



WHAT IS



A project developed and designed by
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What Is Forestry?

Forestry starts with trees—knowing how they grow and what part they play in the world as a whole. It helps to know the history of the forest, what kinds of animals live there, and what makes Kentucky's forests special.

Forests affect how we live and provide many things we use, so it is important to take care of them, understand what they give us, and use them wisely. It is also important to know about jobs for people who want to work with trees, timber, or lumber.

We need to understand the effect of today's world on the forests of the future, and we need to think about what kind of forests we would like our grandchildren to enjoy.

Students at Isonville Elementary, Lakeside Elementary, and Sandy Hook Elementary in Elliott County, Kentucky, have provided the artwork and ideas in this booklet to help educate others about our forests and forest resource issues.

These words and pictures show how much a group of young people can come to appreciate Kentucky's forests. We hope they will help you care about our forests, too.



The History of the Forest

Katie Ison's fourth grade class, Sandy Hook Elementary

"I remember when an ice storm came through our area and broke down most of the trees!"

The forest has been changed by many things: weather, insects, disease, and people.

When Daniel Boone came to Kentucky, much of the land was covered with large trees, and native peoples were the caretakers of the forest. Later some trees were cut, and land was cleared by settlers for homes and farms. In the late 1800s to early 1900s, the forests changed because of widespread logging. The trees Daniel Boone saw when he came to the state were cut.

When trees are cut from the forest, it leaves room for new trees to grow. This is what has happened in Kentucky, and if Daniel Boone returned today, he would see lots of trees but a different forest.



How the Forest Grows

Laura Sparks' fourth grade class, Lakeside Elementary

“Seeds can travel many different ways. You can even carry one in your shoe.”

Trees need air, water, sunshine, and minerals.

There are many different parts of the tree. The roots hold the tree in the ground and give the tree water and minerals. The bark protects the tree like skin protects humans. The leaves make food for the tree. The stem and branches hold up the leaves.

The forest has layers. The top is called the canopy and is made of larger trees. The middle is called the understory and is made of smaller trees. The bottom is called the forest floor, or ground.



Life in Kentucky's Forests

Linda Stafford's fifth grade class, Lakeside Elementary

“Animals are not the only thing alive in the forest. There are also plants, like poison ivy.”

There are more than 300 kinds of wildlife living in Kentucky's forests. The forest provides habitat for wildlife, so taking care of the forest takes care of where the animals live.

There are around 200 different kinds of trees and shrubs in Kentucky, and about 50 of these can bring in income.



