COMMUNITY GREENSPACE CURRICULUM GUIDE

For Wonder & Wisdom's Beautiful Multi-Generational Community Greenspace in Craftsbury Village, VT

By Sterling College students Anna Johnston '17, Colton Francis '18, Jordan Keating '18, Olivia Pickering '17
Community Greenspace Curriculum Guide

Introduction

If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in.
Rachel Carson, A Sense of Wonder

The Community Greenspace Curriculum Guide was developed by Sterling College students (Colton Francis ‘18, Anna Johnston ‘17, Jordan Keating ‘18, Olivia Pickering ‘17) as a final project for their Experiential Curriculum Design class (2016). After an introductory tour of the Community Greenspace with the Director of Wonder and Wisdom, Jim Flint, the students selected four sites to research and develop the following curriculum. The Experiential Curriculum Design students envisioned the development of this curriculum as a means to help teachers, students and visitors to interpret and learn from the many valuable resources offered at the Greenspace. The primary age group for the curriculum is 3rd-4th grade, but with a bit of creativity can easily be modified for younger or older age groups.

It was the intent of the students to design a curriculum that brings alive the Greenspace as a recreational and educational asset and serves as testimony to the vision and creativity of its founder, Jim Flint.

Through the design process the students seriously considered the long term impacts of this project and its relation to the Sterling College mission statement with its emphasis on environmental stewardship. Additionally, the Sterling College students were intent on developing a curricular model that emphasizes the importance of utilizing natural curiosity as a spark in the development of a relationship to the wonders of the world. This is a curriculum that places the student at the center of the learning process and relies greatly on the process of guided self-discovery.

The Sterling College students recognize that this curriculum serves as an introduction to the educational assets of the Greenspace and hope that it inspires teachers, students and community members to further develop curriculum and activities that will give rise to the next generation of environmental stewards.
THE WETLANDS
Spot the Difference: Wetland Edition

Lesson Plan for Grades 3-4, Ecology
Length of Activity: 1 hour

OVERVIEW & PURPOSE

In order to understand the differences between a wetland and other habitats, students will use their senses to make observations. This sensory exploration also allows students to connect with the Greenspace in a tangible and physical way. By recognizing how a wetland is unique, students can understand its ecological importance.

OBJECTIVES

A. Students should feel safe employing each different sense. They should feel grounded and begin to experience a connection to the Greenspace.
B. Students should be thinking about what their eyes, noses, hands and ears are telling them about where they are. They should be reflecting on what distinguishes a wetland.
C. This lesson is designed to have students make sensory observations in 2 different ecosystems (the neighboring woods are a great second site) and reflecting on the differences.
D. Students should be respectful of their impact on this particular ecosystem and mind LNT (Leave No trace) principles.

MATERIALS NEEDED

1. Writing or drawing implements

ACTIVITY

1. Eyes: Record, either by drawing or journaling, the types of plants and where they’re growing, how much water is present, what animals are there, or anything else you can see.
2. Nose: Record what you can smell, either certain plants, the soil, or the air.
3. Ears: With everybody being silent scientists, record what noises you can hear.
4. Hands: Stick your fingers in the mud and ask how wet is the soil? What do the surrounding plants
feel like? Record these tangible experiences.
5. Then repeat these exercises in a different type of habitat.
6. Allow students to share what they experienced and the differences they noticed.

PROCESSING & REFLECTION

How would students define a wetland?

Did they notice any special plants or animals?

Why is it important to have different types of ecosystems?
Wetland Web of Life

Lesson Plan for Grades 3-4, Ecology
Length of Activity: 30 mins

OVERVIEW & PURPOSE

Wetlands are important habitats to many living things. Within an ecosystem all living things have a special job—producer, consumer, or decomposer, that maintain the web of life. Through understanding each role and identifying where it’s represented, students will recognize the connectedness of all things, and value the importance of wetland habitats.

