

Lesson 5: Decisions, Decisions

NUTSHELL

In this classroom lesson, students learn about forest management by making a plan for a schoolyard. Using a card game similar to Old Maid, students learn about some of the people involved in managing forests. As a conclusion, they act out the roles of people involved in forest management and sing a song about what forests can be managed for.

ENDURING UNDERSTANDINGS

- Forest management is the use of techniques (e.g., planting, harvesting) to promote, conserve, or alter forests to meet desired outcomes.
- Organizations, communities, and individuals play a part in forest management efforts by volunteering, raising and allocating funds, voting, participating in the planning process, and making consumer choices.
- Forest research and management involves professionals with backgrounds in many fields, including forestry, biology, wildlife, soils, water, land management, urban planning, engineering, sociology, geography, technology, environmental education, and chemistry.

ESSENTIAL QUESTION

- What decisions must be made to take care of forests and who makes them?

OBJECTIVES

Upon completion of this lesson, students will be able to:

- Define forest management.
- Identify some of the people who help manage forests.

SUBJECT AREAS

Arts, Social Studies

LESSON/ACTIVITY TIME

Total Lesson Time: 65 minutes

- Introduction.....10 minutes
- Activity 130 minutes
- Activity 215 minutes
- Conclusion.....10 minutes

STANDARDS CONNECTIONS

Standards for this lesson can be viewed online at the LEAF website (www.leafprogram.org).

FIELD ENHANCEMENT CONNECTIONS

This lesson ties closely with *Field Enhancement 1, I Can Be a Forester*.

BACKGROUND INFORMATION

Forest management is defined as the use of techniques (e.g., planting, harvesting) to promote, conserve, or alter forests to meet desired outcomes. What does that really mean? In general, managing anything requires us to identify goals. We manage our money by deciding what we would like to do with it later. We manage retail stores by deciding how much profit we need to make. The first step in managing a **forest** is the same. What do we want from this forest? That question may be answered with many different responses. We may want wildlife habitat, a recreation area, lumber, an educational area, a place to preserve species — or we may want to improve the health of the forest.

VOCABULARY TERMS

Ecosystem: An area that contains living and nonliving things existing together and interacting. Ecosystems come in all sizes (e.g., forest, meadow, log).

Forest: An ecosystem that is characterized by a dominance of tree cover and contains a variety of other organisms (e.g., other plants and animals).

Forest Management: Doing things (e.g., planting, harvesting) to a forest to meet human goals.



Urban Forest: The trees and other living things in a city, town, or neighborhood.

To achieve these goals, we must decide what we need to do to get what we want. If we want wildlife habitat, we can plant things that will attract a particular animal in the forest. We can make trails for hiking or snowmobiling. We can put up signs to identify plants or to help people locate where they are. We can cut certain trees to encourage others to grow in a way that will make them valuable for lumber. Many times, more than one of these goals can be accomplished in the same forest.


Usually when people are asked who manages forests, they think of foresters. Although foresters certainly do play a major role in the management of forests in Wisconsin, there are more people involved. Different people and organizations own forests for different reasons. Individuals who own forests are responsible for the management of their forest. When the state or federal government owns forests, a variety of people are involved in management decisions. These include the people who work there, elected officials, and people who use those forests. Even the choices people make when they buy forest products or choose forest recreational activities help determine how forests are managed.

MATERIALS LIST


For Each Student

- Copy of Student Page  **1, How Should I Manage? Map**
- Copy of Student Page  **2, How Should I Manage? Parts**
- Crayons/markers/colored pencils
- Scissors
- Glue

For the Class

- Four copies of Student Page  **3, Who's Who? Script**, copied and cut apart (see page 74 for instructions)

For Every 3 to 4 Students

- One set of Teacher Pages  **1A-C, Forest Manager Game Cards**

PROCEDURE

Introduction - What's Management?


