

# Lesson 2: Connecting with Natural/Open Spaces

Grade 7 Science

**LESSON DESCRIPTION:** This lesson is a culminating activity for the interdisciplinary study of nature deficit disorder. Students connect with a natural or open space by spending time there alone, with an adult, and with a child during the TV turnoff week.

**FOCUS QUESTIONS:** What are ways to make observations in an open space? What can one learn through close observation of an open space?

**OBJECTIVES:** Students will:

- develop a plan for positive human impact on a natural or open space.
- practice several ways to connect with a natural or open space.
- help a younger child connect with nature.

## COMMON CORE STATE STANDARDS

- **READING STANDARDS FOR LITERACY IN SCIENCE & TECHNICAL SUBJECTS 6–12**
  - \* **CCSS.6-8.RH.2** Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
- **WRITING STANDARDS FOR LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS 6–12**
  - \* **CCSS.6-8.WHST.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
  - \* **CCSS.6-8.WHST.10** Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

**LENGTH OF LESSON:** Activity 1 -one class period, plus 5 - 10 minutes per day during Screen-Free Challenge to share and discuss.

## MATERIALS NEEDED:

- *Last Child in the Woods: Saving Our Children from nature Deficit Disorder*, by Richard Louv, 2005, Algonquin Books, Chapel Hill, North Carolina.
- sheets of blank paper and colored pencils
- large colored construction paper and marker for My Natural Space Journal
- stiff cardboard with clip or clipboard or notebooks – students will need a way to write when they visit their natural/open space
- Have handouts available – each of the 9 journal prompts and Camera hands handouts

## VOCABULARY:

discovery play gardens  
 adventure playgrounds

**INVOLVING FAMILIES/COMMUNITIES:** Students will choose an adult and a child with whom they will spend time in a natural/open space.

## PROCEDURES

Teacher’s Note: By now, students are familiar with the book *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*, by Richard Louv. They have learned about the problem, its causes, consequences, and solutions. In this lesson, students will learn a little bit about designing natural spaces and helping children connect with nature. To prepare yourself, you may want to know what the students know by reading through the passages used in the first lessons in English and Social Studies.

There are different ways to prepare for teaching about nature deficit disorder. This lesson is to help students think about and visualize solutions to the effects of urbanization and negative human impacts on the environment. The best way to prepare is to read the book. Another way is to find the sections in the book that are summarized below and read that section of the book. Before teaching, read the selections listed in Activity 1 and mark them in the book.

### Activity 1: Students will collect ideas for positive human impact on the environment.

Teacher’s Note: Students can be shy about sketching. Model sketching getting across that you don’t have to be an artist to get your ideas on paper.

1. Hold up the book and say, **Tell me about this book.** Students will know enough from English class to share the problem of nature deficit disorder, its causes, consequences, and solutions.
2. Hand out 2 – 3 blank sheets of paper to each student and 2 – 3 colored pencils, crayons or markers. **Tell Students:** During the Screen-Free Challenge week, you are going to spend time getting closer to nature by spending time in a natural area or an open space that could be a natural area. The first thing you will do is think about how a natural area could be created or designed to be a great play space for people. As I read the selections from the book, jot down words that will help you remember ideas in the section. Then, you will have time to make some sketches of different designs for natural areas.

Read the following passages about solutions for nature deficit disorder aloud.

#### Different kinds of playgrounds - page 256 - 257

We are now seeing small but significant examples of innovation and commitment to child-friendly green design. The city of Austin, Texas, purchased a farm renamed it Pioneer Farms, and turned it into a living history museum. Kids can go out there, learn about agriculture, and pet the animals....In Kansas City, Missouri,...a group offers their help to neighborhoods or businesses interested in designing outdoor children’s play spaces – discovery play gardens. The group says, “Discovery play gardens are loose in design because children value unmanicured places and the adventure and mystery of hiding places and wild, spacious, uneven areas broken by clusters of plants.

The concept of so-called adventure playgrounds originated in Europe after World War II when a playground designer studied children playing in “normal” asphalt and cement

playgrounds- and found they preferred playing in the dirt and lumber from post-war rubble....A few adventure playgrounds have been built in this country....Huntington Beach (California) Adventure Playground is a previously empty lot where kids created their own play environment in the past. Today, on the lot, children seven and up can still play in the mud and build forts. The playground includes a small pond with rafts. A rope bridge leads over the pond to the “zip line,” a tire swing that runs down a cable.