OBJECTIVES

A. Students will feel curious and engaged. They will also feel a sense of connection to other living things.
B. Students will be investigating and taking some initiative in their own learning.
C. They will be thinking critically about what different inhabitants do, and drawing connections about why it’s important and connected.
D. The lesson begins with an introduction to the different roles and what they do, and examples of each. The second half has students working in small groups or pairs to play detective and see who they can find.
E. By understanding the function of different species, students will cultivate a sense of caring and respect for all life. They will also think about the ethics of what it means to these species if we don’t take care of the wetlands.

MATERIALS NEEDED

1. Journal and pencil

ACTIVITY

Introduction: Within an ecosystem all living things have a certain role. A producer is a green plant that uses photosynthesis to turn the sun’s energy into their food and produce oxygen. Consumers are living things that eat other living things. They can eat producers, plants, or other consumers, animals. Decomposers are “recyclers” that break down dead plant and animal matter and return it to the air, water, and soil.
Have students partner up and make 3 lists of what they find for each category. This might involve poking around in the mud to look for worms, or being very quiet to see some birds.

**PROCESSING & REFLECTION**

To process this experience ask the students to share their lists and what they learned. Ask them where they found each species, what it looked like or what it was doing. To begin making connections question what might happen if some of those species began disappearing?
Wetland Scavenger Hunt

Lesson Plan for Grade 3-4, Natural History
Length of Activity: 30-45 mins

OVERVIEW & PURPOSE

Students participate in a non-competitive game of scavenger hunt in order to find as many of the species represented on the accompanying handout. The purpose of this activity is to introduce students to the different types of life the wetland supports. This activity also develops observational skills and local ecological knowledge.

OBJECTIVES

A. Students should feel curious to discover who is living in the wetland! The non-competitive nature of the game should encourage wonder and discovery, and an appreciation for the bounty of life in this habitat.
B. Students should be actively trying to find and match as many items on their sheet as they can.
C. They should be thinking about where to find things, imagining they were the respective species, and thinking about where within a wetland they live.
D. A game followed by sharing and discussion

MATERIALS NEEDED

1. Photocopies of the scavenger hunt checklist, and a writing tool

ACTIVITY

Either individually or in pairs students are given time to try to find the variety of plant and animal species illustrated on a handout. They should be reminded that the wetland is these creatures home so they need to respect it and treat it like they would their own. They should also be reminded not to pick or collect anything, but show they’ve found said species by indicating so on their handouts.

Once students seem to have found as much as they can, bring the group back together
and share what they found.

PROCESSING AND REFLECTION

Where did they find particular species?
Do they know the name of it?
What did it look like in person?
WETLANDS SCAVENGER HUNT: how many can you find?
Wetland Water Cycle

Lesson Plan for Grade 3-4, Ecology
Length of Activity: 45 mins

OVERVIEW & PURPOSE

Student will learn about the water cycle through the wetlands. They will see the hydrological elements in place and glean the importance of water to maintaining different ecosystems and life.

OBJECTIVES

A. Students should feel engaged and curious
B. They should be actively listening as well as participating in answering the questions
C. They should be thinking about transferring the concepts they’ve heard to what they’re seeing
D. The design is an introduction of terms and explanation in the beginning, then unstructured time for student to apply the lesson and answer the question

MATERIALS NEEDED

1. Chart of water cycle, labels

ACTIVITY

Using the chart provided explain the key points of the water cycle, evaporation, condensation, transpiration, and terms like ground water, runoff, and erosion. Allow students to create labels for where in the wetland they see these concepts represented.

PROCESSING & REFLECTION

To process the experience students can share the areas they identified and the concepts they ascribed to each. Transfer questions like “Where else so you see things like precipitation?” or “What happens to an ecosystem if there is no precipitation for a long time?” This dialogue can make connections for students to begin to understand life’s interconnectedness.
THE WILLOWS
PATTERNS

Lesson Plan for Grades 3-4, Ecology
Length of Activity: 1 hour

OVERVIEW & PURPOSE

Everything is made up of patterns from the molecules in rocks, branches on trees, turning of the seasons, and the pores on your skin. In groups discover and collect as many leaves, sticks, rocks, and fallen bark as you can without taking anything from living things and disturbing as few animal homes as you can. Then as a large group create a pattern (according to size, shape, colors, or??) with the found objects.

