

NICKY FIFTH'S



Mission NJGO

**SAVING NEW JERSEY'S
GREAT OUTDOORS**

When most people think of New Jersey, they don't think of lush forests, rolling hills, babbling brooks, or winding rivers. Most people picture big cities, industry, and a maze of highways. What they don't know is that New Jersey's Great Outdoors are one of our best-kept secrets. New Jersey is the home of amazing state parks and forests, natural recreation areas, marinas, and historic sites. And unlike larger states, everything is close enough to visit on a tank of gas.

As New Jersey's soon-to-be Official Junior Ambassadors, we have made saving New Jersey's Great Outdoors a top priority. We need your help. Our mission is to identify the challenges facing our great outdoors and then, of course, to solve them. We also need to help everyone understand why these natural resources are so important and create excitement. You see, the more people use them, the less danger they face. Since most adults are very busy, we're asking kids to join *Mission NJGO, Saving New Jersey's Great Outdoors*.

Join our mission, along with the New Jersey Department of Environmental Protection, the New Jersey State Forestry Services – Forest Fire Service, and the New Jersey Education Association in saving New Jersey's Great Outdoors!

Your friends,

*Nicky Fifth,
T-Bone & Wanda*



Dear Teachers,



As a former New Jersey teacher, I understand the challenges in providing valuable content while juggling the demands of standardized testing. Despite the obstacles, it is vital that our youngest citizens understand and appreciate this amazing state. That understanding and appreciation, necessary for future leaders, requires education.

While more and more schools use the Nicky Fifth series to teach New Jersey studies through literature, I am pleased to provide you with *Nicky Fifth's Mission NJGO*, an activity book that introduces students to New Jersey's Great Outdoors.

This activity book involves creative, high-level skills that incorporate all areas of the curriculum and provide opportunities for all learning styles.

Mission NJGO is designed to be used cooperatively, in a classroom setting, **with the guidance of a teacher**. Some activities will require a map or the Internet. Helpful websites and apps, as well as the answer key, can be found at www.nickyfifth.com. In addition, all pages are available for free download.

These books have been made possible through a partnership with the Department of Environmental Protection and the assistance of the New Jersey Education Association.

I invite you to visit www.nickyfifth.com, the Nicky Fifth blog, and T-Bone's Teachers' Room for great ideas and to connect with other New Jersey teachers. As always, if you are interested in a School Author Visit, go to www.franklinmasonpress.com for details.

Enjoy New Jersey,

Lisa Funari-Willever

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Teachers' Guide to Using This Book

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This activity book teaches children about New Jersey's Great Outdoors through a mission to save them. The entire mission, SAVING NEW JERSEY'S GREAT OUTDOORS, is divided into Mini-Missions. Each Mini-Mission is then divided into several tasks.

Mission NJGO is divided into the following areas:

MINI-MISSION 1: Knowing Your Great Outdoors

MINI-MISSION 2: Why They're So Important

MINI-MISSION 3: Identify the Problems

MINI-MISSION 4: Preventing the Problems

MINI-MISSION 5: Research and Raw Data

MINI-MISSION 6: Promoting New Jersey's Great Outdoors

MINI-MISSION 7: Spreading the Word

The following symbols are used throughout the book. They will help students complete their tasks and find necessary information.



Use www.nickyfifth.com



Map Skills



Use the State Parks and Forests website or app



Discuss and Debate



Search for details



Observation



Interview



Creative

Mission NJGO is a cooperative activity and should be completed by an entire class, small groups, or with the help of a parent or family member. The purpose of completing the mission is to develop a thorough understanding and appreciation of our natural resources.

Mission NJGO Checklist



Mini-Mission 1

- _____ Task 1.1
- _____ Task 1.2
- _____ Task 1.3
- _____ Task 1.4
- _____ Task 1.5
- _____ Task 1.6
- _____ Task 1.7

Mini-Mission 2

- _____ Task 2.1
- _____ Task 2.2
- _____ Task 2.3
- _____ Task 2.4
- _____ Task 2.5
- _____ Task 2.6

Mini-Mission 3

- _____ Task 3.1
- _____ Task 3.2
- _____ Task 3.3
- _____ Task 3.4

Mini-Mission 4

- _____ Task 4.1
- _____ Task 4.2
- _____ Task 4.3
- _____ Task 4.4
- _____ Task 4.5
- _____ Task 4.6
- _____ Task 4.7
- _____ Task 4.8
- _____ Task 4.9

Mini-Mission 5

- _____ Task 5.1
- _____ Task 5.2
- _____ Task 5.3

Mini-Mission 6

- _____ Task 6.1
- _____ Task 6.2
- _____ Task 6.3
- _____ Task 6.4

Mini-Mission 7

- _____ Task 7.1
- _____ Task 7.2
- _____ Task 7.3



MINI-MISSION 1: Know Your Great Outdoors



TASK 1.1

Before you can save the great outdoors, you should know what they are and why they are so important. New Jersey has many state parks, forests, natural recreation areas, marinas, and historic sites. To complete this mission, use a map or the Internet.

Name three state parks:	County
Name three state forests:	County
Name two marinas:	County
Name two recreation areas:	County
Name two historic sites:	County



TASK 1.2

To complete this task, you must place the twelve locations you selected in Task 1.1 on the map. Use the number or letters next to the name to mark their locations.

STATE PARKS

1. Allaire S.P.
2. Allamuchy Mountain S.P.
3. Barnegat Light S.P.
4. Cape May Point S.P.
5. Cheesequake S.P.
6. Corson's Inlet S.P.
7. Delaware & Raritan Canal S.P.
8. Double Trouble S.P.
9. Farny S.P.
10. Fort Mott S.P.
11. Hacklebarney S.P.
12. High Point S.P.
13. Hopatcong S.P.
14. Island Beach S.P.
15. Kittatinny Valley S.P.
16. Liberty S.P.
17. Long Pond Ironworks S.P.
18. Monmouth Battlefield S.P.
19. Parvin S.P.
20. Princeton Battlefield S.P.
21. Rancocas S.P.
22. Ringwood S.P.
23. Stephens S.P.
24. Swartswood S.P.
25. Voorhees S.P.
26. Washington Crossing S.P.
27. Wawayanda S.P.

STATE FORESTS

- A. Abraham S. Hewitt S.F.
- B. Bass River S.F.
- C. Belleplain S.F.
- D. Brendan T. Byrne S.F.
- E. Jenny Jump S.F.
- F. Norvin Green S.F.
- G. Penn S.F.
- H. Ramapo S.F.
- I. Stokes S.F.
- J. Wharton S.F.
- K. Worthington S.F.