The Importance of the Forest to Our Environment

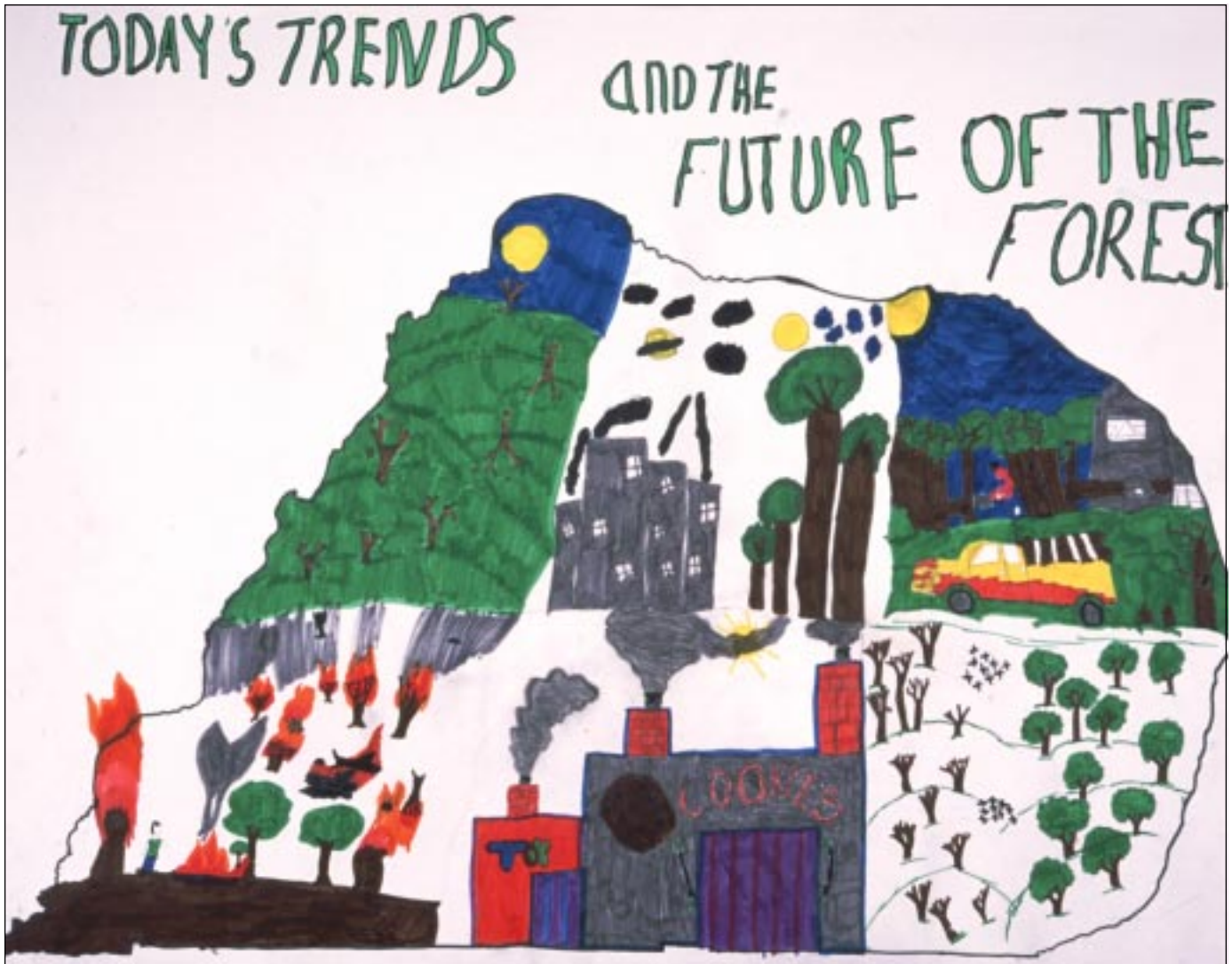
Darrelne Lewis' fourth grade class, Sandy Hook Elementary

"The forest is like our community, always changing."

Trees hold the soil in place and keep it from washing into the creeks. Forests provide a special place for many animals and small plants.

The forest is like a puzzle; everything is connected: the animals, plants, soil, water, and trees. They all depend each other.

Everything is tied to everything else like a spider web. When you move one piece, it affects other parts.



Today's Trends and the Future of the Forest

Betty Williams' sixth grade class, Sandy Hook Elementary

"It is up to us to make a decision now as to what our future forests will be."

Fire can take waste out of the forest, but uncontrolled fires can be bad and cause a loss of future income from your forest.

If you keep taking the best trees out of the forest and leave the bad trees, the forest's value is decreased, which is called high grading. Damaged trees become more open to insects and disease.

You need to balance or care for what you take from the forest so the future forest increases in quality.

As cities grow in what is called sprawl, land is cleared that results in a loss of forest and agricultural land and a loss of habitat, or places for animals to live.