OBJECTIVES

- Have students seek out patterns in nature in non-disruptive ways
- Have them think about patterns large and small found everywhere, and the interconnection of all life as a series of patterns
- Have students become more aware of patterns in nature, those that make up our bodies, the things we eat, and the things we wear

MATERIALS NEEDED

- Hands

ACTIVITY

- Small groups go and collect items for 10 mins. or longer
- Have everyone come back together and each group report and display their items.
- As a whole create a pattern on the ground using all the items collected.
- Use the Reflection and Processing questions to bring closure to this activity.
- At the end put all the items back
PROCESSING & REFLECTION

- What are patterns do you see everyday? For example the sun rises and sets each day and your fingernails have a color pattern to them.
- How might the pattern you created be expanded?
- Why should we pay attention to patterns in nature?
- What patterns do you see in the Willows?
SEASON VISION

Lesson Plan for Grades 3-4, Ecology
Length of Activity: 1 hour

OVERVIEW & PURPOSE

One of the greatest patterns is the turning of the seasons which drastically changes the landscape in the Willows and the way we and all other living things conduct our lives. Break the class into small groups and draw pictures of the Willows in different seasons, and how they might be affected by climate change. Think about how life forms that call the Willows home are affected by the seasons.

OBJECTIVES

1. Have students infer what an area would look like in different seasons, how life forms are affected by the seasons, and how climate change might affect the habitat
2. Have them think about how much the seasons affect how they eat, what they do for sports and fun, and what they do at home and school
3. Have them feel more aware of the role of seasons in shaping our lives and the effects of climate change

MATERIALS NEEDED

1. Paper
2. Clipboards
3. Utensils

ACTIVITY

- Break into groups
- Draw 5 pictures
  - What the willows will look like in Fall, Spring, Summer, Winter
  - With climate change Northern Vermont can receive more rain. Draw a picture of how you think the Willows might will look if it gets more rain each year
Come back together and have each group share pictures and thoughts

PROCESSING & REFLECTION

- How might the Willows or surrounding areas change with climate change and more precipitation?
- How does the turning of the seasons affect a squirrel, chickadee, lichen on a tree, ladybug, and/or a human?
- What can be done to protect habitats like the Willows and reverse climate change?
WILDLIFE OBSERVATION

Lesson Plan for Grades 3-4, Life Science, Ecology
Length of Activity: 1 Hour

OVERVIEW & PURPOSE

You are brave explorers of a magical land that has never been explored! It's your job to identify and document as many species as you can and report back your findings to the whole class. Then, using one species of your choosing, create a Life Cycle diagram tracking how your species fits into the web of life in the Willows.

OBJECTIVES

- Have students use their senses to identify as many forms of life as they can
- Have them think about how one species affects and is affected by others in a Cycle of Life
- Have them feel more connected to the web of life and their place in it.

MATERIALS NEEDED

- Paper
- Clipboards
- Drawing utensils

ACTIVITY

- Split the class into equal sized groups, each with a clipboard, paper, and pencil
- For 10 mins. have each group write down as many plants, fungi, insects, birds and other animals they observe.
- Come back as a full group, having each group report back observations
- Use handout to show and explain a Life Cycle for a Willow tree
- For 5-10 min. have each group draw a Life Cycle for one species of their choosing
- Come back as a full group and ask each group to share their drawings and what they learned from this activity.
PROCESSING & REFLECTION

- What were the most common species found?
- Would they be as common in a different season?
- Choose a Life Cycle (plant or animal) and think about the role you may play in its development?
Life Cycle for a Willow Tree

Roots absorb nutrients from the soil & the plants grow bigger & healthier.