1. Explain to students that you are going to describe a pretend situation and they will have to figure out how to solve the problem.
2. Tell students that in this pretend situation, the principal (or whoever would make this decision in your school) has decided that the bookshelves in the library need to be painted. Before that can happen, someone needs to take all of the books off the shelves and move them to where they are out of the way. When the painting is done, the books will have to be put back. Your class has been chosen to be responsible for moving the books.
3. As a group, discuss some of the things that your class will need to do. Ask who will be in charge of what. Plan where the books would go. Plan when it should be done. Make a list of what tools could be used to help (e.g., bags, boxes, wagons).

4. Tell the students that they have just decided how to manage time and resources to reach a goal. There are a lot of places where people manage things. The teacher manages a classroom; the principal manages the school; there are people who manage grocery stores. All managers make decisions that will help them reach a goal. Even forests have people who manage them. People who manage forests decide what they want to get from the forest and then decide how they can make that happen.


Activity 1 - Manage a Schoolyard

1. Tell students that they are going to get to practice managing a forest. Define what a forest is. (*Forests are places where living and nonliving things interact. Trees are the plants that are most noticeable in a forest, but there are also other plants and animals.*) The towns we live in have all the parts needed to make them forests. The trees in our yards, parks, and along streets all help make up this forest. We call it an urban forest. Today they will get to decide how to manage a part of an urban forest.

NOTE: The definition of a forest and the concept of an urban forest are introduced in *Lesson 2, What Makes a Forest?* of this unit.

2. Hand out Student Page , **How Should I Manage? Map**, to each student. Tell the students that this is a picture of a schoolyard that needs to be managed. Point out the school, road, sidewalks, and other features that are on the drawing.
3. Tell the students that to manage this part of the urban forest, they have to know what the goals are for the schoolyard. Tell them that the goals are to: (a) provide a place for students to enjoy being outside and (b) provide a place for students to study

trees and forests. They will need to decide what sorts of things should be done in that schoolyard to meet those goals. Write the goals on the board for students to refer to later.

4. Hand out Student Page , **How Should I Manage? Parts**. Explain that this sheet has the things they can put on their schoolyard map to meet the goals. Not all of the things on the *Parts* page will fit, so they will have to make decisions on what will be the best pieces to use.
5. Have students create their maps by cutting out and coloring the pictures they are going to use and gluing the parts they chose to the map.
6. When they are finished, ask students to share some of their ideas with the class. What things did most of the class think were really important? (*A big playground, lots of trees, a soccer field?*) What things did students feel they could leave out? After the discussion, post the maps on the bulletin board to display the ideas.

EXTENSION: Draw a map of your own schoolyard for students to manage. Have students set the goals they want for their schoolyard

**“A nation that destroys its
soils destroys itself.
Forests are the lungs of our land,
purifying the air and giving
fresh strength to our people.”**

★ Franklin D. Roosevelt ★

Activity 2 - Forest Managers

- Tell students that it takes more than just one person to decide how a forest should be managed. There are foresters who study the forest and make the plans, but many others play a role. Those who own the land have a say as to what happens on their property. People who live in towns that have forests have a right to say what they think should happen. People who study animals, teachers who teach about forests, and kids who learn about forests all have some part in deciding what will happen and how it will happen.
- Divide the class into groups of three or four. Hand out Teacher Pages 🍏 **1A-C, Forest Manager Game Cards**. These cards show different people who are involved in managing forests. Explain how each of the people on the cards plays a role in managing forests. Have students play as they would for Old Maid.
 - Deal all the cards in one set of *Forest Manager Game Cards* to students in each group of three or four.
 - Each student will try to create pairs using the cards in their hands.
 - They should match all of the cards that they have been dealt first.
 - When everyone has taken all the pairs they can from their own hand and laid them faceup in front of them, they will go around the circle and draw a card from their neighbor's hand.
 - When that card has been added to their own, they should match any pairs they can.
 - Play continues until all of the pairs have been made and someone is left with the Forester card.
 - Unlike in the game Old Maid, it is a good thing to have the Forester card at the end in this game!

