This poem by Joyce Kilmer is the most famous ever written about trees.

Joyce Kilmer (a man, btw) was a famous American poet who served on the front line of World War I. Kilmer was killed in action about three months before the war’s end.

You may read the poem to the class if you wish. Most people have heard snippets of it even if they didn’t realize what they were hearing.

Pause at each of the first three questions and give your students a chance to respond to each. Most students will quickly say that they have received nothing from a tree today, but all of them have!

The third question will (hopefully) get the kids to thinking about how trees actually impact all of us. A list will begin to appear of some of the things we get from trees here in East Tennessee.

Make sure you ask the question after the first statement and give your students a chance to respond. It is easy to see that trees can be considered the symbols of strength and long life but what about wisdom? Hint: If you had lived as long as a tree you would have seen a lot of history occur.

Then we transition into how trees grow. Point out that a mighty oak starts out as a little acorn.
This slide points out that all trees produce some type of seed in order to reproduce. Make sure the class knows that these seeds have to get out of the parent tree’s shadow or shade in order to grow. This is why trees have different strategies to disperse their seeds, i.e., cover them in fruit so animals eat them, make them fly on the wind by giving them a wing, etc.

Be sure to ask the class the question after the first paragraph. Encourage them to think about it (you may need to give them some hints).

Now we talk about the inside of the tree. There are different parts of a tree and this is part of the fifth grade science standards, so the class may know more than you think!

Ask the class to tell you what each of the parts does before pulling up the answer.
This slide talks about how a tree grows each year. Be sure to point out that the cambium layer adds new cells each year to make the trunk and the branches bigger around. Only the tips of the branches get longer. This will be important later.

The class will know that you can tell a tree’s age by counting the growth rings. Point that you can also tell how much the tree grew by looking at the width of each growth ring. So, in effect, we can look back in time see what the weather looked like in the past just by looking at growth rings in a tree. Neat!

This is just a little sideline question based on a question I had in botany class at EKU. When you read the question, the kids will all start trying to do the math.

You will point out that the tire swing doesn’t get any taller because (remember the last slide) only the tips of the branches get longer! The tire swing will be in essentially the same place 18 years later.

The lesson is: Think before you Answer!

This slide introduces photosynthesis. Most of the class will know about photosynthesis but have limited understanding of it.

Be sure to ask the class what a tree needs in order for photosynthesis to occur.

The diagram that pops up at the end is overly complicated and meant for fun. A simpler diagram is on the next slide.

Explain the photosynthetic process.

The tree uses water and carbon dioxide combined with sunlight to produce carbohydrates (food) and oxygen (as a by-product). The diagram is very simple.

Make sure that the class knows that this process takes place in the leaves of the tree. Specifically, the chlorophyll (the green stuff in the leaves) is where the food making process occurs.
This slide transitions from talking how a tree makes food into how a tree gets its water. In effect, we go from talking about leaves to talking about roots.

This slide tells about the important jobs a tree's roots do. Be sure to ask your students the first question and give them time to come up with some answers. Remember, we are here to try to get our students to think!

You will have to explain what is meant by a symbiotic relationship. It is when two different organisms help each other in order to insure the survival of both.

This is just a summary slide of the things we have learned about how trees grow. Ask the questions and let your students answer them.

This slide transitions into talking about the age of trees. Point out, in the third paragraph, that all the forested land in Claiborne County has been logged in the last 100-150 years.

While there are people who are opposed to logging, we can see that trees grow back! That means that trees are a renewable resource. In fact, Tennessee is increasing its amount of forested land in recent years. We are growing more acres of trees in Tennessee each year than we are cutting.
Now we talk about the extreme age that some trees can reach. In particular, the Bristlecone Pine.

Ask your students to name some of the events in world history that a tree this old would have lived through. Humans find it hard to think about the passage of this much time. Get them to think about.

6,000 years = 2,190,000 days = 52,560,000 hours ….

We move from talking about the age of trees to their physical size. This slide points out the difference in size between the Sequoia and Redwood.

There are some neat pictures at the end.

This slide makes some size comparisons between the Coast Redwood and some of our largest animals.

Point out that a Coast Redwood is over three times taller than a blue whale is long. Also, the Coast Redwood is taller than a football field is long. Pretty neat!

I have created a crossword puzzle about trees. There is a slide without the answers and it is followed by this slide with the answers.

If you are using a SmartBoard, use a SmartBoard pen to fill in the answers as the class answers them. You can turn it into a game. Give some thought beforehand as to how you are going to do this.
January Contests – Bread Baking

BAKING CONTEST
Both the breadbaking and cookie contests will be at your January meeting. (All entries should be baked by the 4-H member making the entry.) Parents and grandparents may help, but please remember that this is the 4-H members project.

You may enter as many of the categories as you are eligible. You will receive ribbons for all entries.

BREAD BAKING
4th Grade – Coffee Muffins
5th – 8th Grades – 3 Cookies
9th – 12th Grades – Yeast Bread (a loaf or 3 rolls)

COOKIE CONTEST

Drop Cookies: These cookies have a texture more like cake and are the easiest to bake. The dough is spread in a greased pan and baked for a given length of time. When cooled, the cookies are cut into squares or bars.

Bar Cookies: The dough is dropped from spoons onto baking sheets. Leave space between the dough for it to spread when baking.

Rolled/Shape Cookies: This type of cookie dough is rolled and cut using different shaped cutters. The cookies are made from stiff dough, and shaped with the hands.

TWO TYPES OF COOKIES

Go over the rules for both the Bread Baking Contest and Model Vehicle Contest with the kids. Explain that each person should label their entries with their name and what category it should be in.

January Contests – Model Vehicles

Building models is a popular activity for many 4-H members. Only enter one model in each class. (All models must be made by the 4-H member entering them in the model contest.) You may use plastic model kits, snap together kits, or wood kits.

CLASSIFICATION:
1. Model Car - plastic, wood, or other kits
2. Model Truck - plastic, wood, or other kits
3. Model airplane, boats, space shuttles or military vehicles

JUDGING CRITERIA

Judges will look for:

Neatness of model. How does it look compared to all other models?

Use of glue. Glue should not be visible on outside. Use a toothpick or liquid glue made especially for model kits. Any glue visible on wheels or shields will result in points deducted.

Use of paint and/or decals. Are all decals neatly applied? Is paint neat and smooth?

Construction. Do all parts fit together properly or does it fall apart when it is picked up to be judged?

Difficulty of model. How difficult was your model compared to others in its class. Remember, snap together models are not as difficult as those requiring glue.