Scientific Practices Highlighted: Obtaining, Evaluating, and Communicating Information

Crosscutting Concepts Addressed: Patterns; Scale, Proportion, and Quantity

SURVIVAL SKILLS

Lesson Overview: Learners will practice planning for and executing wilderness, or backcountry, travel. Learners will practice working as a team and individually to successfully prepare for being lost in a backcountry scenario, and for overnight survival in an emergency situation.

Total Time: 1.5 or 3 hours

Hiking Distance: Varied; .75-1.5 miles

Activity Level: Varied; 3 hour class not easily modified for all abilities; 1.5 hour class can be modified for most
Learning Goals: By the end of this session, learners will be able to use creative thinking skills to meet their basic needs in the backcountry in the following ways:

1. Identify and address the immediate needs of a group in an emergency backcountry situation.
2. Successfully identify and use natural and commonly carried objects to address short- and long-term survival needs in the wilderness while practicing Leave No Trace principles.
3. Discuss the resources available in natural settings and relating them to the success of other cultures today and in the past.

Scientific Practices Highlighted: Defining Problems, Designing Solutions

Crosscutting Concepts Addressed: Patterns

Team Building Classes:

TRUST SWING**

Lesson Overview: Learners work together to lift one another with a certified pulley system on a giant swing. Learners place trust in their group and control the amount of risk with which they are comfortable by setting personal goals for how high they would like to be lifted. Students must be 5th grade or older to participate.

****Acknowledgment of Risk Forms are REQUIRED**

We charge an additional \$10.00 equipment fee per field group for this activity.

Total Time: 1.5 hours, Acknowledgement of Risk Form required

Activity Level: Strenuous mentally, physically low to moderate; accommodations can be made for some physical limitations as riding the trust swing involves minimal physical exertion.

Learning Goals: By the end of this session, learners will gain experience and skills in the following ways:

1. Trust is required in teamwork, and setting and achieving personal goals can result in self-confidence gains.
2. Using simple machines, like compound pulleys, changes the amount of energy required to move an object.
3. Learners will relate potential and kinetic energy concepts using the Trust Swing as a model.

POWER POLE**

Lesson Overview: Learners challenge themselves to climb a 25-foot telephone pole and jump for a bell suspended nearby. This activity provides the most significant mental and emotional challenge for learners. The group setting offers emotional support for each participant, who is also supported by a trained ropes course facilitator to ensure physical safety. Students must be 7th grade or older to participate in this activity.

****Acknowledgment of Risk Forms are REQUIRED**

We charge an additional \$10.00 equipment fee per field group for this activity.

Total Time: 1.5 hours, Acknowledgement of Risk Form required

Activity Level: Very strenuous mentally, physically low to moderate; cannot be modified for universal accessibility

Learning Goals: By the end of this session, learners will gain experience and skills in the following ways:

1. Setting, working toward, and achieving personal goals takes confidence and support from their peers.
2. Gaining personal confidence requires taking (perceived) risks when success is not assured, and understanding that failure is an important part of growth.
3. Trusting in yourself, others, and safety systems are important components of personal growth.

CLIMBING WALL**

Lesson Overview: Striving to climb a 40-foot wall with hand and foot holds, learners experience rock climbing and feel the exhilaration of attempting a daunting feat. Encouraged by their peers and led by a trained ropes course instructor, learners set and achieve personal goals, confront fears, and gain self-confidence in a unique outdoor experience. Students must be 5th grade or older to participate in this activity.

****Acknowledgment of Risk Forms are REQUIRED**

We charge an additional \$10.00 equipment fee per field group for this activity.

Total Time: 1.5 hours, Acknowledgement of Risk Form required

Activity Level: Strenuous physically and mentally; cannot be modified for universal accessibility

Learning Goals: By the end of this session, learners will gain experience and skills in the following ways:

1. Setting, working toward, and achieving personal goals takes confidence and support from their peers.
2. Gaining personal confidence requires taking risks when an outcome is not assured, and understanding that failure is an important part of growth and success.