OPTION: As groups finish the game, have them go to the board or chart paper, and list one person from their cards and what that person might want from a forest. This can help keep groups that finish early active and thinking about what they've learned.

Conclusion - Who's Who?

- Discuss some of the things people might want to get from forests. (*Trees, animals, fun, lumber/wood, learning, etc.*) Write the ideas the class comes up with on the board. (**NOTE:** You will be using them in a song later.) Explain that there are things that foresters can do to help meet these goals. Tell students that they are going to hear a short skit that explains some of the things that we can do to manage forests.
- Ask for volunteers or assign students to read the parts of the forester, neighbor, student, and furniture maker in the skit.
- Hand out Student Page 🍏 **3, Who's Who? Script**, to the volunteers and read the skit aloud.
- End the lesson by singing "Young MacForester" to the tune of "Old McDonald." The words to the song are listed on the next page. From the list of things you wrote on the board, insert a word in the space indicated in the song. (*Trees, animals, fun, lumber/wood, learning, etc.*) Allow the students to fill in the remaining spaces with words and/or a motion that they feel reflects the first word (see page 72).

Career Profile

Kim Sebastian, Urban Forester

This is Kim Sebastian. Kim is an urban forester for the Wisconsin Department of Natural Resources. An urban forester is a person who helps to take care of trees in towns and cities. Kim works in the southeastern part of Wisconsin, where Milwaukee is. There are three main things Kim does for her job. She helps communities decide how to take care of their trees, she helps communities find money to take care of their trees, and she teaches people about the trees in their cities and towns. Kim spends part of her workday in the office doing paperwork and part of her day meeting with people and talking about the trees in their urban forest.

Kim went to college and studied urban forestry. She still goes to meetings to learn about the latest things that are happening. Kim had lots of jobs that gave her good experience to get the job she has now. She worked as a camp counselor, helped do research about trees, and worked for companies that took care of trees. Kim is a member of groups that help urban foresters and others learn even more about urban forestry.

Kim says that the best part of her job is working outside. She also likes meeting interesting people and knowing that she can make a difference in the future of urban forests. One of the other things Kim says she likes about her job is “I get to wear jeans to work (and not have to be all dressed up).”

If you would like a job like Kim’s, you should study science, math, writing, and computers. You can also join student clubs that are interesting to you.

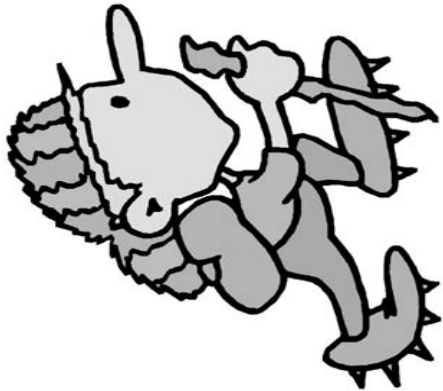


Kim teaches people in cities and towns how to care for trees by doing things like removing unsafe branches.

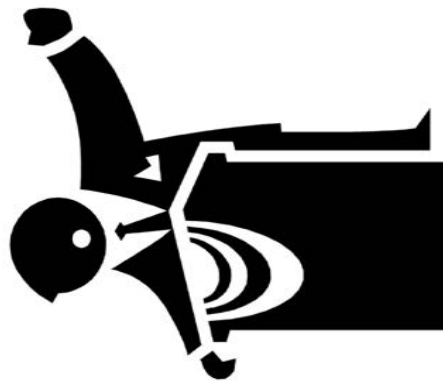
FOREST MANAGER GAME CARDS

Instructions:

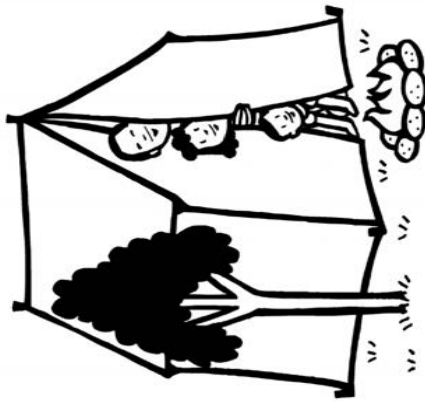
- Make one set of cards for each group of three to four students.
- You will need **two copies of each page** per set of cards (so there are pairs). **Note: Each group will need only one Forester card.**
- Copy the cards onto cardstock or mount them on construction paper for durability and to prevent students from seeing through the back of each card. Different colored sets will help keep them organized.