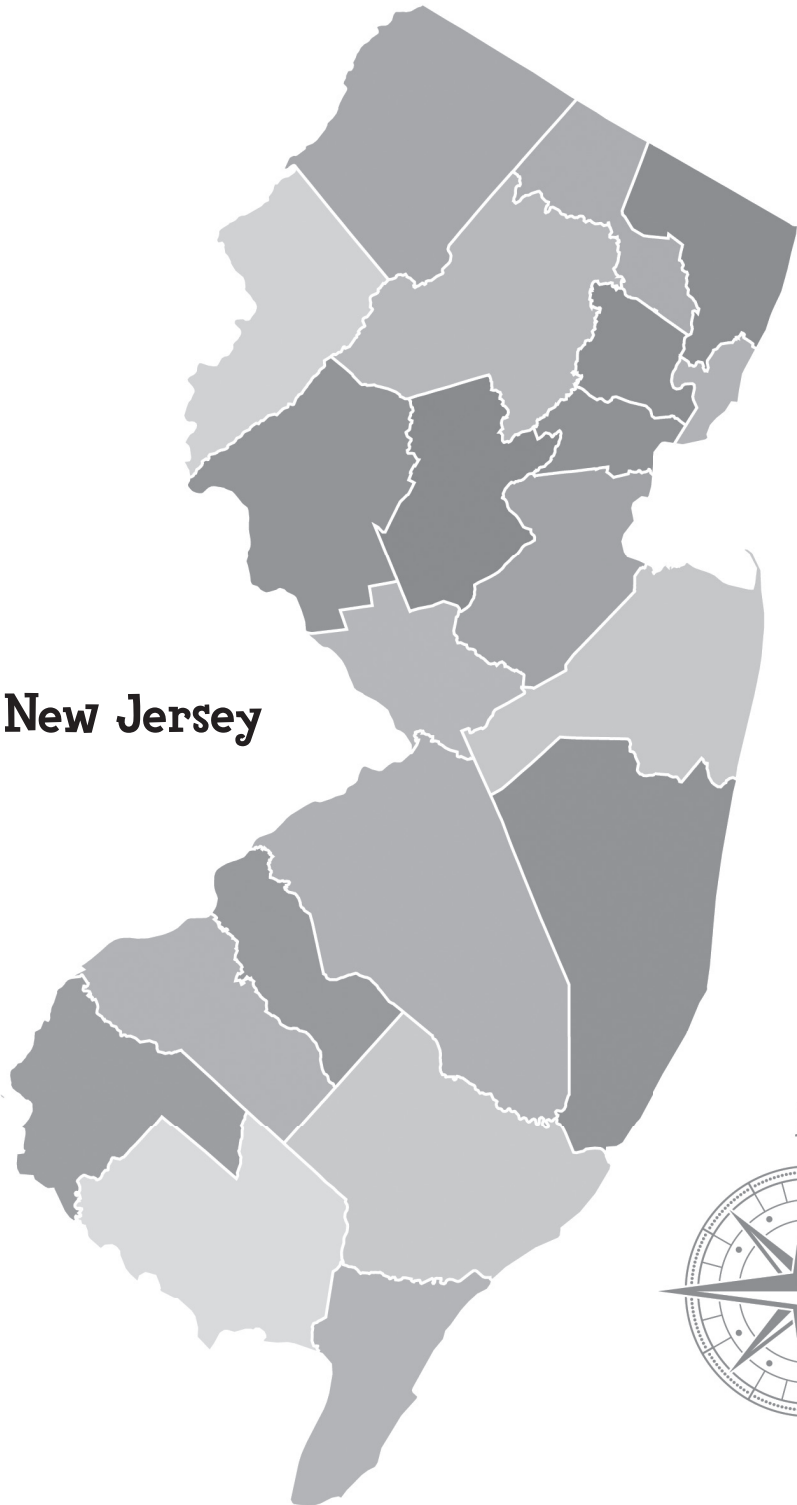
RECREATION AREAS

- AA. Atsion R.A.
- BB. Bull's Island R.A.
- CC. Round Valley R.A.
- DD. Spruce Run R.A.
- EE. Warren Grove R.A.

STATE MARINAS

- M1. Forked River S.M.
- M2. Fortescue S.M.
- M3. Leonardo S.M.
- M4. Liberty Landing S.M.
- M5. Sen. Frank S. Farley S.M.

- F1. Forest Resource Ed. Center



New Jersey



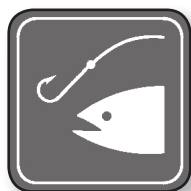
TASK 1.3

Before you visit the Great Outdoors, you should become familiar with the activities offered and the symbols used for each activity. Use the state parks website or app to identify the symbols below. You must insert the missing name or picture.















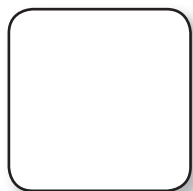




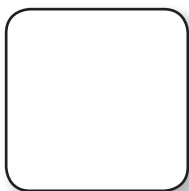




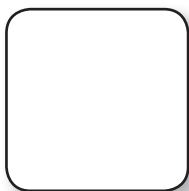




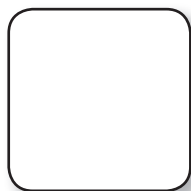
battlefield



canoeing



ice fishing



kite flying



TASK 14

For this task, you will determine which activities are offered at each location. To complete this assignment, you must use the state parks website or app and answer the following questions.

1. Name three state parks that offer fishing.

2. Name three state forests that permit hunting.

3. Name three state parks that offer swimming.

4. What activity is offered at all state marinas?

5. Which recreation area offers the most activities?

6. How many locations offer a beach? Name them.



TASK 1.5

To understand the importance of state parks and forests today, you must know their history. To complete this task, you must read the information from author and expert, Kevin Woyce, and underline the important facts and dates. When you are finished, reread this file to ensure vital details have not been missed, then proceed to Task 1.6.

The History of New Jersey's State Parks & Forests

Just as New Jersey is so geographically beautiful and diverse, the state's parks and forests are just as beautiful and diverse. Today, we enjoy dozens of state parks, forests, recreation areas, marinas, and historic sites. But it took over 100 years to reach this point.

In the late 1890s, the New Jersey palisades were being dynamited for stone to build growing cities. One site near Fort Lee was removing 12,000 tons of rock every day. By 1899, the New Jersey Federation of Women's Clubs petitioned Governor Foster Voorhees to stop blasting. In 1900, Gov. Voorhees worked with, then New York Governor, Theodore Roosevelt to create the Palisades Interstate Park Commission. By 1901, Roosevelt became the first conservationist president. By 1909, the Palisades Interstate Park opened. By 1919, over a million people were visiting the park.

At the time, state-owned parks were a new idea. In 1905, under Governor Edward Stokes, the Forest Park Reservation Commission made its first two purchases of land. In 1907, 5,432 acres in Sussex County were purchased, becoming the heart of Stokes State Forest. The Commission managed the cutting and reforestation of the forest while trying to prevent forest fires.

In 1906, Governor Stokes recommended that all 108 of New Jersey's freshwater lakes be set apart as public parks, preserved for the use of the people of the state. In 1907, a law was passed so the Commission could purchase any land surrounding or covered by freshwater lakes or ponds. By 1914, the state began buying parklands and purchased Swartswood Lake. This was the first time the state bought land solely for use as a park.

Swartswood, the first state park, became so popular, the state was inspired to buy and develop other parks. Soon, people were inspired to donate their own land. In 1923, Anthony and Susan Kuser donated the over 10,000 acres, monument, and mansion that would become High Point State Park. This was the state's largest land donation ever, and there was one condition: bird hunting would never be permitted.





TASK 1.6

Use information from Task 1.5 to complete the timeline. Upon completing the timeline, proceed to the next page and await further instructions.

1890s	
	1899
1901	
	1905
1906	
	1907
1914	
	1919
1923	



TASK 1.7

In task 1.5, you learned some of New Jersey's amazing history. For this task, you will read the following blurbs about some people who have played a key role in New Jersey's Great Outdoors. You will then select one person from the list and complete the fact sheet.

Notable New Jerseyans

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ANTHONY KUSER was more than a progressive captain of industry and wealthy New Jerseyan. Along with his wife, Susan, he was also an environmentalist. What is now High Point State Park was once his mountaintop estate. In 1928, he donated over 10,000 acres of his estate to create High Point State Park. The Kusers then paid an architect to design the monument that marks New Jersey's highest point at 1,803 feet. As avid bird watchers, there was one condition attached to the donation: bird hunting would never be permitted.

