

## **What Does MCSEEP Teach?**

The goal of our Kindergarten through Eighth Grade curriculum is to gradually build an educated and caring awareness of the importance and wonder of our Earth. Through carefully crafted lessons, students learn about the problems that beset our environment and steps they can take to help care for the Earth.

We accomplish this by using a wide variety of entertaining, informative, and interactive educational methods; building on what was taught the previous year while laying the groundwork for the following year. Accordingly, when our Kindergarten students graduate from grade school, they have a good understanding of environmental issues as varied as solid waste management, conservation of natural resources, biodiversity, groundwater and watershed preservation, global climate change and the impact of consumerism on the natural world. All lessons are both enjoyable and educational, offering practical solutions to current environmental problems. In addition, the MCSEEP curriculum meets Illinois State Learning Standards, thereby satisfying the environmental education requirements. The schools we teach in are highly supportive and enthusiastic about our program.

The following is a synopsis of our presentations:

### **KINDERGARTEN – *The Garbage Monster* (35 minutes)**

Along with five year old 'Lou,' students learn a very important lesson about the consequences of making too much trash. We tell the story of 'The Garbage Monster' using our illustrated flip book. The story teaches students how we can all make the 'monster' disappear by reducing, reusing, and recycling. Rita Recycle, an entertaining sock puppet, reinforces the idea by leading the class in singing "*We Recycle*". Our lesson makes it clear that we all have a responsibility to care for the Earth's resources. It always proves to be a fun and lively class!

### **1<sup>st</sup> GRADE – *Our Good Friends, the Trees* (35 minutes)**

The first grade presentation reinforces the previous year's concepts of the "3 R's", but concentrates specifically on paper recycling and the source of that paper – *trees*. We look at the many gifts that trees bring to our world; food, air quality, habitat for animals, soil retention, shade, wood for human use, and more. The students watch a wonderful video from the IL Department of Natural Resources, "*Kids for Trees*." The undisputed highlight of the class is making our own recycled paper. Each class gets to keep the paper shape made (choosing between butterflies, hearts, holiday shapes, etc.) as a reminder of the importance of recycling paper and caring for our good friends, the trees.

### **2<sup>nd</sup> GRADE – *Water - Making Every Drop Count* (40 minutes)**

Most students are surprised to learn they are drinking the same water the dinosaurs drank! Our second graders learn how our Earth recycles water through the water cycle and that water is a nonrenewable resource. Understanding that all living things need water to survive, we examine McHenry County's water source, groundwater. Conservation ideas are shared, giving the students ways to begin conserving immediately. Our lesson continues with a brief video cartoon, summarizing how

groundwater reaches their homes and school. We conclude with a game where students move the 'water drop' forward by correctly answering questions on water facts and conservation. The children are thrilled when they help the 'drop' join his friends in the water pool!

### **3<sup>rd</sup> GRADE – W.O.R.M.S. – 'Why Organisms Renew My Soil' (50 minutes)**

The subject of our 3<sup>rd</sup> grade lesson is the '4<sup>th</sup> R' – ROT. The presentation explains that composting feeds the Earth, providing important nutrients for plants. Students will enjoy meeting Vermi, the worm, the star of our video. Vermi explores the process of how organic materials biodegrade, while making jokes any third grader would enjoy! We end with our Worm Bin Game, where students need to answer questions correctly in order to get the worm family home for lunch.

### **\*4<sup>th</sup> GRADE – The Race to Renew (50 minutes)**

Exploring the difference between renewable and nonrenewable resources, students understand the importance of conserving our natural resources by practicing the "3 R's." The lesson includes a video that focuses on the subject of energy, looking at various renewable forms of energy; such as biomass, geothermal, wind, solar and water. The lesson wraps up with our Race to Renew Game. By defining the pictured forms of energy, students can send our solar car on a trip around the game board track. By the end of our road trip, students will have a clear understanding of which forms of energy are clean, renewable forms, and which are not. We also introduce green career opportunities in the energy sector.

### **5<sup>th</sup> GRADE – What's Happened to Home? (50 minutes)**

As McHenry County continues to change and develop, students are shown how other species are impacted by progress and growth. This lesson stresses the importance of biodiversity, showing how all species are essential to the continued health of our planet. The vital concepts of biodiversity are presented through an excellent World Wildlife Federation video and an original, interactive story in which students act out various native species along with the things that threaten their survival.

### **6<sup>th</sup> GRADE – Water – Yours to Preserve (50 minutes)**

Global water quality is rapidly becoming one of today's most important issues. With only 1% of all water on the planet accessible for human needs, taking care of this resource is absolutely essential to continued life on Earth. We explore groundwater in McHenry County, looking at the Fox and Kishwaukee watersheds. Next, we broaden our scope and explore human impact on our largest bodies of water – the oceans. Using several hands on activities, this lesson really brings home how important it is for each of us to do our part. Our lesson includes an excellent Cousteau video, "Trash on the Spin Cycle." We conclude with reviewing steps students can take to protect our water.

### **7<sup>th</sup> GRADE – The Heat Is On: Global Climate Change (50 minutes)**

This presentation seeks to educate students on the causes and likely consequences of global warming and also offers practical solutions to lessen its impact. Students will enjoy watching the timely, Polar

Palooza video, *“Take Aim at Climate Change.”* By learning how our current fossil-fuel consumer lifestyle adds to global climate change, we can appreciate the importance of new energy technologies, such as hybrid and fuel-cell vehicles. Our lesson also looks at the impact global warming has on our oceans. We conclude with a very optimistic video, *“The Future of Coral Reefs.”* We tell our students, “Perhaps you may be the one that discovers the solutions we so urgently need.”

**\*8<sup>TH</sup> GRADE – Cool Jobs – Working for Sustainability (50 minutes)**

With over half of our college graduates unable to find jobs, plus a struggling economy, employment futures seem bleak. Factor in a finite amount of natural resources and growing populations, the resulting challenges are many. In this lesson we explore the theory of natural capitalism and cradle to cradle production. Our goal is to satisfy today’s needs without diminishing the prospects of future generations. We begin by identifying green career opportunities plus the training required for those positions. Next, we examine the traits employers’ desire, thus giving the students a solid foundation to build their career aspirations. Is it possible to find a rewarding career that utilizes individual talents and gifts, but also promotes sustainability of the Earth’s resources? Our lesson answers with a resounding “YES”!

**\*HIGH SCHOOL - Green Careers (50 minutes – 1 hour)**

Picking up where our 8<sup>th</sup> grade lesson left off, we continue to explore how to balance economic growth with improved care for the environment. Our general career focus shifts to the topic of energy. As the U.S. population grows and when the economy rebounds, electricity demand is expected to increase by approximately one-third in the next 12 years. Worldwide, the demand for energy is expected to double by 2030. How can we power the world without overpowering the environment? This lesson will address that question by looking at the new career fields in renewable energy. We also discuss internship opportunities and how to best prepare students to fill these important roles. Ever optimistic about the future of our children and planet, this workshop takes the first step in identifying the solutions and opportunities that will allow us to emerge stronger and more sustainable.

High schools can call our office to schedule a lesson. (815) 334-4054

\*The Green Career lessons are sponsored by the McHenry County Cooperative for Employment Education (MCCEE). Funding is provided through the State of Illinois, CTEI grant.

Thank you for your interest in our program. Should you have any questions, feel free to contact me at the MCSEEP office.

Sincerely,

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