TEAM ADVENTURE*/TEAM CHALLENGE**

**Team Adventure does not include low ropes elements, and therefore does not need Acknowledgement of Risk Forms.*

***In Team Challenge, Acknowledgement of Risk Forms are REQUIRED.*

Lesson Overview: Learners will participate in a series of group problem solving activities that encourage cooperation, communication, and trust. Each class is tailored to the needs of the group and is a unique experience. The group is encouraged to review their experiences, link them to relevancy in their daily life, and extend these new ideas as they approach situations at home or in school. ***MEC facilitators will choose the activities based on the individual group's needs. Because of this, each student group will have a unique experience using different activities.***

Total Time: Team Adventure - 1.5 hours, no additional forms needed; Team Challenge - 3 hours, Acknowledgement of Risk Form required

Activity Level: Easy to strenuous; can be made universally accessible with notification

Learning Goals: By the end of this session, learners will be able to use the following skills to help them solve problems:

1. Active listening and sharing of ideas are important components of success in group work.
2. Working with others to solve problems highlights the variety of solutions a problem may have.
3. Problem-solving skills need to be honed with practice, and are valuable in all aspects of life.

Parent Information & Student Forms

PARENT LETTER



McDowell Environmental Center

105 DeLong Road
Nauvoo, AL 35578

Dear Parent or Guardian,

McDowell Environmental Center's philosophy is to teach students in the great outdoors and give them a lifetime of memories and experience. Your child will be learning through hands-on environmental science classes, seeing nature up close in a 1,140-acre outdoor classroom. Our instructors have been trained in a child-centered, experiential approach to teaching and are passionate about sharing the natural world with students and adults. We would like to mention a few important items worth emphasizing about your child's upcoming visit to ensure their safety and comfort while away from home.

Appropriate Clothing: We offer hands-on science and team building classes, so we spend most of our time outdoors, even in the rain and cold. Please help your child be prepared with appropriate clothing and gear, as indicated below. In truly inclement weather, we have ample indoor teaching space.

Wear:

Old clothes and closed toed shoes (*For safety, no sandals or crocs please!*)

Bring a daypack with:

Rain Coat

Water Bottle

Lunch & Snack (if suggested by the teacher)

Extra set of clothes if taking Aquatic Adventures or Stream Studies

1 pair of shoes and socks that can get wet or muddy

Acknowledgement of Risk Form: If your child's teacher has chosen either our Team Challenge or one of the "high ropes elements," an Acknowledgement of Risk Form should accompany this packet of information. Please ensure that the student's name and your signature are on this form so that your child can participate in all of the activities.

Your child's school teachers will sent home all information. The teachers from your school will select chaperones for the trip. If you have any questions regarding our program, personnel or facilities, please feel free to call us or visit our web site at www.mcdowellec.com.

Jen Kopnicky, Director
jenk@campmcdowell.com
205.387.1806 ext. 109

STUDENT ACKNOWLEDGEMENT OF RISK FORM

WAIVER OF LIABILITY for McDowell Environmental Center

Camp McDowell - 105 Delong Road - Nauvoo, AL 35578



Dear Parent / Legal Guardian,

Your child's teacher has chosen one or more of the following for your child to participate in at McDowell Environmental Center: Team Challenge, Power Pole, Climbing Wall and/or Trust Swing.

Team Challenge is a series of challenges and obstacles for a group to overcome. The purpose of the course is to teach teamwork and cooperation. At times, participants will be two to six feet off of the ground on ropes, cables or logs. During these activities, your child will depend on their classmates for physical and emotional support and on our instructor to guarantee strict adherence to safety guidelines.

The Power Pole, Climbing Wall and Trust Swing are all twenty to thirty feet high ropes course elements. While off the ground, all participants will be secured by a rope and harness safety system operated by a trained instructor. The purpose of these activities is to build group trust and selfconfidence.