How the Forest Affects Our Community

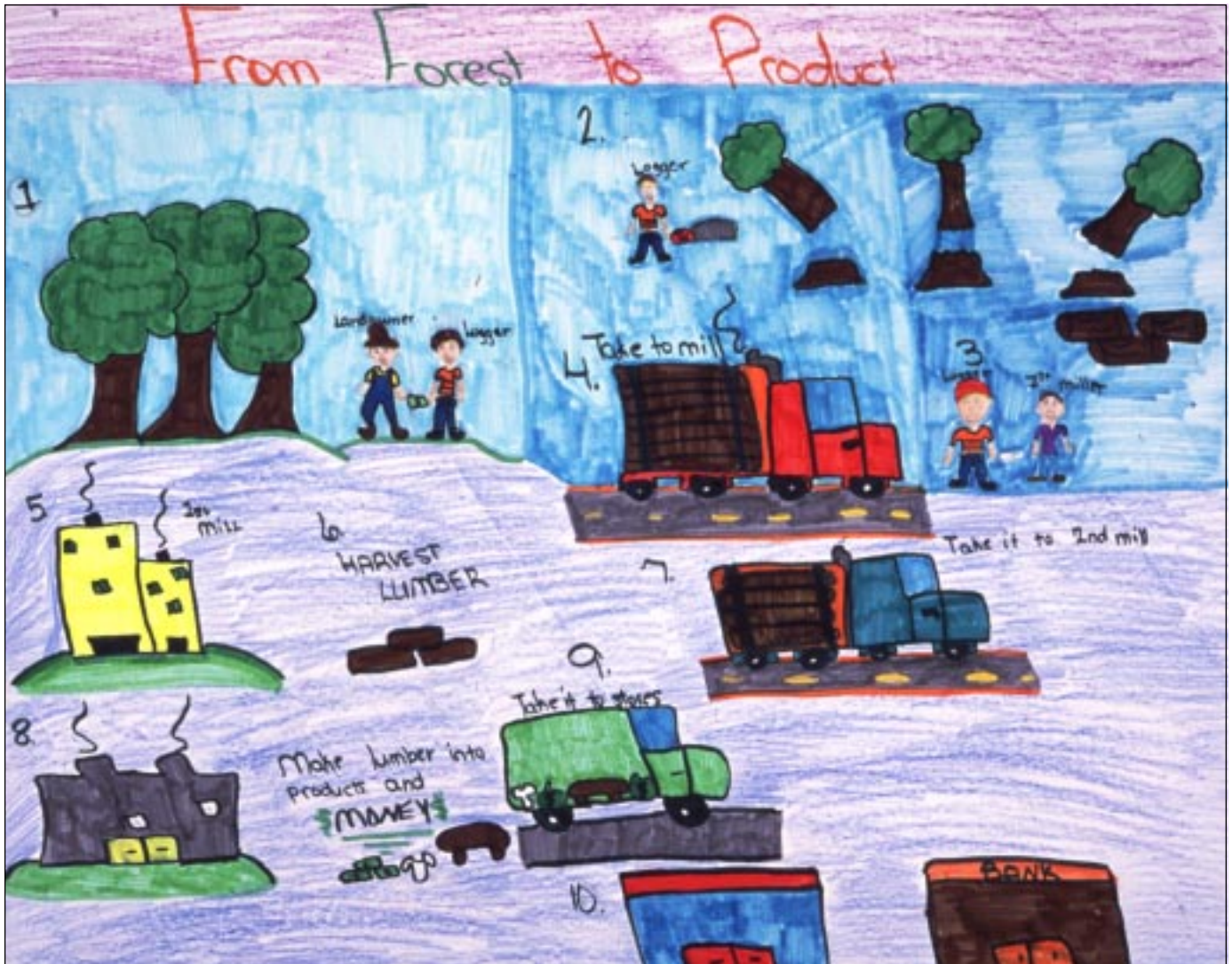
Linda Stafford's fifth grade class, Lakeside Elementary

“If we take care of the forest, it can provide a lot of what we need to live: a place to work, a place to live, a place to play.”

The forest provides homes, food, jobs, and a place to play, and it cleans water. A forest provides a place for recreation: hunting, fishing, hiking, and camping.

The trees are pretty in the spring and fall and that makes people want to come and see the forest.

Lots of people make a living from the forest: loggers, truck drivers, and people in many other careers.



From Forest to Product—What Is the Process?

Toni Johnson's sixth grade class, Lakeside Elementary

“I did not realize the number of jobs in the forest industry.”

It takes more than one step to produce a product:

1. The logger or mill owner buys trees from the landowner.
2. The trees are cut or harvested and then gathered at the log landing.
3. At the log landing the trees are loaded on a truck and driven to a mill.
4. At the mill, the logs are separated, sawn into lumber, and dried.
5. The lumber is loaded onto trucks and shipped to stores.
6. People or companies buy the lumber and build products such as furniture or flooring.



Careers the Forest Holds for Us

Sharon Boggs' sixth grade class, Isonville Elementary

“To get a job in forestry, you should do well in school. Some jobs in forestry require you to go to college or technical school.”

- Wildlife biologists study wildlife.
- Foresters make forest management (care) plans.
- Consulting foresters help people selling timber.
- Naturalists teach about the environment.
- Loggers harvest the trees.
- Equipment operators run bulldozers, skidders, booms, or trucks.
- Mechanics fix forestry equipment.
- Forest engineers plan logging operations.
- Artisans obtain materials from the forest to create art.
- Lumber mill owners/operators saw logs into boards.
- Carpenters make wood into furniture.
- Machinists make furniture and other forest products.
- Forest scientists study the forest.
- Botanists study plants.