Fall leaves & logs

Animals consume leaves and twigs

Worm castings & decomposed animal & plant material is made available for plants to eat.

Worms, mill logs, mushrooms & other organisms break down manure & plant material.

Animal manure/remainder & plant material goes into the soil.
WORM THROUGH THE WILLOWS

Lesson Plan for Grades 3-4, Ecology
Length of Activity: 1 hour

OVERVIEW & PURPOSE

Worms and many critters call the Willows their home but they might understand it much differently than we do. Gather in a line (worm) with one person designated as a guide. Everyone but the guide will be blindfolded and given a cup of water (optional), filled to the brim. No one is to talk. The goal is for the group to get from one side of the Willows to the other working effectively as a group, and without spilling the water. Use all your senses but sight to guide and observe the land.

OBJECTIVES

- Have students use their senses other than sight and to get through the Willows and observe the smells, feels, etc. of the land
- Have them think about how other life forms, like worms, travel and experience the Willows
- Have them feel more connected to one another, more aware of the power of their senses, and more empathetic to other forms of life like worms

MATERIALS NEEDED

- Blindfolds
- Cups
- Water

ACTIVITY

- All but one student (the leader) are blindfolded and (optional) given a cup of water
- The leader guides the group from one end of the Willows to another without talking
• Switch leaders on the return trip, or as often as you see fit.
• Return to the starting point and gather as a large group and use the Reflection questions to process the activity.

PROCESSING & REFLECTION
• What did you do well?
• What could you have done better?
• What could the group have done better (without naming names)?
• What are some observations you made without the use of sight?
• How might a worm or other non-human organism observe the land?
• How did this activity help you to better understand worms?
• How did this activity help us to be a better group?
THE LABYRINTH
History and Uses of Labyrinths

For grades 3-4
Length of Activity: 30 minutes

OVERVIEW & PURPOSE

The purpose of this lesson is to give an overview of historical context of labyrinths and their uses as well as some context on the Greenspace's labyrinth.

OBJECTIVES

- For students to understand the purpose and background of labyrinths and to use their senses to engage with the labyrinth

MATERIALS NEEDED

Labyrinth

ACTIVITY

1. **Activity:** Exploring the labyrinth with senses

   **Design:** Participants should work with partners or small groups and scatter around the labyrinth

   - Ask the following questions and allow each group to talk for a moment or two to discuss the following questions:
     - What does the labyrinth feel like? What kinds of textures are there?
     - What does it look like?
     - What shapes do you see?
     - Can you pick out any designs?
     - What colors do you see?
     - Does the path look easy or difficult?
     - What do you think people use labyrinths?

   - Come back together to talk about what the students found
     - What did you see that you liked?
     - What did you not like?
     - What did you notice when you touched the labyrinth?
2. **Activity:** Discussion: What, why, and what for?
   **Length:** 10-15 minutes  
   **Design:** Circle

   - The following are questions that can be used to give a guided talk/discussion about labyrinths.

   - **What is a labyrinth?**
     A labyrinth is a complex often circular system that leads from a beginning point to the center. They often combine the idea of a maze with the idea of a meander and blend them together to create a walking path full of purpose. They are made of all kinds of different materials and contrasted 2 and 3 dimensionally.

   Where did the idea come from? Where are they in the world?

   Nobody's exactly sure where they came from or when they started. Labyrinth patterns are universal and found in archaic petroglyphs, Amerindian basket-weaving designs, paintings, on ancient coins and they are a theme throughout the world. The oldest labyrinth was a two-story stone building in Europe.

   What are they used for?

   Labyrinth's are often used for meditative and intentional walking, self reflection, and clearing the mind.

---

**PROCESSING & REFLECTION**

What surprised you about labyrinths?

What do you like about labyrinths?

