



Eco-Station Shorts

For a detailed description for each activity and how to facilitate it, please visit our website at www.KeepRocklandBeautiful.org.

Bugged About Water Quality

A tag game that represents how environmental stressors such as trash, salt, sewage and fertilizers affect water quality. Students will learn how macro invertebrate population indicates the health of a stream eco system.

*Works indoor or outdoor

Grades: 4th-8th

Participants: Full class

Activity sets: 1

Carrying Capacity

An interactive activity (similar to musical chairs) that explores how population growth and the impacts of modern development put a strain on natural resources and how students can help preserve those resources. A tarp is folded (each time the music stops) to mimic the shrinking resources. It is unfolded as students suggest ways to preserve these resources.

*Indoor or outdoor.

Grades 4-8: A chronological exploration of the growth of development of Rockland County and the subsequent demands on resources.

Grades K-3: Focuses specifically on water as a natural resource.

Participants: Half to Full class

Activity Sets: 2 sets (we only have one radio)

Color me Natural

A color matching game. Students use color samples to explore the surrounding school ground. They match colors of trees, ground cover, bugs and possibly animals with chips of color and discuss the role color plays in an eco-system.

*Outdoor only

Grades: K-5

Participants: Half class

Sets: 2

Decomposition Line Up

Students are handed images of items that decompose at different rates. The students then work together to arrange themselves in order of the time it will take for each of the images they are holding to break down. (There is a team building component in the lineup)

*Indoor or Outdoor

Grades: K-5

Participants: Half to Full class (if students work in pairs)

Sets: 1

Environmental Chutes and Ladders

This activity uses a version of the board game Chutes and Ladders to illustrate some of the ways each of us can conserve natural resources. Discussion-based activity.

*Best done indoors (can be done as a wind-down after high energy activity. Ideally paired with another activity)

Grades: K-3

Participants: Half class (4 players per board)

Sets: 4 large boards

Earth: The Apple of Our Eye

This activity uses an apple (sliced in a very specific way) to demonstrate the planet's limited supply of farmable land. The facilitator cuts the apple proportions that represent, water, mountains, deserts, swamps, cities, roads, etc. We end up with 1/32 of the apple skin (topsoil) to represent arable land.

*Can be done indoors or outdoors, but we recommend a quiet area. Pairs nicely with Environmental Chutes and Ladders or Where is the Water?

Grades: 2-5

Participants: Half class

Sets: As many as you would like to have running. Equipment includes one apple.

Energy Bike

Student's cycle on an actual bike to feel the difference in energy required to light an incandescent versus compact fluorescent light bulb. They discuss why saving energy is important for the health of the environment and our own bodies.

*Indoor or outdoor.

*This activity needs to be facilitated by a KRB educator. There is a \$100 add on fee for this activity.

Grades: 3-8

Participants: Half class

*One Bike

Environmental Jeopardy

A Jeopardy game designed to teach students about living a more sustainable lifestyle. There is an emphasis on collaborative decision-making.

*Power point presentation, indoor activity. Nice wind-down after high energy activity.

Grades: 4-8

Participants: Half to Full class

Sets: As many sets as you would like.

Enviroscape Model

The Enviroscape is an interactive watershed model for understanding how different land use activities affect the quality of our water. Students help demonstrate point and non-point source pollutants on our watershed.

*Ideally indoors.

This activity is facilitated by a KRB staff. There is a \$100 fee for this activity.

Grades: 4-8

Participants: Half class

Sets: 2

Everybody Lives Downstream From Someone

Students are given props that represent different wildlife and pollutants. They are guided through a narrated script that helps them to understand how town's pollutants can affect species in and along waterways. The students, acting as Agents of Conservation, show how we can reduce these pollutants.

*Can be done indoors or outdoors.

Grades: K-4

Participants: Half to Full class

Sets: One set

Garbage Relay

Students participate in a relay race with the objective of depositing different types of recyclables, compostables and trash into the proper receptacle. They discuss ways to reduce waste and how to make cleaning up fun!

*Can be done indoors or outdoors. (We provide the trash!)

Grades: K-8

Participants: Half to Full class (Best with a full class)

Sets: 2

How to Turn Kitchen Scraps into Black Gold

Students are introduced to the world of composting and participate in a hands-on demonstration of vermicomposting, as they meet red wiggler worms in their scrap-laden home. Master Gardener facilitators will cover the do's and don'ts of feeding the worms, how to handle them and the uses of the "black gold" that they produce. Students learn the ecological importance of composting to reduce waste and conserve energy. Prepare to get a little dirty and learn a ton!

*Indoor or outdoor.

*This activity is facilitated by Cornell University Cooperative Extension Master Gardeners. There is a \$100 fee.

Grades: K-3

Participants: Full class

Hudson River Riddles

Students learn about local waterway inhabitants by playing a game of riddles. Teams compete to match the correct photograph with each riddle. The facilitator incorporates how fish, birds and plants all depend on the river for survival.

*Works well indoors or outdoors. Great as a wind-down activity.

Grades: 3-8

Participants: Half to Full class

Sets: 2

Just Passing Through

In this activity, students play the part of vegetation and raindrops. Bottle caps represent leaves and pebbles. Through a guided simulation, the students will learn how vegetation is necessary for soil to absorb water and get deep into the ground.