What Do We Want the Forest to Look Like in 100 Years?

Shana Reed's fourth/fifth grade class, Lakeside Elementary

“We would like a forest with no trash, healthy trees, homes for animals, and a natural and peaceful setting with clean rivers.”

If you could look out your window at a forest in 100 years, what would you want to see?

It could be a healthy forest, lots of wild flowers, different kinds of wildlife, an investment for your grandchildren that could send them to college, the trees you climbed when you were a child, and a creek with clean water.



Caring for Our Forests

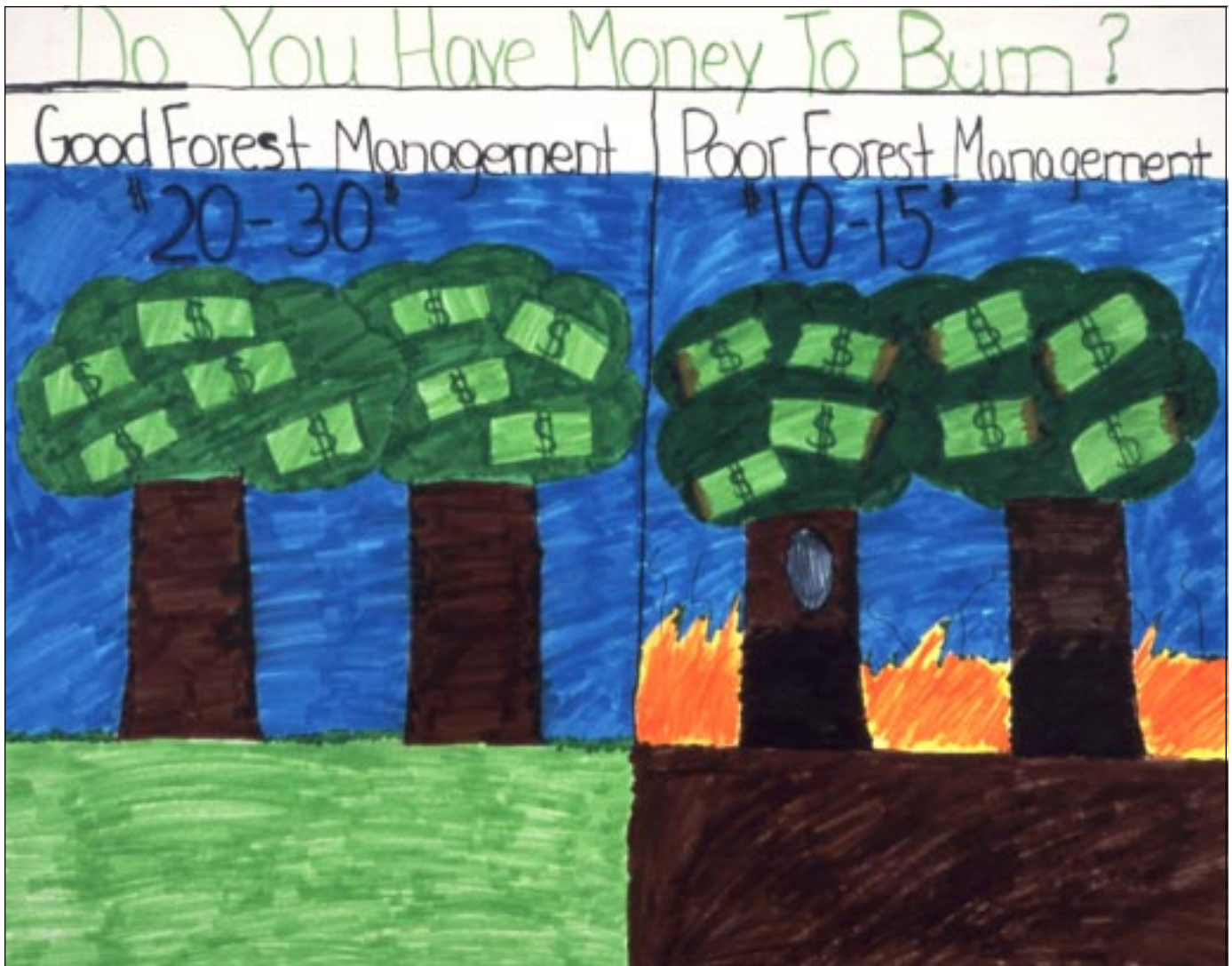
Robin Griffith's fifth grade class, Sandy Hook Elementary

“If you care for the forest, it will give you more of what you want and need.”