GOVERNOR FOSTER MACGOWAN VOORHEES was young and progressive. He teamed up with Theodore Roosevelt, then governor of New York, to save the cliffs and shores of the Palisades. After his death, his farm was donated to the state as the center of Voorhees State Park.

GOVERNOR BRENDAN BYRNE did something amazing. In 1977, as the Pinelands were about to become a major city, Gov. Byrne signed Executive Order 56 creating a Pinelands Review Committee and shortly after signed the Pinelands Protection Act. This act established our country's First National Reserve. The original one million acres has grown by an extra 100,000 acres.

GOVERNOR EDWARD STOKES was governor from 1905 to 1908, and he was a staunch environmentalist. At that time, the land that would later become Stokes State Forest was considered useless; there were no regulations to protect the trees and land. Governor Stokes knew better and started the Forest Park Reservation Commission to protect and restore the land. In 1907, he donated 500 acres from his estate. The state purchased an additional 5,432 acres, naming that land Stokes State Forest.

Notable Americans

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ABRAHAM S. HEWITT was an iron manufacturer, a US Congressman, and once the mayor of New York City. He provided gun barrel iron to the Union during the Civil War for the price it cost him to make it. The Ringwood Manor, his summer estate, is the centerpiece of Ringwood State Park and was often referred to as the Second White House. He felt strongly about education and honest government and refused to give in to corruption.

GENERAL GEORGE MEADE — if his name sounds familiar, it should; General George Meade was a famous Civil War general, defeating General Lee at the Battle of Gettysburg. However, when he was a lieutenant, he was assigned to design a new lighthouse in Barnegat. Four times taller than the original lighthouse, it was the second tallest lighthouse in the United States. A bronze bust of General Meade and a plaque to honor his work stands in front of the famous lighthouse affectionately known as Old Barney.

PRESIDENT THEODORE ROOSEVELT, the one-time governor of New York, was a staunch conservationist and felt strongly about appreciating and protecting the great outdoors. He quadrupled the size of the nation's forest reserves, used the Antiquities Act of 1906 to establish the first sixteen national monuments, and always encouraged conservation efforts by the states.

PRESIDENT FRANKLIN DELANO ROOSEVELT, nephew of President Theodore Roosevelt, was also the governor of New York. He was elected governor in 1928, and a year later, the stock market crashed. The country was thrown into the Great Depression, and millions of Americans were out of work. In 1931, he created a program that hired young men to work in New York's forests and parks, planting trees, building roads and trails, and fighting fires. The following year, in 1932, he was elected president of the United States. In 1933, as part of his New Deal, he created the Civilian Conservation Corps (CCC). By the mid-1930s, more than 500,000 men were working in 2,600 camps across the country. New Jersey had twenty-two camps, five of which were in state forests and two that were in state parks.

Fact Sheet

Name _____ Date of Birth _____

Place of Birth _____ Date of Death _____

Career _____

Affiliated with which site(s): _____

Contribution: _____

Remarkable detail: _____

Wow fact: _____

MINI-MISSION 2: Why They're So Important

CONGRATULATIONS, you have completed your first Mini-Mission and you're now ready to proceed to the next level, Why They're So Important. Mini-Mission 2 requires you to locate the information that explains why saving New Jersey's Great Outdoors is so important. You may now proceed to Task 2.1.



TASK 2.1

Before you can understand why natural resources are so important, you must be able to identify them. Use the following definition to complete this task.

A natural resource is something that is found in nature and can be used by people. Some of the Earth's natural resources are plants, light, soil, water, air, animals, stone, minerals, and fossil fuels. They are raw materials that can be used to create resources necessary to live and to make our lives better. If nature continues to make these resources and they will not run out, they are called renewable resources.

Using that definition, determine the status of each item. If it is a natural resource, write NR on the space. If it is not, you may leave the space blank. If it is a renewable resource, circle it.

Trees	_____	Computers	_____
Houses	_____	Plants	_____
Sunlight	_____	Animals	_____
Oil	_____	Hammers	_____
Meatloaf	_____	Gasoline	_____
Soil	_____	Water	_____
Clothing	_____	Stone	_____
Roads	_____	Wind	_____
Plastic	_____	Coal	_____



TASK 2.2






When the environment is free of contaminants, pollution, and human intervention, nature is able to thrive. Draw a picture below that shows a scene from a forest. Include natural resources such as trees, plants, soil, water, and animals.





TASK 2.3

Before people will protect New Jersey’s Great Outdoors, they must believe they are valuable and worth protecting. Now that you know what natural resources are, you must explain two benefits each resource offers. This task requires you to complete the chart below.

RESOURCE	BENEFIT 1	BENEFIT 2
TREES 		
WATER 		
SOIL 		
AIR 		
ANIMALS 		



TASK 2.4

This task will require you to build upon tasks 2.1 – 2.3 to create bullet points. A bullet point is an important detail. Using the five natural resources listed below, create two bullet points for each to explain their current threats.

1. TREES



A. _____

B. _____

2. WATER



A. _____

B. _____

3. SOIL



A. _____

B. _____

4. AIR



A. _____

B. _____

5. ANIMALS



A. _____

B. _____



TASK 2.5

A steward is someone who cares for and protects something valuable. A steward of New Jersey's Great Outdoors is someone who takes care of our natural resources and protects them. To be good stewards, you must understand the past, but be aware of the present. You must also be able to tell the difference between fact and opinion.

An issue that has created great controversy has been whether or not New Jersey's forests should allow logging activities by private companies. Read and discuss our positions to better understand the pros and cons of private logging on state properties.



T-BONE'S POINT OF VIEW

Responsible logging is a win for the state and the environment. If the state is in charge of the logging companies, we can make sure state lands are protected. Proper logging requires deciding which land can be logged, limiting areas, and supervising the replanting. In addition, logging can be a great way to generate money for the state and create jobs. Most importantly, logging is the best way to create healthy forests.



NICKY FIFTH'S POINT OF VIEW

Our forests are beautiful and provide a home for animals. If we cut down all of the trees, the animals won't have a home. When autumn arrives, there will be no trees to show off their colorful leaves. Plus, when people hike and explore our forests, the trees provide shade and relief from the sun.



WANDA'S POINT OF VIEW

Logging doesn't mean cutting down all of the trees at once. It's about maintaining a healthy forest. Logging clears out dry underbrush and old, dry leaves that become fuel for forest fires. Think of it like trimming and pruning a rose bush so it can grow healthy. Plus, reducing the risks of forest fires can prevent the loss of life and property.



This part of the task requires you to identify our best facts. Once you have selected the facts, find an opinion used for each.



T-Bone's Point of View - Pro (for logging)

Fact 1. _____

Opinion 1. _____



Nicky Fifth's Point of View- Con (against logging)

Fact 1. _____

Opinion 1. _____



Wanda's Point of View - Pro (for logging)

Fact 1. _____

Opinion 1. _____

After you have analyzed the data, decide your position on this issue and explain why. Be sure to use facts to support your opinions.

Your Position:

PRO

CON

Explanation: _____



TASK 2.6

Not only does New Jersey have amazing resources, we have amazing resources to teach us about those resources. Naturalists, park police, fire-wardens and foresters can answer all of your questions and teach you how to be good stewards. This task requires you to interview one of them, in-person, on the phone, or by e-mail.