Hiker



Politician



Campers



Teacher



Student



Forester

FOREST MANAGER GAME CARDS



Family



Landowner



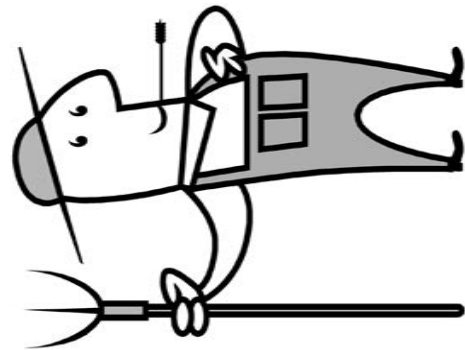
Neighbor



Fisher

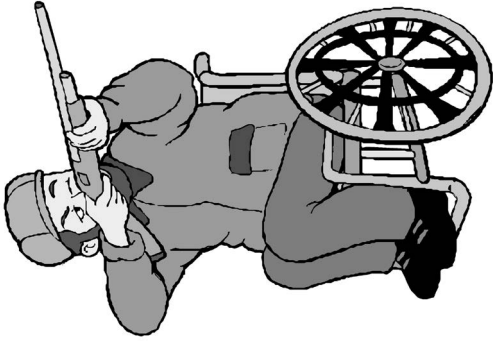


Firefighter



Farmer

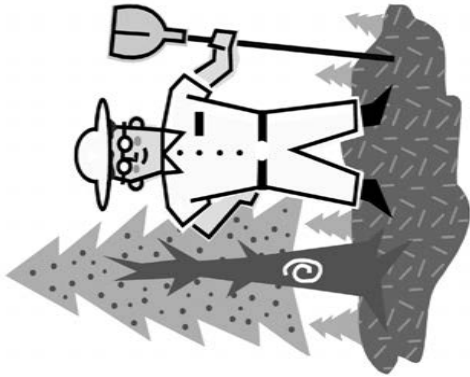
FOREST MANAGER GAME CARDS



Hunter



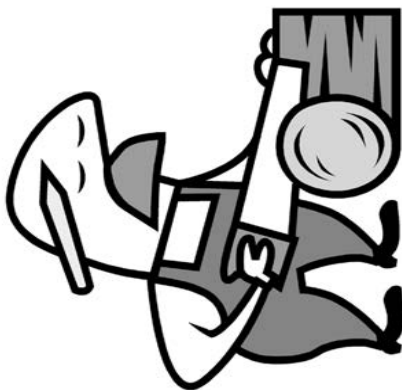
Scientist



Park Ranger



Scout

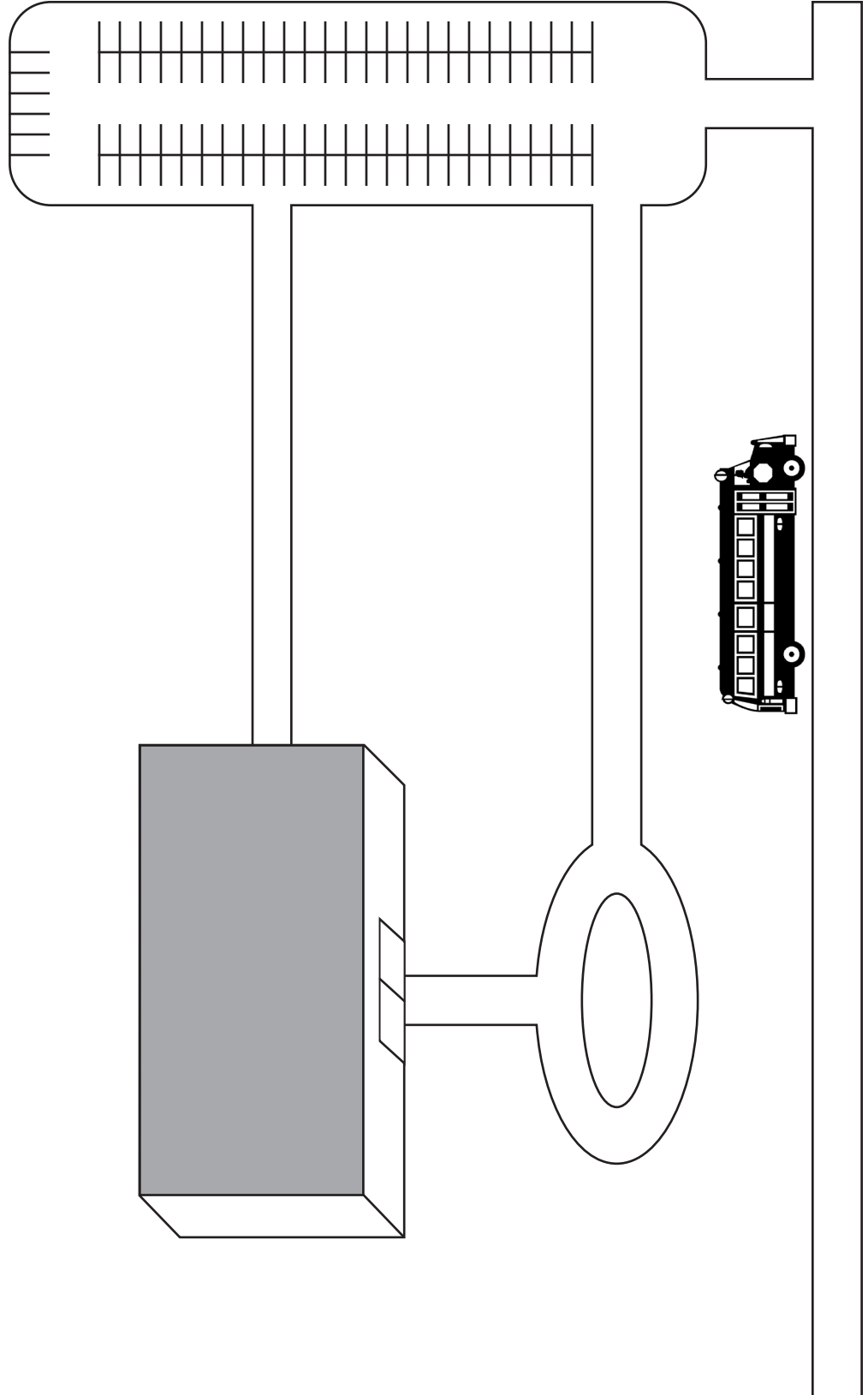


Carpenter

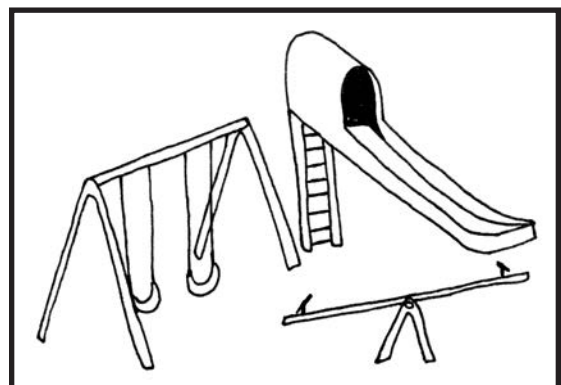