We can take care of our forests for many different reasons, including providing timber, recreation, water, and a home for wildlife.

To decide how we want to take care of our forests, we need to think about how we want our forests to look in future. Do we want income from the forests, hiking trails, wildlife, or something else? With a good forest plan we can have many choices.

Caring for our forests is like raising our children; the attention we give them will determine their outcome.



Caring for Our Trees Pays

Brenda Bradford's sixth grade class, Lakeside Elementary

"I realized how important it is to take care of your trees so they will be worth more money in the future."

It is important to take care of our trees so they will be worth more in the future.

Preventing fires from getting out of control and not using living trees for fence posts will make our trees more valuable. While not all fire is bad, fires that are uncontrolled or "torched" do damage and cost money. Although fire can kill trees, more often fire just causes damage and allows insects and disease to attack. In future years the damaged trees may look sound, but the heartwood or core of the trees may be rotten, which takes away from the quality of the wood and its value.



Forest Harvesting

Freida Tussey's fifth grade class, Isonville Elementary

“Cutting trees is not bad, but it needs to be well planned.”

There are many ways to harvest trees:

- Group selection is taking a group of trees from only one area. It can prevent the spread of insects or disease and can help keep the forest healthy.
- Single tree selection is taking selected single trees from throughout the forest. It provides trees for certain products like white ash for baseball bats.
- Clear-cutting removes all the trees in an area and lets in more sun for new trees to grow.
- Thinning removes some trees to allow other trees to grow better.
- Seed tree cutting leaves a few well-spaced trees for re-seeding the area.

Trees can grow back or re-sprout from the stump and roots of cut trees.



What to Know Before Selling Timber

Vicky Riffe's sixth grade class, Sandy Hook Elementary

“Before I sell my timber, I want to have written on paper what’s going to happen.”

Here are steps to follow before selling timber:

1. Decide if you want to sell the whole “boundary” or just part of the timber on your farm.
2. Decide how you want to sell your timber: Ask a forester to help you make a decision (for help finding a forester, go to page 17).
3. Request a reference to find out how well the logger did on other jobs.
4. Advertise widely. If you only get one offer, how can you know if it is a high offer or a low offer?
5. Sell by written contract to protect both you and the logger.
6. Oversee the sale. Make sure the contract is followed.



Resources for Forest Information

Jady Skaggs' fifth grade class, Sandy Hook Elementary

“All the information is available for you; all you have to do is ask.”

- **Kentucky Division of Forestry:** Call (800) 866-0555 or (502) 564-4496 to find out the phone number of your county forester, who can make up a free forest management plan for you.
- **Cooperative Extension Service:** Find it in the phone book under the name of your county. An Extension agent can provide you with a list of loggers and consulting foresters.
- **Natural Resources and Conservation Service:** Call (859) 224-7350 for conservation plans for water and soil quality and information about the Forestry Incentive Program (FIP), which will pay part of the cost of replanting trees if you have a forest management plan.
- **Consulting foresters:** Contact your county Cooperative Extension Service office for a list of consulting foresters, who charge a small fee but usually help get a better price for timber.

About This Project

We wanted to celebrate one of our best assets in Kentucky, our youth, by using their help to create a publication for all ages to explain forest resource issues.

Students at Isonville, Lakeside, and Sandy Hook elementary schools in Elliott County, Kentucky, took part in a 4-H project using interactive educational activities about 15 different topics in forestry.

The youth were asked to tell us, in words and drawings, what they learned for each of the 15 different topics.

This project was developed and designed by Dr. Marcella Szymanski, Assistant Extension Specialist in Forest Economics and Natural Resources; Gwenda Adkins, Family and Consumer Science Agent, Elliott County; and William Thomas, Agriculture and Natural Resource Agent, Elliott County. Educational activities were provided by Project Learning Tree and Project Wild. Information was provided by the Kentucky Division of Forestry and Daniel Boone National Forest. Some information was specifically designed for this project by the University of Kentucky Cooperative Extension Service.