Name: _____

Post: _____

Years on the job: _____

What made you select this career? _____

What are the job requirements? _____

What is your job description? _____

What is your schedule? _____

What is your favorite part of the day? _____

What is your least favorite part of the day? _____

What can kids do to help protect New Jersey's Great Outdoors? _____

MINI-MISSION 3: Identify the Problem

CONGRATULATIONS, you have completed Mini-Mission 2. You now understand why New Jersey’s Great Outdoors are so valuable. Next, you will immediately move to Mini-Mission 3 and identify the greatest risks to our Great Outdoors.



TASK 3.1

Before problems can be solved, problems must be identified. For this task, you must read the passage below and underline important details. Once completed, proceed to Task 3.2.

Some of the best parks and forests are located in New Jersey. They include mountain ridges, glacial lakes, sandy shores, and winding rivers. Unfortunately, they face many threats. Air and water pollution, soil contamination, threats to wildlife, deforestation, overdevelopment, and forest fires not only threaten our parks and forests, they threaten our entire state.

Parks and forests are home to many animals, and each is connected to another. Trees are not just big plants; they are life-support systems for many animals. Some use tree leaves for food or the branches and trunk as a home. If the trees disappear, tree-life also disappears; and it doesn’t just affect wildlife.

Trees continuously filter the air we breathe while protecting our soil. People inhale oxygen and exhale carbon dioxide. Trees take in that carbon dioxide and release oxygen; clearly, an amazing relationship. They also protect our water. Tree roots hold soil in place so the bank doesn’t wash away, keeping sediment out of the water. Trees also remove the pollutants carried in water. The roots absorb much of the water as it sinks into the soil. Trees remove pollutants before releasing water back into the air.

Of course, another vital resource is water. Water remains pure when untouched and allowed to proceed through its natural cycle, uninterrupted. Clean water is needed for drinking, plants, trees, crops, and animals. Since fresh water is a valuable resource, we must protect it. Deep under New Jersey’s Pine Barrens, the Cohansey Aquafilter contains seventeen trillion gallons of fresh water. This is enough to cover the entire state in ten feet of water, and it is protected by the forest above.

Finally, animals play a vital role in the ecosystem while supporting vegetation. From tiny worms that aerate the soil to honeybees that pollenate plants, the presence of each and every animal is connected and important.

Of all of the threats to our great outdoors, humans are the most dangerous. Whether it's by accident or on purpose, we can negatively affect the environment every day. When we destroy woodlands to build more houses and businesses, we affect the balance that keeps our forests healthy. While forests offer many resources for people, including lumber, we must be dedicated to using these resources wisely. We must manage development while businesses work cooperatively with science.

Nature has created a complex system designed to handle and adapt to natural events, such as storms, floods, and droughts. It is not prepared, however, for the stress caused by people. As the next generation, you must use your technology, technology no other generation before has enjoyed, becoming informed and active. You'll need to know the impact of human behavior and be willing to speak out when necessary. New Jersey's Great Outdoors depends upon it.



TASK 3.2

Now that you are familiar with how the forests affect the entire state, you must answer the following questions. Using your answers, you must participate in a class discussion.

1. It seems like New Jersey has plenty of forested land. Why not develop more of it? _____

2. Trees are beautiful, but we need wood for many things in life. How can we use the trees responsibly? _____

3. What role do trees play in protecting resources? _____

4. What is the greater threat to our forests, nature or people? Why? _____



TASK 3.3

When it comes to protecting New Jersey's Great Outdoors, you must know the difference between man-made threats and natural threats. Finding the right solutions requires understanding the cause of the problems.

Use the diagram below and place each threat in the appropriate area and then proceed to Task 3.4.

Air Pollution

Water Pollution

Flood

Storms

Overhunting

Acid Rain

Forest Fires

Development

Drought

Litter

Overfishing

Insects/Disease

Deforestation

Soil Contamination

High Winds

Infestation

Pesticides

Drilling



{NATURAL}



{MAN-MADE}



TASK 3.4

If you have completed Task 3.3 correctly, you have observed that many major threats are caused by people. Now you must demonstrate that you understand how each threat is connected.



How does contaminated water affect animal habitats? _____



How does deforestation affect air quality? _____



How does development affect forests? _____



How do trees impact water quality? _____

MINI-MISSION 4: Preventing the Problems

CONGRATULATIONS, you have completed Mini-Mission 3 and you now have the proper background to advance to the next level. Identifying a threat is only the beginning. You must now use what you have learned from the first three Mini-Missions to address the threats.



TASK 4.1

As you grow up, you will find that the easiest way to solve problems is to prevent them. Your task will be to identify ways to prevent threats to our Great Outdoors through a class discussion. Assign the actions below to the appropriate problems. Keep in mind, each problem will have several actions.

- A. Reduce pesticides
- B. Managed logging
- C. Enforce regulations
- D. Plant more trees
- E. Education
- F. Limit development
- G. Proper dumping
- H. Eliminate litter
- I. Public involvement

Air Pollution _____

Water Pollution _____

Soil Contamination _____

Deforestation _____

Forest Fires _____

Endangered Species _____



TASK 4.2

One of the greatest dangers our forests face is fire, and the results can be devastating. In order for prevention to work, two things must happen: people must know why the problem is important and then they must change their behavior. This begins with education and to be successful, it's best to start at a young age.

This task involves education. You will read the passage below and prepare a presentation for a kindergarten class that thoroughly explains the following:

1. why our parks and forests are so important
2. the causes of forest fires
3. the effects of forest fires
4. what people can do to prevent them

As you prepare this task, you must keep the age of your audience in mind, use interesting visuals, and keep your message brief. You may draw pictures or create a digital presentation. Once completed, present it to your class and be prepared to answer questions. If you have access to a kindergarten class, offer to share your presentation.



Forest fires destroy valuable acres of forests and the homes of many animals. They impact air, water, and soil quality, they disrupt ecosystems, they cost millions of dollars, and they can take the lives of those who live nearby and those who risk their lives trying to save others and their property.

People often think most forest fires are started by dry conditions, extreme heat, sunlight, or lightning. The shocking truth is most forest fires are not caused by nature. Most forest fires are caused by people, either accidentally or on purpose. It can be the careless tossing of a cigarette or not properly extinguishing a campfire to the more serious act of ignoring rules and warnings. Of course, arson, which is deliberately setting a fire, is also a senseless cause of such destruction.

Some might say that people destroying our natural resources is bad news, and it is. But it may also be good news. It means we can reverse it. It means we can teach people to be more careful and respectful. By monitoring conditions, removing underbrush that acts as fuel, removing dead trees, planting seedlings, and educating the public, we can reverse the damage and protect our wildlands.





TASK 4.3

To protect our resources from wildfire, you should be familiar with the terms used by the Forest Fire Service. Read the passage below and match the correct definition with each term.



Each year the Forest Fire Service protects more than our parks and forests, they protect our entire state. First, they educate the public by visiting groups and providing information. With the help of Smokey Bear, they remind people about safe behaviors. They continually monitor, or assess, weather conditions to determine the fire danger.

Next, they conduct prescribed burns. These are controlled fires, started by the Fire Service, to burn dry brush and other vegetation that can act as fuel in a wildfire. Some vegetation, when dry, can burn like gasoline. Dry brush is the low-lying grass and bushes that, when dry, provide fuel for a forest fire. A prescribed burn is performed by trained professionals after careful planning and safety measures are in place. Prescribed burns are designed to remove fuels to prevent fires and keep the forest healthy.

Of course, many fires are not planned, and they perform fire-suppression activities to contain and extinguish the fire. Many of the tools they use are different than the tools used by local firefighters. These tools include trucks for going off-road, bulldozers, shovels, chainsaws, helicopters, and planes.