How do you see yourself using the labyrinth?
Blindfold Partner Walk

Lesson Plan for Grade 3-4
Length of Activity: 30 minutes

OVERVIEW & PURPOSE

This teambuilding activity is designed to help students find effective ways to talk to one another. The purpose of this lesson is to use touch and sound to guide a partner through the labyrinth.

OBJECTIVES

- For students to use touch and sound to guide another student through the labyrinth.

MATERIALS NEEDED

1. Blindfolds

ACTIVITY

1. Each student needs a partner and one of them will be blindfolded
2. Students can choose whether they will use sound or touch to guide their blind partner through the labyrinth. If they chose sound, they may only communicate with their voice. If they chose touch, than they may only guide with light touching.
3. Once they have gone through, the partners should switch so that each student has a chance to guide and a chance to walk.
4. Pairs should stagger their start times to minimize collisions and confusion.

PROCESSING & REFLECTION

What was it like to be blindfolded?

Did you use touch or sound? What was it like to guide your partner?

What was it like to be guided?

What worked well?
What could you have done better?

How can we use what we learned today in the classroom?

http://activeafterschool.ca/activities/walking-floorground-labyrinth
Walking the Labyrinth

*Lesson Plan for Grades 3-4*
*Length of Activity: 45 minutes*

**OVERVIEW & PURPOSE**

To use the labyrinth to move the body and walk with purpose. This activity will use movement and music to intentionally walk through the labyrinth. Labyrinths are often used for walking in a reflective or spiritual sense.

**OBJECTIVES**

- Students will use their mind and body to think about the topics of the walk.
- They will be reflective and thoughtful on a subject of the instructor’s choice.

**MATERIALS NEEDED**

- Music playing device
- Music
- Paper and writing utensils if you would like to do written reflection

**ACTIVITY**

1. Decide on what types of walking the group will participate in. There are some suggestions below to get your mind thinking. This could be adapted and used as a reflective tool for classes or events going on in school or life. Any type of intentional walking is great as long as it has thought behind it.
   a. Earth walk- Think of ways to better the earth such as recycling, not littering, saving water and the students role in these processes.
   b. Peace walk- Think about how to be peaceful and bring peace to the students families, friends, and community.
   c. Gratitude walk- Think about words and phrases that express things the students are grateful for.
   d. Reflective walk- A walk to reflect on themselves, family, class, seasons, a school event, or
another relevant theme.
e. Getting to know yourself walk. Thinking about life in regards to themselves. What makes them happy? Upset? Angry? Think of ways to change or improve the circumstances?

2. As a group agree on guidelines for walking in the labyrinth. Here are some suggestions (feel free to add or delete as the group progresses):
   a. Allow a few seconds in between each person entering the labyrinth
   b. You can leave the labyrinth at any time
   c. Be respectful of each other’s space and thought process

3. Decide on music (Optional).
   a. Dependent on the type of walking that is being done, music may or may not be appropriate.
   b. Avoid music with lyrics as they can be distracting
   c. Music can be used to speed up or slow down the walking

4. Decide on how participants will move through the labyrinth.
   a. Walk
   b. Fast walk
   c. Skip
   d. Jump
   e. Dance

5. Try it! Choose a walking method give it a try. Speed it up, slow it down, do whatever works for you and the group. Try different methods and different movements.

PROCESSING & REFLECTION

This can be a group discussion or a personal written reflection. The reflection can be a drawing, painting, words, really whatever you want it to be.

1. How did it feel to walk the labyrinth?
2. What was your favorite way to move through the labyrinth?
3. What did you think about? Or not think about? Come back to the types of walking you were doing and the intention behind it.
4. What did you learn about our group?
5. Anything we can do differently next time?
FIELD AND STREAM
Understanding Predator Prey Relationships

Lesson Plan for Grades 3-4, Ecology
Length of Activity: one hour

OVERVIEW & PURPOSE
To explore and learn about predator prey relationships

OBJECTIVES
To be inspired by the natural world and all its creatures.