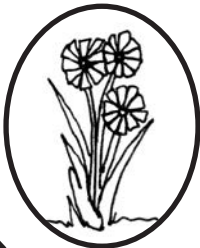
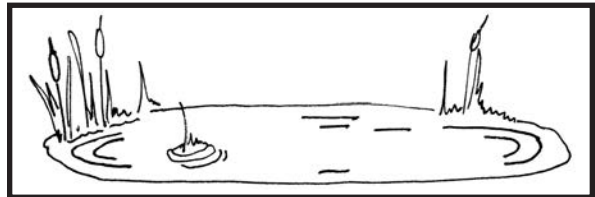
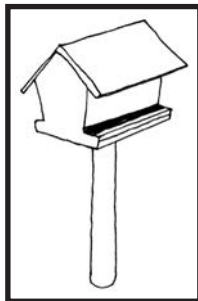
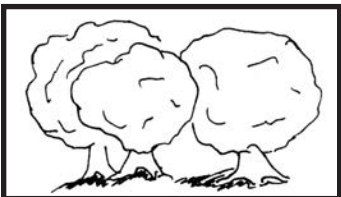
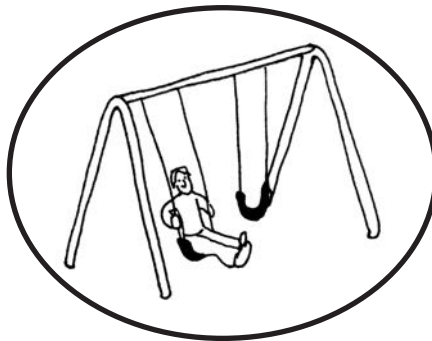
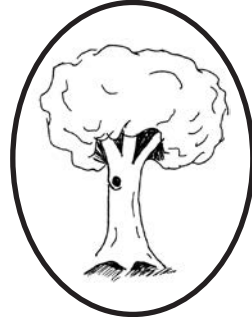
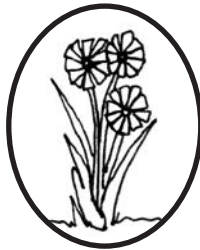
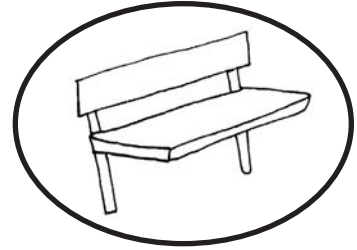
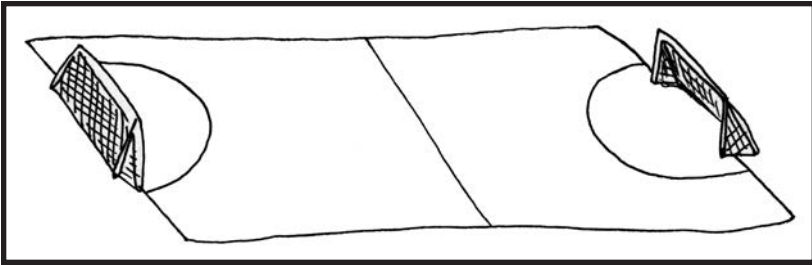


Bird Watcher

HOW SHOULD I MANAGE? MAP



HOW SHOULD I MANAGE? PARTS



WHO'S WHO? SCRIPT

Setting: A forest in Wisconsin. A forester is in the forest with a number of people who are concerned about it. There is a neighbor, a student, and a furniture maker.

Forester: Look at this forest. There are sure a lot of people who came to the forest today to help decide what to do. That's great! I think we need to decide what we should do to manage the forest. Neighbor, what do you think we should do here?

Neighbor: I live next door to the forest, and I like to look at the birds and other animals in the forest. I want to plant bushes that grow berries that they can eat.