When they are not actively fighting fires, they are busy conducting maintenance and repairs on equipment. Maintenance is work that is done regularly to keep a machine, building, or piece of equipment in good condition and working order.

Forest firefighters are also called wildland firefighters, which refers to the fact that they are responsible for all fires that occur in our wild or natural areas.

_____ assess

_____ fuel

_____ prescribed burn

_____ fire suppression

_____ maintenance

_____ wildland firefighter

A. forest firefighter

B. to contain or extinguish a fire

C. keeping equipment in working order

D. controlled fire to burn dry brush

E. to monitor

F. dry brush and low-lying grass



TASK 4.4

This task requires you to know the differences between local town firefighting and wildland firefighting. You probably know what your local firefighters do, so now you can learn about wildland firefighters. Below are the job descriptions and requirements for a wildland firefighter. Read the information and proceed to the questions below.

Becoming a Wildland Firefighter

Most of the duties performed by a forest firefighter take place outdoors and are related to wildfire suppression, fuel reduction, fire prevention, and fire preparedness. Specific responsibilities include building special off-road trucks, maintaining and repairing equipment, training to use special equipment and work around helicopters, conducting prescribed burns, and teaching residents about wildfire risks.

Wildland firefighters are constantly training to be better prepared for their job. Understanding how fire behaves—spreads and burns through different fuels, can be useful in knowing how to put it out. Did you know the basic three things needed for fire to occur? 1. Fuel, 2. heat source, and 3. oxygen. These three things are often represented and known as the Fire Triangle. Remove one leg of the triangle the fire will go out or not start.

Part of a wildland firefighter's training also happens outside the classroom. Experience with trucks, tools and equipment is also needed. Also, as a wildland firefighter, you should be physically fit. One test that wildland firefighters use to test fitness is the "Pack Test." This test is given annually.

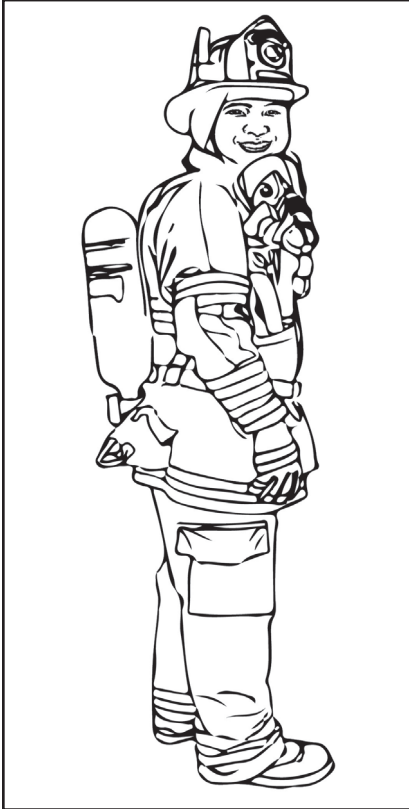
Some questions you will be asked: Can you drive a truck with a manual transmission? Can you change a tire? Can you run a chainsaw? Can you pitch a tent? Can you tie half a dozen knots and sharpen a knife? Can you read a topographic map? Can you use a compass? Learning how to get by and make do in the outdoors comes in handy. If you don't have these skills, are you willing to learn?

Now that you are aware of what it takes to become a forest firefighter, use the space below to explain whether you would consider this career. Use detail when explaining your reasons, including the new terms you have learned.

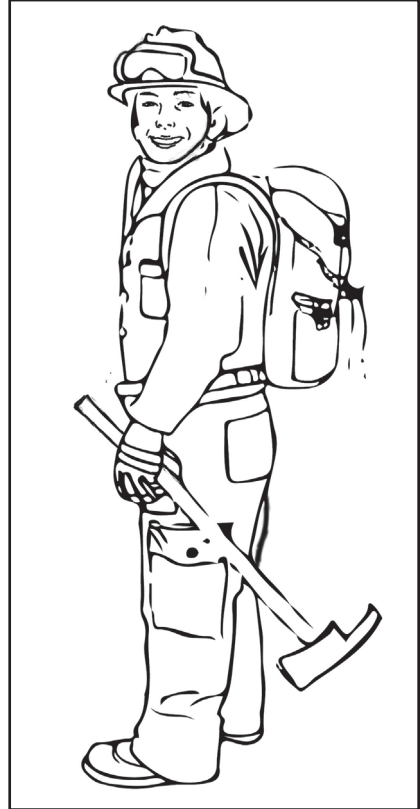


TASK 4.5

While local and wildland firefighters share the same basic mission, the uniform and protective gear is very different. Below, Nicky and T-Bone are modeling the protective gear for both types of firefighters. For this task, you must place an X on the differences and list them below.



**NICKY FIFTH
LOCAL FIREFIGHTER**



**T-BONE
WILDLAND OR FOREST
FIREFIGHTER**

Differences:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

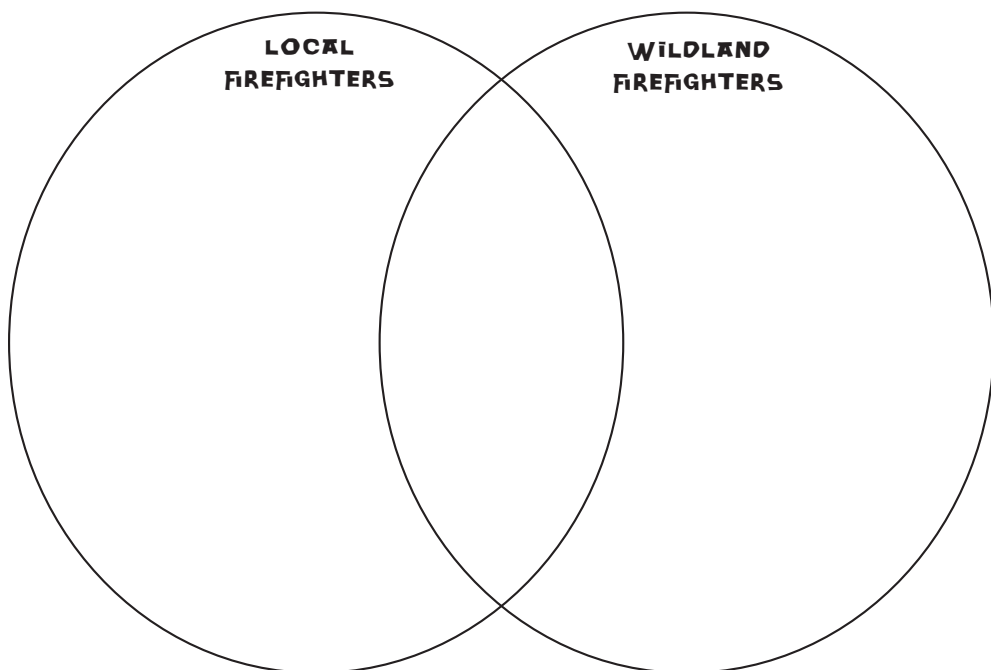


TASK 4.6

Not only is the protective gear very different, the tools and the methods for fire suppression are very different also. This task requires you to read the methods below and place the tools used by each in the diagram below.

Local firefighters arrive in engines or trucks. An engine carries water, and a truck carries ladders. Depending on the fire, the engines usually hook up to a fire hydrant as a source of water and the trucks extend their ladders. These firefighters use their masks and SCBA, or self-contained breathing apparatus, crawling through the fire building. With almost no visibility, they must feel their way around. They carry a flashlight and other small tools, such as thermal imaging cameras, that can be helpful when fighting a house or building fire. They also wear a device that sends a loud piercing sound if they stop moving for more than thirty seconds.