Our insurance carrier requires that all participants have a signed waiver which holds Camp McDowell and its staff harmless from any and all liability if an accident should occur. Camp McDowell has used these activities since 1974, and this requirement is not the result of any problems, injuries or accidents at the camp, but simply a requirement of the liability insurance carrier.

By signing this waiver, you accept responsibility for your child who is willingly participating in a program where there are certain inherent risks and dangers. **Please note that your child has the choice to not participate.** You must understand that the risk involved in participation may also include loss or damage to personal property, physical or psychological damage and/or injury not excluding fatality due to accidents which may occur. You understand that, in case of injury, initial treatment may be performed by the staff of Camp McDowell and there may be need for transportation to medical facilities in Jasper, Alabama.

After reading above, I certify that my child is completely healthy (both physically and emotionally) and capable of participating in these activities. I understand that it is solely my responsibility to determine whether there is any medical reason that he/she should not participate in any of the activities.

I assume all of the above inherent risks and any other ordinary risks incidental to the nature of these activities which are not specifically foreseeable. I will hold Camp McDowell harmless from any and all liability, actions, causes of action, debts, claims and demands of every kind and nature whatsoever, whether for bodily injury, property damage or loss otherwise which may arise from my child's participation. By signing this waiver I release Camp McDowell and its staff from any negligence incurred. My child enters into this activity voluntarily, and I take full responsibility for the decision for him/her to participate or not to participate.

PLEASE NOTE THAT YOUR CHILD CAN NOT PARTICIPATE UNLESS YOU RETURN THIS SIGNED FORM!

Parent/Legal Guardian Name (Please Print)

Name of Student (Please Print)

Parent/Legal Guardian Signature

Date

CHAPERONE LETTER & INFORMATION



McDowell Environmental Center

105 DeLong Road

Nauvoo, AL 35578

Dear Chaperone,

Thank you for agreeing to accompany students on their exciting trip to McDowell. As a chaperone, you will play an important role in creating a fun, safe and non-competitive learning environment. We would like to take this opportunity to tell you a little bit about your role as a chaperone.

The lead teacher from your school will assign to you a field group of 10-12 students to supervise during the day. You will be with the students the entire time during your stay. You are directly responsible for the safety and supervision of your field group.

During classes, the McDowell Instructor will be directly responsible for the group, but they will rely on you for support and attentiveness. Please actively participate in all classes and activities that you attend. Look forward to active classes which may include hiking or wading in a stream. We appreciate your enthusiasm during these classes, as it can be a great motivator for the students!

Here are some GENERAL POLICIES FOR ADULTS:

- Smoking is not allowed indoors or in front of students. Alcohol is not allowed.
- Try not to use your cell phone around the children.
- Corporal or harsh verbal punishment is not allowed. If you experience difficulty managing the student's behavior, speak to their teacher for help.
- When you come to the Center, it is most likely that you will share our campus with other schools. We believe positive interactions among all participants create potential new friendships. Please be a model of respect to the other schools, both children and adults.

Your school may eat lunch a picnic-style lunch as a group. Work with your lead teacher to help ensure the safety of all students during lunch and do not allow students to leave the immediate area without permission. Water coolers will be provided.

In some of the classes, you and the children will get wet and muddy so wear OLD clothes and shoes. A rain coat is essential, because classes are held rain or shine. Our classes are hands-on, so be sure to bring a daypack with a water bottle. **Wear comfortable, closed toed, hiking shoes.**

Thanks for taking the time to read this letter and for agreeing to be a chaperone. Please feel free to call us if you have any questions. We look forward to meeting you!

Jen Kopnick, Director

jenk@campmcdowell.com

205.387.1806 ext. 109

ADULT ACKNOWLEDGEMENT OF RISK FORM

WAIVER OF LIABILITY for McDowell Environmental Center

Camp McDowell - 105 Delong Road - Nauvoo, AL 35578



Dear Adult Participant,

Your group has chosen one or more of the following for your school to participate in at McDowell Environmental Center: Team Challenge, Power Pole, Climbing Wall and/or Trust Swing.