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Participating Schools

Isonville Elementary School

Fourth Grade

Teacher: Denise Boggs

Scott Orban Barker
Michael S. Eldridge
Jonathan P. Ferguson
Tiffany Dawn Fields
Jessica N. Gilliam
Lucas D. Gilliam
Carmen D. Hall
Michael J. Hay
Shelia M. Laney
Elizabeth S. Lovato
Kimberly McDowell
Nathan Von McDowell
Ronnie C. Oney
Aaron Michael Peters
Tyler R. Riggsby
Heather Lynn Skaggs

Silena Skaggs
Meggan Renee Sloas
Kayla N. Stephens
Elizabeth C. Thomas
Nicole Renee Wagoner
Brandle A. Wells
Amanda F. Whitley

Fifth Grade

Teacher: Freda Tussey

Lori A. Adkins
Brittany J. Barker
Kelley Marie Barker
Samantha A. Cox
Amanda Eldridge
Gregory N. Gilliam
Christopher A. Hall
Jonathan J. Hall

Ashley Keaton
Billy Maxie
Bonnie M. Maxie
Hazel Maxie
Timothy R. Maxie
Rodney D. Messina
Tiffany R. Mullett
Cory E. Opp
Garrick Pennington
Jessica R. Salyers
Sarah J. Salyers
James Z. Skaggs
Adrianna Sturgill
Nathan L. Sturgill
Donald C. Vaughn
Amy M. Wagoner
Joanna L. Wagoner
Kimberly W. Wagoner
Rachel C. Wagoner

Sixth Grade

Teacher: Sharon Sloas Boggs

April N. Blankenship
William J. Conley
Kayla R. Evans
Lacy D. Lewis
Nathan S. Lewis
Anastasia N. Lovato
Travis L. Matthews
Margaret C. Maxie
Willis A. Maxie
Sarah E. Porter
Rebecca Sue Rupe
David Skaggs
Keshia D. Skaggs
Johnny G. Stevens
Justin R. Wagoner
Windy R. Wagoner
Rebecka J. Whitley

Lakeside Elementary School

Fourth Grade

*Teachers: Laura Sparks &
Shana Reed*

Marissa C. Adkins
Seth Alan Adkins
Mikeal Joe Barker
Megan Danielle Boggs
Joseph Adam Conley
Willard Justin Conn
Christopher E. Dickerson
David Leston Dyka
Cheisi A. Elliott
Samatha J. Griffith
Corey Hall
Bradley S. Hickman
Crystal L. Holbrook
Kera Ann Howard
Tella Marie Johnson
Joshua C. Leadingham
Zachary James Lewis
Tabathia L. Mason
Stacy D. Middleton
Britanni A. Parmley
Beverly N. Porter
Lauren R. Porter
Aaron Brent Randolph
Whitney N. Salyers

Alyssa Ann Skaggs
Danielle L. Skaggs
Lashawn Angel Skaggs
Damen Lee Smith
Braydan S. Tucker

Fifth Grade

*Teachers: Linda Stafford &
Shana Reed*

Corey T. Bames
Danny Martin Bayless
Leevon Bear
Matthew T. Blevins
Tasha R. Carrington
Joseph Aaron Carter
Morgan E. Carver
Ashley D. Cox
Jonathan Ray Cox
Shaun Riley Cox
Nathan W. Davis
Jared T. Dickerson
Adam J. Eldridge
Tommy Lee Garriss
Joshua Ray Greene
Hallie Sue Griffith
Kelsay D. Harper
Lela N. Hickman

Joshua S. Hill
Melissa Leann Holbrook
Sarah R. Ison
Sarah Johnson
Derrick Laney
Christoph Leadington
Hayley Nicole Lewis
Natasha N. Lewis
Justin L. Lyons
Vickie Lee Nicholson
Emily Grace Porter
Jacob D. Randolph
Keisha R. Randolph
Brittany N. Rose
Timothy E. Stephens
Danielle Turner
Latysha D. Walker

Sixth Grade

*Teachers: Brenda Bradford &
Toni Johnson*

Lisa Boggs
Vanessa Sue Brown
Reba Katherine Click
Gregory L. Conn
Michael Paul Cox
Amelia Eldridge