Forest firefighters must be as active in prevention as they are in suppression, or putting out the fire. They use engines to get to the fire, and if it is a small fire they can drive into the woods and put it out. Most forest fires, however, require the use of a combination of tools, like engines, bulldozers, and helicopters. Without fire hydrants, these firefighters use bulldozers and shovels to dig to the mineral soil, creating trenches, called firelines, that are used to contain a fire to a certain area.





TASK 4.7



For many years, the New Jersey Forest Fire Service has worked closely with Smokey Bear to raise awareness and educate the public about the dangers of forest fires. Not only is Smokey Bear the symbol for New Jersey, he is also the symbol for the United States.

During World War II, the United States was using a lot of wood to build battleships and support the war effort. The government was worried that our forests could be attacked and this valuable resource destroyed. In response, the USDA Forest Service and the War Advertising Council created a poster campaign to help prevent forest fires.

Originally, they planned to use Disney's Bambi, but later decided to use a bear to advertise wildfire prevention. They selected a bear after a black bear cub was found alive in a tree after a fire ravaged through a forest in New Mexico. On August 9th, 1944, Smokey Bear was created.

In 1947, Smokey got his slogan, "Remember, only you can prevent forest fires." By 1952, having become so popular with schoolchildren around the world, Congress passed a law protecting the name and image of Smokey Bear. He is so popular that he even receives fan mail. He receives so much fan mail that in 1964, he was given his own zip code, 20252. Interestingly, the only other individual to have his own zip code is the president.

Since education is a huge part of prevention, and we know that the public responds well to characters, your task will be to create a character, unique to New Jersey, that promotes the Great Outdoors. You will create the character, the message, and the details. You will also draw a picture of your character wearing any special uniform or gear.

Name _____

Species _____

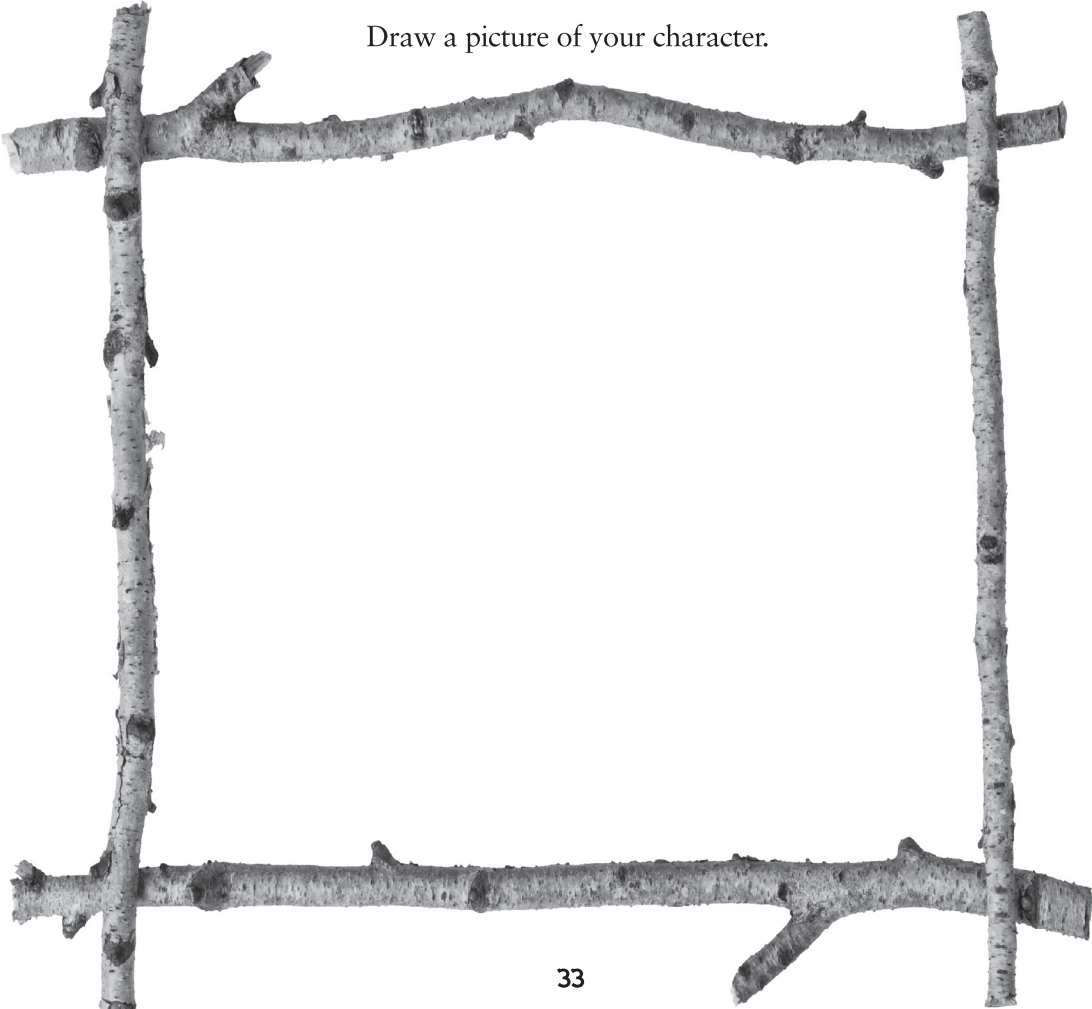
Reason you have selected this character _____

Character’s special skills _____

Character’s message _____

Special uniform or gear _____

Draw a picture of your character.





TASK 4.8

For this task, you will use the information from Task 4.7 to design a safety poster that can be used in schools. You may use paper, posterboard, or a computer to complete this task. You must be neat, and your message must be clear. Avoid adding too many elements to your poster, or your message will get lost. Use this form to organize your thoughts and check your work.

Main headline _____

Sub-headline _____

Two most important points:

1. _____

2. _____

Poster format:

___ Paper

___ Posterboard

___ Computer

Colors _____

Graphics _____

For more information visit _____

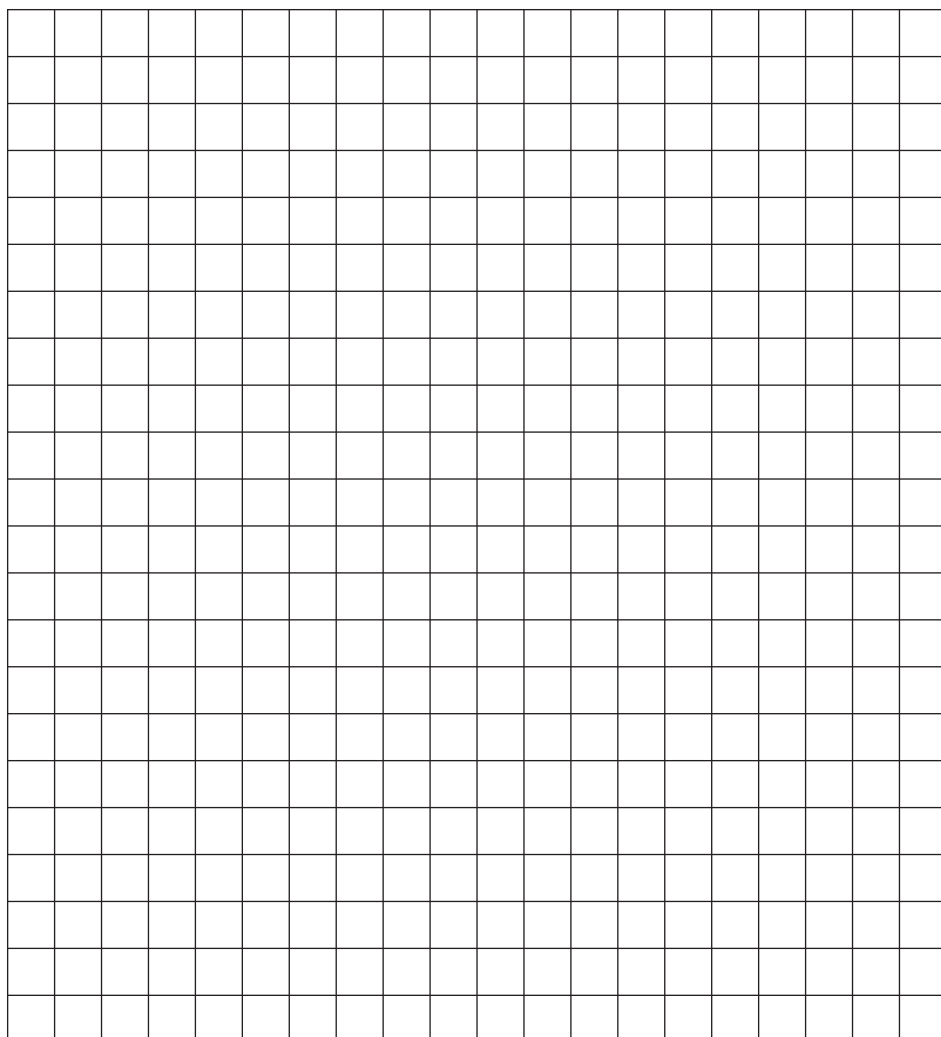
Summarize your poster: *This poster will* _____



TASK 4.9

Use this blank grid to create a word search with the words listed below. Upon completion, challenge a classmate, friend or family member to find the hidden terms.

wildland	forest	park	environment	fire
water	trees	soil	animals	air
seedling	mountain	lakes	New Jersey	Smokey



Mini-Mission 5: Research and Raw Data

CONGRATULATIONS, you have successfully completed Mini-Mission 4. The knowledge you have acquired will serve you well on *Mission NJGO*. While you have focused on the natural and man-made challenges New Jersey’s Great Outdoors face, there are different challenges that are just as serious.



TASK 5.1

Attendance and attention are two areas that desperately need improvement. When people stop visiting and caring about our parks and forests, lawmakers stop paying for things that make them safe and special. When they are no longer safe and special, they are forgotten and closed. Closed parks and forests can eventually be sold to developers, creating more problems.

To promote our Great Outdoors you must become experts on the topic. For this task, you will calculate the distances between your home and the following destinations so you can become better acquainted with their locations.

Cape May Point State Park _____

Hacklebarney State Park _____

Abraham S. Hewitt State Forest _____

Fort Mott State Park _____

Double Trouble State Park _____

Jenny Jump State Forest _____

Monmouth Battlefield _____

Washington Crossing State Park _____

Island Beach State Park _____





TASK 5.2

For this task, you will interview four people and record their answers on the chart. You may ask relatives, friends, teachers, or neighbors. **You may not ask strangers.** Once the chart is completed, proceed directly to Task 5.3.

SP = **STATE PARK**

SF = **STATE FOREST**

	Person 1 _____ _____	Person 2 _____ _____	Person 3 _____ _____	Person 4 _____ _____
What is the date of your last visit to a SP or SF?	_____	_____	_____	_____
How often do you visit SPs or SFs each year?	A. 0 times B. 1-3 times C. more than 3 times	A. 0 times B. 1-3 times C. more than 3 times	A. 0 times B. 1-3 times C. more than 3 times	A. 0 times B. 1-3 times C. more than 3 times
Do you visit parks:	A. within 25 miles of your home B. beyond 25 miles of your home	A. within 25 miles of your home B. beyond 25 miles of your home	A. within 25 miles of your home B. beyond 25 miles of your home	A. within 25 miles of your home B. beyond 25 miles of your home
Do you prefer:	A. State parks B. State forests	A. State parks B. State forests	A. State parks B. State forests	A. State parks B. State forests
Rate these activities from favorite to least favorite: <i>camping, hiking, biking, fishing.</i>	1. 2. 3. 4.	1. 2. 3. 4.	1. 2. 3. 4.	1. 2. 3. 4.
How often have you camped in a SP or SF?	A. Never B. Once C. More than once	A. Never B. Once C. More than once	A. Never B. Once C. More than once	A. Never B. Once C. More than once
Is management of state parks and forests important to you?	YES NO	YES NO	YES NO	YES NO



TASK 5.3

When a group of people are interviewed, the people are called a sample group. Even a small sample group of four can provide important information. If each student includes their sample group in a class group, the answers are even more useful. Use all of the class data and answer the following questions.

1. Of the people interviewed, how many:

- _____ have not visited state parks and forests in the past year
- _____ visited 1-3 times within the past year
- _____ visited more than 3 times in the past year

2. How many:

- _____ visited parks within 25 miles of their homes
- _____ visited parks beyond 25 miles of their homes

3. How many of the following activities were ranked as their favorite?

- _____ camping _____ hiking _____ biking _____ fishing

4. How many of the following activities were ranked as their least favorite?

- _____ camping _____ hiking _____ biking _____ fishing

5. How many of the people interviewed:

- _____ have never camped at state park or forest
- _____ have camped in a state park or forest once
- _____ have camped in a state park or forest more than once

6. How many of the people interviewed:

- _____ feel management of state parks and forests is important.
- _____ feel management of state parks and forests is not important.

MINI-MISSION 6: Promoting New Jersey's Great Outdoors

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CONGRATULATIONS, you have completed Mini-Mission 5 and you now understand what people think about our state parks and forests. This information will help you decide how to get people excited.



TASK 6.1

Using the data from your sample, you can create marketing ideas. Promotions and marketing are ways you can get people excited about New Jersey's amazing outdoor destinations. There are many ways to draw attention and motivate people to act. Since low attendance is a very real threat to our state parks and forests, this is one of the most important parts of your mission.

For this task, you will select one location and design an e-brochure. An e-brochure is a valuable tool for sharing information. It's inexpensive, interactive, can be bright and colorful, and contains useful links. Follow the steps below. To see a sample, visit www.nickyfifth.com.

E-Brochure

- STEP 1:** Organize the information you would like to use. Vital information should include address, schedule, descriptions of activities, and photos.
- STEP 2:** Use a blank sheet of paper and fold into a trifold brochure with three sections on each side.
- STEP 3:** Using a pencil, mark which information will go on each section.
- STEP 4:** Search the Internet for photos or clip art to make your brochure more appealing.
- STEP 5:** Write your copy. The copy is the words you will use to provide information and create excitement.
- STEP 6:** Insert all of your information, including links, in your brochure.
- STEP 7:** Proofread your brochure, including reading each word aloud.
- STEP 8:** Have someone else look over your work.
- STEP 9:** E-mail your brochure to five family members, friends, classmates or state lawmakers.



TASK 6.2

For this task you will use your brochure to create a radio commercial. You will have sixty seconds to sell your destination. Keep in mind that you cannot use photographs on the radio. You must use your words to paint pictures for the listeners. Think about the raw data from your chart, and tailor your message to create excitement. Try to end your commercial with a clever jingle or slogan.