Allow students ten minutes to sketch things from the selection you just read.

Vision for a whole city - pages 261 – 262

The author, Richard Louv, writes:

I can imagine San Diego as a potential prototype (for a green redesigned city). My city already markets itself as a nature destination for tourists...Why not market all of San Diego as the nation’s first zoopolis? Pat Flanagan, former director of Informal Education at the San Diego Natural History Museum, says: “Where we could really design for urban wildlife would be to increase the number of pollinating birds and insects, including butterflies. By planting so many non-native plants and scraping the hills, we’ve been depleting the native nectar plants.” Imagine the San Diego museum and zoo selling packets of indigenous seeds of pollinating plants...In the new zoopolis, our schools would use surrounding natural environments as classrooms. In a city with so much sunlight, with such fair weather, natural playgrounds should be the rule.

Allow students 5-10 minutes to sketch these ideas.

Teacher’s Note: Consider reading a passage twice so that students can listen again, or pre-read a passage and underline key words. As you read, write these words on the board if you think your students need that scaffolding.

3. Review some of the key ideas and have students share their sketches.
4. Have students: fold a 11 x 18 piece of construction paper in half and write their name on the front in the lower right corner, then make a title: My Natural Space Journal. During the week, students decorate the folder with pictures and words drawn or cut from magazines. Date the sketches of playground ideas and put them in the folder.

## **Activity 2: Students learn about a natural or open space through observation during the Screen-Free Challenge week and reflect on the experience.**

1. Ask students to talk with an adult and choose a natural space or an open space where they would like to spend some time during the TV Turnoff week. If possible, they should find a child with whom they can spend some time in that space. They will be learning about the space by making different kinds of observations. A nearby place is best if transportation is an issue, as they will go there five times. The next day, have each student tell you the natural space or open space they have chosen.

2. Natural Space Journal pages are provided with a variety of prompts. Discuss these with the students. Require the first one, about reimagining the natural space. Also require that one of their visits there be with an adult or a young child. There are some blank pages for other ideas. Students should do this 5 of the 7 days of Screen-Free Challenge.
3. During the Screen-Free Challenge, begin each class period with a five minute discussion of their connection with nature the night before. Ask what they did, what they learned, and with whom they shared their experience. Sharing observations and stories will encourage students to do this.
4. At the end of the Screen-Free Challenge, have students organize their folders. The folder should include their design ideas, their design for the natural area, and any writing or drawing they did during the week.
5. **Closure - Reflection:** For the last page in their journal, hand out the My Natural Space is... journal page. Have students summarize their observations, their thoughts about positive and negative human impacts, and nature deficit disorder. Ask students to read their writings aloud.

# My Natural Space Journal

Date:

Go sit in the space and think of changes in the natural area or open space that will improve it for people, animals, and plants. Draw your ideas, labeling each part and what people/animals/plants would do there. Think about people of different ages using the space.

# My Natural Space Journal

Date:

Take an adult to your space and show your plan. Brainstorm more ideas, and draw them.

# My Natural Space Journal

Date:

Sit for ½ hour and write as much as you possibly can in each column. Sometimes, it helps to close your eyes to hear, smell, and feel things. Or, if you are with a child, whisper about what you observe and write things down when you get home.

Sights	Sounds	Smells	Touches

# My Natural Space Journal

Date:

With a child, take camera hand pictures of something big, something small, something green, something living, something dead, or whatever.

# My Natural Space Journal

Date:

Make a treasure hunt for a child based on your observations of your natural or open space. Include things like something round, something smooth, tiniest sound, largest sound, etc. List things that you and the child found.

# My Natural Space Journal

Date:

Look for a plant with an interesting design. Draw the plant or a part of the plant in detail. At the bottom of your drawing, write three questions about the plant. Try to find an answer for the questions.

# My Natural Space Journal

Date:

Go to your space and find a comfortable spot to sit. Wait for nature to go back to what it was doing. Be still for 15 minutes. You will be amazed! Then, write or draw pictures about what you observed.

# My Natural Space Journal

Date:

Find an animal home or habitat. Draw a picture of it. Or, with a child, try to find as many animal homes as you can.

# My Natural Space Journal

Date:

Record any observations that interest you.

Date:

My Natural Space Is...