*Great activity to do outside on a slight slope. Can be done indoors in large enough space.

Grades: K-4

Participants: Half to Full class

Sets: 1

Litter Wizard

This activity is great for younger students. The facilitator reads from a book about a wizard who gets upset with the amount of litter he sees in a town. The wizard casts a spell that sends litter back to whomever dropped it and it gets stuck to them! Members of the town are confused by the trash that is stuck to them and the story continues. A group discussion follows on the effects of litter and steps for litter prevention.

*Great indoor wind down, can be read outside as well.

Grades: K-3

Participants: Half to Full class

Sets: 2

Locavore Special

Students take an imaginary trip to the supermarket in early April. After purchasing their fruits and vegetables, they learn the season in which these items are grown and harvested in our region. In exploring this, they learn how far some of our food must travel to get to us and the true cost and benefits of purchasing of locally grown produce.

*Indoor activity.

Grades: 3-8

Participants: Half class

Sets: 2

Meet a Tree

Students are paired up and "introduced" to a tree. The student meeting a tree is led to the tree with their eyes closed. When meeting the tree, they feel, smell and measure (hug) the tree they are being introduced to. They return to the group circle, open their eyes and try to locate the tree they just met. Each group then switches roles. The final section of the activity includes using a child friendly field guide to identify a few tree species.

*Outdoor activity.

Grades: K-5

Participants: Half to Full class

Sets: 2

Nature Bingo

Students play a bingo game using bingo cards comprised of plants and animals native to our region. A Power Point presentation of each of these beautifully photographed species is used for 'calling out' selections. In the process of playing the game, students discuss the characteristics and habitats of these local inhabitants.

*Can be in done indoors with projection and screen/smartboard or outdoors with laminated cards.

Grades: K-8

Participants: Half to Full class

Sets: 2

Nature Trail Exploration

Students explore the natural environment around their school yard. They learn there are no "weeds", just plants we with which we have lost touch. They learn many of the plants we call weeds have played an important role in our past, e.g. as food, dyes or medicine. (Plant identification cards available)

*Outdoor activity. Requires facilitator willing to learn a few native plants.

Grades: K-8

Participants: Half class

Sets: 2 sets of cards

Pyramid Of Life

Each student is given the role of a plant or animal in a food chain. As one animal consumes another in the chain, they acquire not only energy, but accumulated pesticides that have been applied to the plants/producers in the group. This is simulated by passing patches of felt up the food.

*Can be done indoors or outdoors.

Grades: K-8

Participants: Half to Full class

Sets: 2

Sound Map

Students sit outside in a designated space and listen to *all* the sounds in the environment with their eyes closed. They mark the origin of these sounds on a basic map of the area. Students can draw symbols to represent the sound they hear. This activity can be matched with Meet A Tree as a nature awareness series or with a basic mindfulness/breathing activity.

*Outdoor activity. Excellent activity to follow up high energy choices like Garbage relay or Survival Tag.

Grades: K-8

Participants: Half class

Sets: As many as needed

Superbowl Surge

Using tokens to simulate waste that is flushed down a toilet, students simulate a super surge of activity during half-time and learn what happens when waste overflows from treatment facilities. Lines or chalk and rope and chairs represent houses and pipelines.

*Indoor or Outdoor activity.

Grades: 3-8

Participants: Half class

Sets: 1

Survival Tag

This is a tag game where students take on the roles of coyotes and rabbits (native to our area), and simulate the predator/prey balance in an ecological system. Students explore how human activity and natural resources play a role in the balance as well.

*Best outdoors. If indoors, needs large space.

Participants: Full class

Grades: K-8

Sets: 2

Tops and Bottoms

Students are handed out images of the parts of various plants that grow above and below the soil. They then try to match up the appropriate parts for each. Examples include; carrots, beets, broccoli, celery, lettuce and corn. The students then listen to a trickster story involving a bear and a rabbit, who manages to always get the more delicious part of the plant. Students discuss the role and value of the different parts of a plant.

*Indoor or outdoor.

Grades: K-3

Participants: half class

Sets: 1

Web of Life

Using a ball of string and photographs of different plants and animals, students make the natural connections in an ecosystem and explore how humans can affect relationships in nature.

*Indoors or Outdoors

Grades: 3-8

Participants: Half class

Sets: 2

What Animal Am I?

In this exercise, a photograph of an animal native to Rockland County is attached to the back of each student. The students walk around a designated space asking each other a series of questions (provided) to try and figure out which animal they represent. (With a group of very young, one student with a photograph on his/her back can stand in front and ask questions of the group.)

*Indoor or outdoor

Grades: K-5

Participants: Half class

Sets: 2

Where is the Water

In this activity, a globe and a water cycle poster are used to initiate a discussion about where we find potable water on earth. The students then fill in a graph illustrating the percentage of available fresh water on the planet and discuss what we can do to protect our finite supply of water.

*Indoor or outdoor. Pairs nicely with 'Earth, the Apple of My Eye' which demonstrates our finite amount of farm land.

Grades: 3-5

Participants: Half class

Sets: 1