Remember, you must read it slowly and with enthusiasm, keeping your time in mind. Use the space provided below to outline your commercial. Once your outline is completed, create a rough draft on a blank piece of paper. Make your corrections, and prepare your final draft.

Radio Commercial Outline

Headline: _____

Detail 1: _____

Detail 2: _____

Detail 3: _____

For more information _____

Catchy slogan or jingle _____



TASK 6.3

As the future of New Jersey, you will one day lead the state and protect the resources you've just learned about. Whether you are a citizen or an elected official, your responsibilities are great. This task will require you to write a letter to one of your elected state officials. You may select the member of the General Assembly or Senator that represents your town. Your letter should stress the importance of supporting and protecting our natural and historic sites.

You will use the space below to outline your letter. It should clearly state the following:

1. The location you have selected _____

2. A brief history _____

3. Why the site is so valuable _____

4. Why you believe the site should be protected _____

5. How the site contributes to the state _____



TASK 6.4

For this task you will use the list of words below to create a song about New Jersey's Great Outdoors. A rhyming dictionary is a useful tool when writing a poem or song and could be very helpful for this task.

park	forest	trees	birds
dark	unrest	bees	words
New	Jersey	Allaire	Stokes
High Point	outside	outdoors	ride
hike	hiking	bike	biking
canoe	kayak	swim	swimming
grass	flowers	bears	squirrel
chipmunk	raccoon	camp	camping
campsite	fire	campfire	smore
climb	rock	rocks	Smokey
Kuser	Hewitt	Hacklebarney	Farny
Cheesequake	Ringwood	Allamuchy	Rancocas
Brendan Byrne	Barnegat Light	Bass River	Belleplain
Cape May Point	Inlet	Double Trouble	Fortescue
Forked River	Hopatcong	Island Beach	Jenny Jump
Kittatinny Valley	Leonardo	Liberty State	Long Pond
Ironworks	Monmouth	Battlefield	Penn
Norvin Green	Parvin	Princeton	Ramapo
Mountain	Round Valley	amazing	Voorhees
Spruce Run	Stephens	Swartswood	Wharton
Warren Grove	Washington	Crossing	Marina
Wawayanda	Worthington	fresh air	no cares
fitness	fun	family	friends
good times	playground	picnic	summer
fall	winter	spring	seasons
reasons	Delaware Canal	Raritan Canal	amazing
awesome	remarkable	get your fill	beautiful
green	blue skies	warm sun	soft breeze
jaw-dropping	breathhtaking	history	boating
crabbing	beach	viewing	watching
skiing	sledding	gardens	botanical
nature tour	ice fishing	ice skating	lighthouse
kite flying	monument	mountain bike	museum
performing arts	scuba diving	dog sledding	surfing
lake	pond	river	ocean
bay	sand	moon	drive

Mini-Mission 7: Spreading the Word

CONGRATULATIONS, you have completed six out of seven Mini-Missions. You are ready for the last Mini-Mission.



TASK 7.1

Your task will be to give a speech that informs and motivates your audience. You will be provided with the names of three parks and forests. You must fill out a form for each, examine your answers, and plan your speech.

Your speech must be written and delivered clearly and should focus on facts. The length of your speech should be 1-2 minutes, and you will not use props or visuals. Instead, you will use words to paint a picture.

Brendan Byrne State Forest

Year Established _____ Acres _____

Location _____

Amenities

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Interesting Facts _____

Reason to Visit _____



Ringwood State Park

Year Established _____

Acres _____

Location _____

Amenities

_____	_____
_____	_____
_____	_____
_____	_____

Interesting Facts _____

Reason to Visit _____





Wharton State Forest

Year Established _____

Acres _____

Location _____

Amenities

_____	_____
_____	_____
_____	_____
_____	_____

Interesting Facts _____

Reason to Visit _____





TASK 7.2

Using your research from Task 7.1, create an outline of your speech. Use the outline to create a speech that informs and motivates your audience.

Greeting _____

Common Fact _____

Byrne S.F. Fact _____

Ringwood S.P. Fact _____

Wharton S.F. Fact _____

Conclusion: _____



T-BONE'S TALKING TIPS

When you deliver your speech, speak slower and louder than you think you should. Make eye contact with your audience, and look at bullet points instead of reading the whole speech. Use dramatic pauses to emphasize important facts and information, and prepare a strong conclusion. Avoid using words like *um* and *like*.



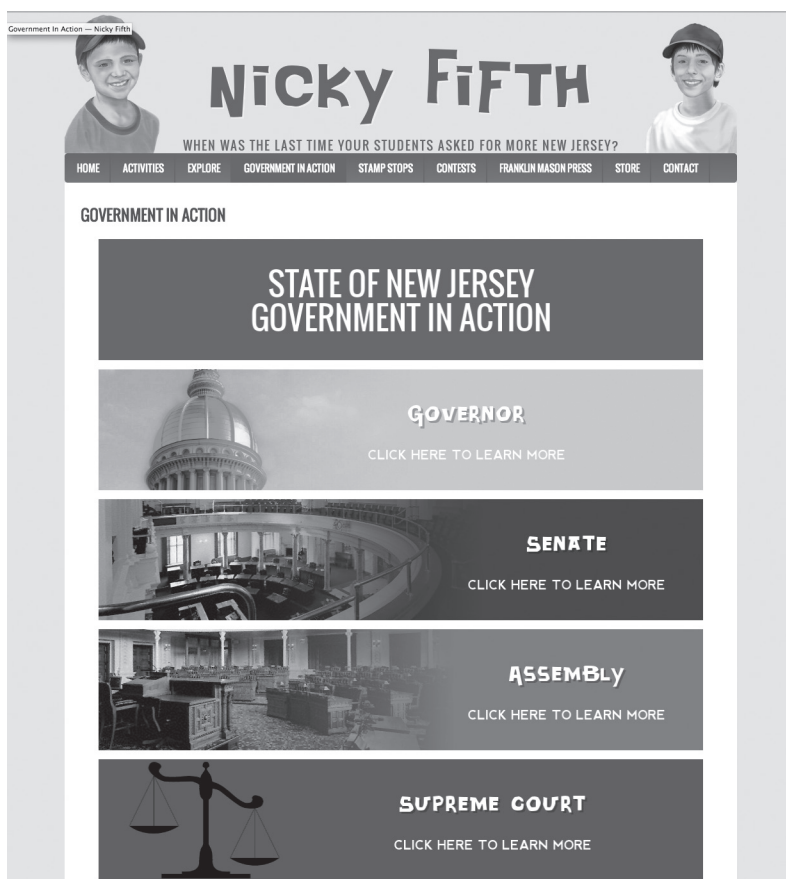
TASK 7.3

While a major responsibility of the State Parks and Forest Service is to protect the parks we have, it must also develop sites that could be added to the system.

One site that was very popular and has been closed is Waterloo Village.

This final task involves your class adopting a site that is in danger or should be reopened. You will use the Internet to locate information, articles, and interviews regarding the site. You will call the proper authorities and find out why the site has been closed or is in danger, all of the issues involved, and what would be necessary to save or reopen the site.

You will then visit the Government In Action page found at nickyfifth.com and find both your lawmakers and those that represent the area where the site is located. You will write letters and make phone calls so your elected officials know you are concerned and that you are monitoring the situation.





Mission Accomplished

Certificate of Achievement

This certifies that

has completed *Mission NJGO*,
Saving New Jersey's Great Outdoors



Nicky Fifth

T-BONE

Wanda

Date

Franklin Mason Press
Trenton, New Jersey
www.franklinmasonpress.com

New Jersey Department of
Environmental Protection
www.state.nj.us/dep/

