

# **NIGHT PROGRAMS**

## ***BIG SCREEN***

Themes: Connections, Cycles, and Systems; The Earth Provides

Lesson Overview: Learners explore the night sky with help from science and past cultural observers. Learners participate in guided stargazing highlighting seasonal celestial bodies, and guided activities on lunar phases and planet size and scale, and learn about celestial myths.

Total Time: 1.5 hours

Hiking Distance: Negligible; based on sky and instructor-chosen activities

Activity Level: Can be modified for universal accessibility with notification

Learning Goals: At the end of this session, learners will look up at the night sky and have a better understanding of:

1. The relationship among the Earth, moon, stars, and the patterns produced by their movements.
2. The composition and scale of our solar system.
3. The role of the night sky in human cultures.

Scientific Practices Highlighted: Developing and Using Models

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

## ***INVENTION CONVENTION***

Themes: Community; Energy

Lesson Overview: During this indoor activity, learners build camaraderie, cooperation skills and group spirit. Working in small groups, learners attend a 'convention,' sharing ideas and using their imagination, creativity, ingenuity and teamwork to engineer solutions to problems, create sculptures or short skits, or build functioning machines. This class has a large selection of possible activities so each program is unique and based on the choice of the MEC instructors.

Total Time: 1.5 hours

Hiking Distance: N/A

Activity Level: Universally accessible

Learning Goals: By the end of this session, learners will be better equipped to do the following:

1. Work in small groups cooperatively, sharing ideas and designs in pursuit of a common goal.
2. Engineer and test a solution to a problem offered by MEC staff with minimal resources and maximum creativity.
3. Find inspiration from natural objects, unfamiliar words, sketches, and in other surprising places, and use that to consider the design of current or future technologies.

Scientific Practices Highlighted: Developing and Using Models; Planning and Carrying Out Investigations

Crosscutting Concepts Addressed: Cause and Effect; Patterns; Energy and Matter

## ***McDOWELL WOODS***

Themes: The Earth Provides, McDowell Stewards

Lesson Overview: Learners participate in a town hall-style role play to determine how best to use land acquired by Camp McDowell. Learners take on different stakeholder roles, such as Camp McDowell employees, coal miners, restaurateurs, scientists, and farmers, to come to a consensus on how best to use the land. Each stakeholder group will present their ideas for land use to the group, support their ideas with evidence, and will listen to other stakeholder groups with thoughtful respect to come to a solution that works best for everyone.

Total Time: 1.5 hours

Hiking Distance: N/A

Activity Level: Universally accessible

## ***NIGHT HIKE***

Themes: Adaptations

Lesson Overview: Learners explore the forest of Camp McDowell at night, using all of their senses to enhance the experience and compare it to their hikes during the day. As they explore their senses, they discuss adaptations unique to nocturnal animals that help them be successful in their environment. ***We recommend that this class not be taken in May as sunset time does not correspond well with our evening class time.***

Total Time: 1.5 hours

Hiking Distance: .5 - 1 mile

Activity Level: Universally accessible

## ***RADICAL RAPTORS***

Themes: Adaptations; McDowell Stewards

Lesson Overview: Learners engage with our bird educators, live birds of prey - like a hawk or owl - to learn about their adaptations, habitats, and ecological significance.

Total Time: 1.5 hours

Hiking Distance: N/A

Activity Level: Universally accessible

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

1. Describe the specialized traits of birds of prey and how each adaptation contributes to the success of the bird.
2. Relate adaptations to habitat and behaviors.
3. Consider the impact of humans on birds of prey indigenous to our region.

## ***SONGS, SPARKS AND STORIES***

Themes: Community

Lesson Overview: Learners experience an exciting evening of songs, skits, stories and games with our instructors. Connections to cultural entertainment before television and electricity are highlighted, as well as a sense of community and cultural preservation. The class takes place around a campfire and is ideal for all sized groups.

Total Time: 1.5 hours

Hiking Distance: Negligible to up to  $\frac{1}{8}$  mile based on which fire location is chosen

Activity Level: Universally accessible