MATERIALS NEEDED
Predator prey

1. Pictures of local animals (herbivores, carnivores omnivores) enough for every student to have one
2. Two blindfolds. Paper bags or student hats work well.
3. Two maracas or other noise makers.
4. Tracking guide

ACTIVITY
Predator Prey

1. **Suggested area of play:** The field
2. **Pass out one animal picture to each student and ask the students to think about the food their animal eats.**
3. **Ask the class to divide themselves into groups based on their animals. One group should be animals who eat only plants. They are called herbivores. The second group will include all the animals that eat other animals. These are called carnivores. Other animals called omnivores eat plants as well as**
other animals. Review the animals in each group and make necessary corrections.

4. Review the type of food that herbivores might eat. Explain that herbivores are themselves often eaten by carnivores and omnivores. Explain that herbivores eaten by carnivores and omnivores are called prey, and the carnivores and omnivores that do the hunting are called predators.

5. Ask the carnivores and the omnivores if they see someone in the herbivore group they might like to eat for lunch. Review their choices.

6. After some predator prey relationships are established collect the animal pictures. Have the students form a circle. Ask them that the boundary of the circle is the boundary of the forest where predators and their prey live. Each student in the circle is a tree have them take root and stand quietly.

7. Ask the students to name a predator that lives in your area. Choose a student to be the predator and come to the center of the circle. Ask the class what prey animals live in the area. Select another student to come into the center of the circle to represent the prey.

8. Explain to the students that the predator will be hunting its prey inside the forest circle. What senses might the predator use to catch its prey how might the prey keep from being caught?

9. Explain that this predator will be hunting its prey on a very dark night. To simulate darkness the predator and prey each wear a blindfold - stressing the importance of their sense of hearing. Give the predator and the prey a maraca or shaker. Make sure everyone is quiet (after all trees can’t talk).

10. Blindfold the two students and move them to different places in the circle when you say “go” the predator should find the prey by following the sound of the maraca. When the prey is touched the game is over. To make the activity more or less difficult change the size of the circle.

11. Repeat the activity to give other students the option to be a predator and prey.

12. Break into small groups and ask each group to explore the Greenspace (establish boundaries) and to think about what omnivores, herbivores and carnivores may live here. Ask them to explore the Greenspace to identify (or create) places where these animals might live.

13. You can conclude this activity by taking a tour of the critter homes and asking students to present their findings.

**PROCESSING & REFLECTION**

What was it be like to be a predator?

What was it like to be the prey?

What did you learn about the predator/prey relationship?

How do the seasons impact the predator/prey relationship?

What was your favorite part of the this activity?
Seed Dispersal

Lesson Plan for Grades 3-4, Ecology
Length of Activity: One hour

OVERVIEW & PURPOSE

To inspire a sense of wonder towards the natural world, and to learn about how seeds are dispersed.

OBJECTIVES

To inspire a sense of wonder towards the natural world and learn about the dispersal and life cycles of seeds. To think about the intricate patterns nature has to offer.

MATERIALS NEEDED

1. A few different kinds of seeds with different dispersal techniques you can collect them ahead of time. There are a variety plants and trees within the proximity of the green space (Burdock, cedar, milkweed, dandelion, silver maple, berries, pin oak acorns). Burdock, cedar and milkweed are recommended because they all have different seed dispersal adaptations.
2. Egg cartons, half a carton for each pair of students.
3. Personal knowledge of seed dispersal techniques.

ACTIVITY

Introduction - Get them excited about seeds!

Start out by asking the group what they know about seeds? Ask what role do seeds play in the life cycle of plants and how are these seeds dispersed? Ask them to look around and see if they can find any seed producing plants? Can they name them? Ask students seeds from this area?

MilkWeed Race

Objective: to see how far a seed can travel with a little help.

Give each student a milkweed seed and, without using their hands, ask them to see how far they can make it travel. The most effective is blowing, but let the students come up with their own ideas - the most effective is
blowing.

Whose seed travelled the furthest? Why?

What are some other ways that seeds can be dispersed?