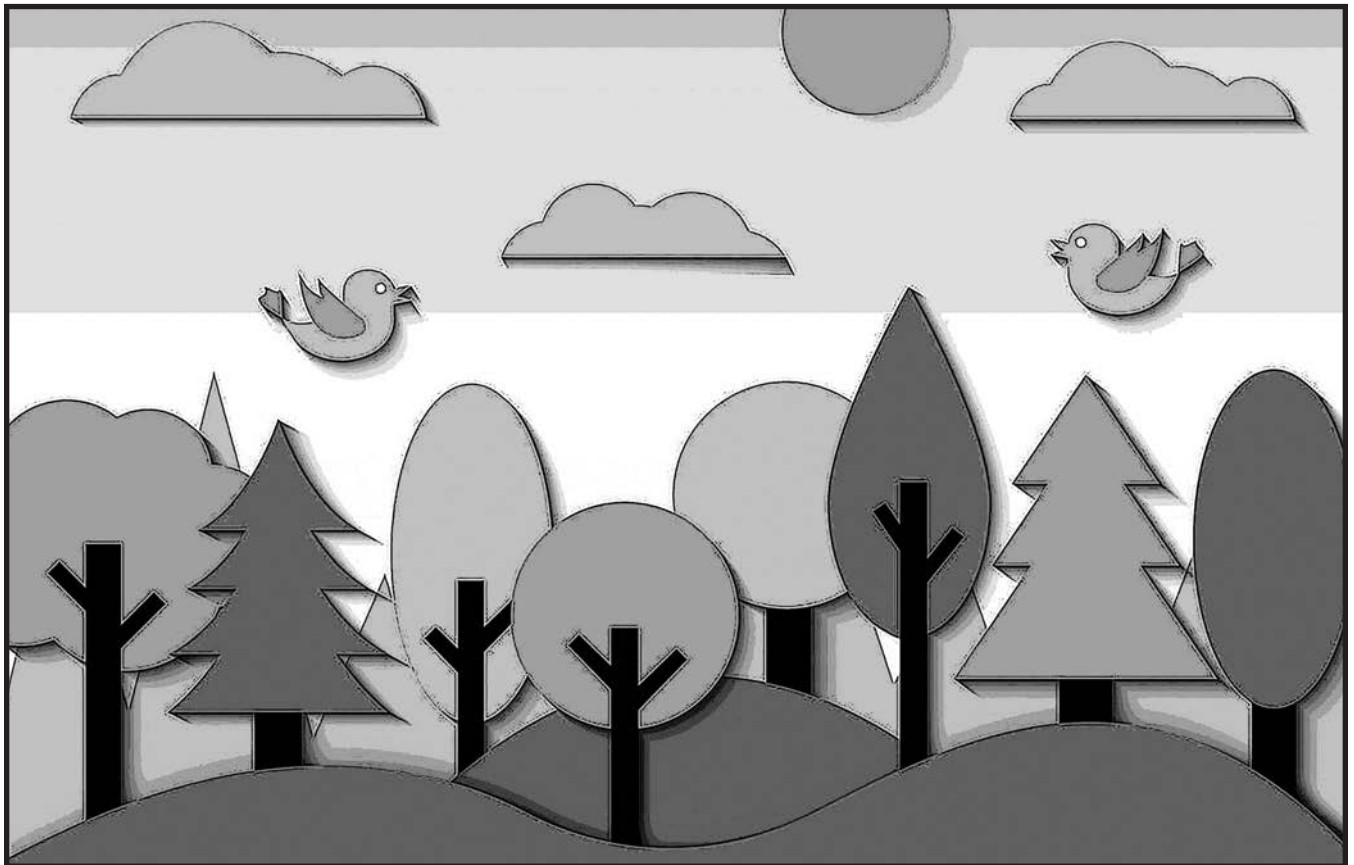
Forester: What do you think, student?

Student: I like to come to the forest with my class to learn. I want there to be signs, so I know what kind of trees are here.

Forester: What about you, furniture maker?

Furniture Maker: I make tables out of wood to sell. I want to have trees that are big enough to cut and make into tables.

Forester: I think we can help all of you! We can plant shrubs that have berries on them that animals and birds can eat. We'll also plant things with nuts or twigs animals will like. We can build trails and put up signs about the trees, plants, and animals. That will make it much easier for classes to come here to learn. We can cut down some trees to make into furniture and then plant more trees. We'll even plant trees that can be made into different products. With your help, we can make this a great forest!



Student Page 3