David Chase Evans
Michael Scott Fannin
Nancy K. Greene
Thelma N. Griffith
Troy J. Griffith
Hilary D. Holbrook
Leah E. Horton
Adam L. Howard
Alesha Howard
Joshua Lewis
Kayla Lewis
Chelsa C. Markwell
Andrew Alderick McLaughlin
Nathan A. Moore
Stephanie D. Porter
Derek D. Randolph
Jackie Reynolds
Christopher R. Skaggs
Jessica F. Smith
Nathan Stephens
Heather M. Stevens
Derek Whisman
Amber Nicole Wood

Sandy Hook Elementary School

Fourth Grade

Teacher: Darrelene Lewis

Theressia M. Adkins
Heaven Clevenger
Matthew A. Elliott
Caitlin Rose Fannin
Ethan Grant Faulkner
Evan Blake Faulkner
Garrett Walter Fultz
Jenna M. Gilliam
Jacqueline H. Harmon
Bobby Ray Howard
Treyleigh Nichole Lewis
Michael David Marx
Brandy Moore
Jonathan Moore
Donovan Wade Perry
Chrystal Riggsby
Banasha Elaine Rowe
Dustin Brian Eugene Russell
Johnny Edward Skaggs Jr.
Kevin Lee Stamper
Megan A. Tolliver
Talisa Danielle Wagoner

Fourth Grade

Teacher: Katie C. Ison

Lacy Morgan Blevins
Leah Kathryn Blevins
Bethany Bowling
Kaleb Carpenter
Keith Anthony Center
Billy Click
Whitney Nicole Cline

Bronson J. Flatt
Krista Lynn Fultz
David Ray Gillum
Benjamin Terry Green
Stephanie Juniper
Charles A. Kibbey
Mary Ann Noble
Wayne T. Reynolds
Joseph M. Stapleton
Ricky K. Stevens
Kaneatha Thornsberry
John William Walter
Kala Noel Wilson
Sheena Rene Wilson

Fifth Grade

Teacher: Robin L. Griffith

Samantha K. Brickey
Jeremy C. Clinger
Heather Eagle
Justin Tyler Fannin
Billy Malcolm Fultz
Cassie M. Gray
Bryan Lee Holland
Korey Scott Ingram
Samantha Faye Ison
Andrew Zachary Le
Amber Nicole Mofford
James Talbit Nickell
Paul O'Neal Jr.
Nathan Adam Perry
Lucas Lee Stegall
Brittany D. Stephens
Maynard A. Stevens
James Michael Trimble

Laken Hope Wilder
Mary A. Williamson
Danielle Wolfenbarger

Fifth Grade

Teacher: Jady R. Skaggs

Angel Renee Brown
Jeremiah Joseph Butts
Kaleigh Carter
Rachel Marie Castle
Melissa G. Clevenger
Caitlin Coffey
Brian K. Eldridge
Bethann M. Englehardt
Jeffery S. Flannery
Monica Lee Fraley
Samantha L. Gilliam
Teara Noel Jessie
Travis Colby Jones
Brittany Renee Layne
Sabra L. Lewis
Joshua Allen Mason

Sixth Grade

Teacher: Betty S. Williams

James K. Adkins
Ashly N. Boggs
Carol Layne Burton
Frances Collette Burton
Pamela Jean Cline
Jeramie Elliott
Brittany Ferguson
Jessica E. Gilliam
Adam L. Howard

Ricky N. Juniper
Amber N. Kinster
William Anthon Mason
Issac S. Smith
Shelly Rena Smith
Robert Brian Spears
Whitney A. Thompson
Trista June Wagoner
Charles A. Weddington
Charles Daniel Weddington
Jordan Wilder

Sixth Grade

Teacher: Vicky Riffe

Joann M. Brangard
Cody A. Carpenter
Amelia G. Conway
Kendra E. Dickerson
Jaclyn B. Ferguson
Erica D. Gibson
Cameron A. Griffith
Justin Lee Kidd
Dustin E. Line
Aaron D. Moore
Lisa M. Short
Joshua Allen Sims
Joshua Joe Smith
Brenna Ann Telaroli
Justin D. Watson
Ronald E. Weddington
Randi E. White
Aleisha N. Whitt