What have they learned about seed dispersal?

Why is it important that we think about seed dispersal?

Can they think of other methods of seed dispersal (attach to animals, animal scat, etc.)?

**Seed Scavenger Hunt**

1. Pair them up or create small groups
2. Give them half an egg carton and instruct them to collect seeds the (cedar swamp is full of cedar seeds, in the field there are also seeds to collect)
3. The students can sort their seeds using the egg cartons.
4. Assemble as a large group and ask each small group to introduce their seeds to the larger group. Allow each group to share their findings (Describe habitat, plant or tree, etc) and any other discoveries. Allow time for the students to compare and contrast their seeds.
5. Ask them to consider how their seeds are dispersed and how this might affect growing patterns.
6. If you would like this activity to continue in the classrooms ask the students to collect a plant that they harvested seed from and use a plant identification book to identify their specimen. This will allow them to further explore and develop a relationship with natural community found at the Greenspace. If time allows this activity can take place at the Greenspace.

**PROCESSING AND REFLECTION**

What did the students learn about seed dispersal?

Why is it important that we understand seed dispersal?

How can we be better friends to the environment?

What do you like about being outdoors?
Streams

Lesson Plan for Grades 3-4
Length of Activity: One hour

OVERVIEW & PURPOSE

Spend time observing different stream habitats. To become inspired and curious about the natural world.

OBJECTIVES

1. Students will spend time observing the natural world.

MATERIALS NEEDED

1. Large and small sheets of paper, colored pencils/markers/crayons, clip boards.

ACTIVITY

Dream a stream

This activity would be good to do before you enter the forest - perhaps on the stage platform.

Sitting in a circle ask the students to imagine they are sitting near a stream. What does it look like? Sound like? Ask each child to think of two or three words to describe their imagined stream and share these with the group. Sort the students into small groups based on the adjectives they used to describe their imagined stream.

In their small groups ask the students to draw plants, animals, rocks, etc they might find in their imaginary streams. Share with the larger group.

Floating Race

Gather back together as a large group and walk to the stream located in the nearby forest. As you walk down to the stream ask the students to gather objects that they think will float. When you arrive at the bridge ask the students to show what they collected
and guess which objects will be the fastest and slowest (hypothesize). Ask the students to put their objects in the stream and observe the rate of travel. After the race discuss the movement of the different objects based weight, size, shape, etc.

**Study a stream**

In small groups student students can explore the stream and identify creatures and plants that are living in and around the stream. Afterwards bring the groups together to share what they observed and compare results.

What did you notice about your section of the stream? The teacher records the different responses on a large piece of paper and note differences and similarities. Why do you think these differences and similarities exist?

**PROCESSING AND REFLECTION**

What was your favorite part of this session?

What did you learn about streams?

Why are streams important?

What can we do to keep streams healthy?
Water Is Life

Lesson Plan for Grades 3-4, Ecology
Length of Activity: 1 hour

OVERVIEW & PURPOSE

This lesson will provide further knowledge and practical experience observing water in its natural state. This lesson would be great in pair with class lessons on water cycles.

OBJECTIVES

1. To gain a deeper understanding of water and its connection to life on this planet.

MATERIALS NEEDED

- Large sheets of paper
- Colored pencils, markers, or crayons

ACTIVITY

Water Water Everywhere Mural

Have the students explore the area in the forest and examine where water is stored. Have the students bring back 5 objects (leaves, plants, flowers, moss, etc) that store water that live near or around water. Challenge the student to find unique objects that store water.

Talk about how the objects found have a relationship to water?

Together create a mural to represent the relationship water has to life on this planet be sure to include some of the objects found by the students. Ask why the students why they selected these objects and how they depend on water for survival.

PROCESSING & REFLECTION

Sharing circle
Have the students share their perspectives on water. Have each student complete the following sentence.

One thing I like about water is ____________________

How is water connected to life on earth?

What can we do to ensure that all living creatures have access to clean water?