Team Challenge is a series of challenges and obstacles for a group to overcome. The purpose of the course is to teach teamwork and cooperation. At times, participants will be two to six feet off of the ground on ropes, cables or logs. During these activities, participants will depend on one another for physical and emotional support and on our instructor to guarantee strict adherence to safety guidelines.

The Power Pole, Climbing Wall and Trust Swing are all twenty to thirty feet high ropes course elements. While off the ground, all participants will be secured by a rope and harness safety system operated by a trained instructor. The purpose of these activities is to build group trust and selfconfidence.

Our insurance carrier requires that all participants have a signed waiver which holds Camp McDowell and its staff harmless from any and all liability if an accident should occur. Camp McDowell has used these activities since 1974, and this requirement is not the result of any problems, injuries or accidents at the camp, but simply a requirement of the liability insurance carrier.

By signing this waiver, you accept responsibility for willingly participating in a program where there are certain inherent risks and dangers. Please note that you have the choice not to participate. You must understand that the risk involved in participation may also include loss or damage to personal property, physical or psychological damage and/or injury not excluding fatality due to accidents which may occur. You understand that, in case of injury, initial treatment may be performed by the staff of Camp McDowell and there may be need for transportation to medical facilities in Jasper, Alabama.

After reading above, I certify that I am completely healthy (both physically and emotionally) and capable of participating in these activities. I understand that it is solely my responsibility to determine whether there is any medical reason that I should not participate in any of the activities.

I assume all of the above inherent risks and any other ordinary risks incidental to the nature of these activities which are not specifically foreseeable. I will hold Camp McDowell harmless from any and all liability, actions, causes of action, debts, claims and demands of every kind and nature whatsoever, whether for bodily injury, property damage or loss otherwise which may arise from my participation. By signing this waiver I release Camp McDowell and its staff from any negligence incurred. I enter into this activity voluntarily, and take full responsibility for the decision for myself to participate or not to participate.

PLEASE NOTE THAT YOU CANNOT PARTICIPATE UNLESS YOU RETURN THIS SIGNED FORM!

Name (Please Print)

Name of Child, if attending (Please Print)

Signature

Date

PLEASE RETURN TO THE TEACHER ASAP

STUDENT & CHAPERONE TIPS

Preparing Your Students

The more prepared your students are for the trip, the quicker they will acclimate and start enjoying their experience. Essential topics to discuss with your students:

1. Daily Schedule: meal times, class times, lights out, rec time, canteen, night program.
2. McDowell Classes: activities you have chosen, what to wear, level & type of physical activity.
3. Their responsibilities: your school's guidelines, McDowell policies (listed below), expected behavior and consequences.
4. McDowell's location and travel time. Find us on a map of Alabama!
5. Cabins: size, chaperones, cabin assignments.
6. Their questions, fears and/or concerns.
7. **Rules for students at McDowell Environmental Center:**
 - Always ask a chaperone if you leave the group. Take a buddy with you. Tell the chaperone when you return.
 - Please help keep camp free of litter and graffiti.
 - MEC staff must approve the collection of any plants, animals, and other natural things.
 - Please don't chew gum at camp. Animals cannot digest gum that they find on the ground.
 - The team adventure course and any construction areas are off limits.
 - Walk, don't run- there are many roots and rocks to trip over.
 - Bare feet and sandals are only ok in the cabins.
 - "If you can't say something nice...Don't say nothin' at all." -*Thumper*, from *Bambi*
 - Do not enter anyone else's cabin.
 - Playgrounds and the Rec Hall may only be used with adult supervision.
 - Do not ring the bell in front of the dining hall- It is for emergencies only!

Helpful Hints for Choosing Chaperones

- Make sure they will be a positive role model for the group. We want them to set a good example to the students in terms of their own values, behavior, appearance and attitude.
- Chaperones need to be physically fit. The classes at McDowell Environmental Center are very active. Most of them require some degree of hiking and hill climbing. Hikes vary from 1/4 mile to 3 miles, depending on the classes you choose.
- The chaperones must be able to keep up with the students. Some chaperones may see this as a vacation or as time to spend alone with their child. In reality, it will be a lot of work. They will be with the students all day and all night. Sometimes they might be the only chaperone supervising a group of students.
- Make sure they are committed to being on the trip for all of the students and to taking an active role in supervision. Taking care of one's own child is different from supervising a whole group. Different skills are required. Having some adults with previous experience could be helpful. Examples: scout troops, youth groups, etc.
- Our classes are held outdoors rain or shine. We encourage getting wet and muddy. If the chaperone is not enthusiastic about being outside, they will lessen the students' experience.
- You may limit chaperones to one or two per cabin. We also recommend no more than two adults per Field Group. We have found that too many chaperones detract from the experience for the children. In this case, sometimes the main emphasis shifts away from supervising the students to socializing with other chaperones. We have found that some students are distracted by their own parents and are more likely to participate when their parents are not immediately present. Too many chaperones can lead to the "someone else is watching them" syndrome, which means that no one is supervising the students!
- Consider asking parents to complete an application if they are interested in being a chaperone. This can help you make a well-informed decision about who to choose.

RISK ACKNOWLEDGEMENT COVER SHEET

PLEASE BRING ALL STUDENT RISK ACKNOWLEDGMENT
FORMS TO MEC AND TURN IN UPON ARRIVAL

McDowell Environmental Center staff is not able to verify prior to class that all students attending Environmental Center Day Programs have a Risk Acknowledgment form that is signed and dated by the student's parent or legal guardian. We therefore request the Lead Teacher to sign below to verify that all students who participate in today's Team Challenge, Trust Swing, Power Pole or Climbing Wall have a Risk Acknowledgement form (pg. 17) that is signed and dated by that student's parent or legal guardian.

I, _____, verify that all students who participate in
(Print Your Name)

Team Challenges, Power Pole, Trust Swing, or Climbing Wall on _____ have a signed
(Trip date)

a Risk Acknowledgement Form that is signed and dated by their parents or legal guardian.

List below any students who DO NOT have a signed Risk Acknowledgement form or are NOT to participate:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

This form **MUST** be signed and accompany all student's risk acknowledgement forms.
All students must have a signed risk acknowledgement form before they participate.

Signature of Lead Teacher: _____ Date: _____

Name of School: _____

Directions to Camp McDowell

Birmingham and Montgomery:

Take I-65 North in Birmingham. Get off at exit 265A, headed onto I-22 towards Memphis. Take Exit 63 and turn right onto 269 North into Jasper. Turn right at second light onto 18th St. and an immediate left onto 9th Ave. which will turn into HWY 195. Take Highway 195 North 13 miles to Camp McDowell. Camp entrance will be on your right.

From Huntsville:

Take I-65 South to Cullman; take U.S. 278 west to Double Springs; take Highway 195 South 10 miles to Camp McDowell. Camp entrance will be on your left.

From Tuscaloosa:

Take Highway 69 north to Jasper; take Highway 195 north 13 miles to Camp McDowell. Camp entrance will be on your right.

From the Shoals:

Take Highway 43 south from Florence to Russelville; take 243 from Russelville until that road ends then take 195 south to Double Springs; take Highway 195 South 10 miles to Camp McDowell. Camp entrance will be on your left.

From the Tupelo, MS area:

Take I-22 to the Hamilton/Highway 278 exit. Follow highway 278 about 40 miles to Double Springs. Turn right on Highway 195 South. Take HWY 195 South 10 miles to Camp McDowell. Camp entrance will be on your left.

Please come to the Welcome Center, the second building on the left side of the camp road (about 1 mile from Highway 195).