

Win With Wood

Welcome Kentucky youth, teachers, extension agents, Kentucky forest products industries representatives and guests.

On Oct. 3, 2023, 9 a.m. – 2 p.m., you will be able to experience an exciting event at the University of Kentucky Wood Utilization Center located at the Robinson Center for Appalachian Resource Sustainability (RCARS), Quicksand, Ky. Win With Wood is an unique opportunity for Kentucky's youth to learn more about the forest products industries and to showcase their talents and skills. This annual fun-filled competition incorporates both primary and secondary forest products events as well as forestry events. Students are welcome to participate in as few or as many of the events as she/he desires.

All events are on an individual basis for both the junior and senior levels. Events will be held in and around the Wood Center Complex. The events will start at 9 a.m. and run concurrently until all have participated or until 2 p.m. If time permits, the awards will be presented at the end of the competition. Awards are as follows: each event will have a blue, red and white ribbon winner. There will also be three medallions given in both the senior and junior divisions for combined total high scorers. The overall combined highest score total in the senior division will receive the Albert Spencer Win With Wood scholarship, provided by the Kentucky Forest Industries Association. The scholarship is for \$500 to be used at the University of Kentucky College of Agriculture.

I would also encourage representatives of the primary and secondary wood products industry to consider attending this event and bring a company display with some examples of your product line. You might also consider inviting someone from your human resources department; this is an excellent opportunity to recruit future personnel for your business. We have noticed that the youth respond extremely well to advice and suggestions at this stage of their education. So, come and help tailor the youth of today for your company's workforce for tomorrow.

Please take a few minutes to look over the events scheduled, then fill out the registration forms and return to Betty Hardin, 130 Robinson Road, Jackson, KY 41339 before Sept. 25, 2023, or by email, betty.hardin@uky.edu .

Thank you and we hope to see you at the Win With Wood event on Oct. 3, 2023, at the University of Kentucky Wood Utilization Center.

Sincerely,

The Win With Wood Committee

Win With Wood

Oct. 3, 2023

Win With Wood competition will be held on Oct. 3, 2023, from 9 a.m. (registration) until 2 p.m. at the UK Robinson Center for Appalachian Resource Sustainability, Wood Utilization Center at Quicksand, Ky. Competitions are available for students to demonstrate some of the skills needed for employment in both the primary and secondary wood industry. You are invited to compete in any or all the events that are scheduled. There is no minimum or maximum number of events to enter. The events will start at 9:30 a.m. and run concurrently until all have participated or until 1 p.m. If time permits, the awards will be presented at the end of the competition.

Below are the general rules for the competition. Attached are the specific rules for each event.

1. Determinations made by the judges are final. There is to be no harrasing, chastising, or otherwise challenging the judges.
2. Arrive at the events on time so the events can flow smoothly.
3. All written answers must be PRINTED.
4. All competitors are encouraged to complete as many events as time and skills allow.
5. Lunch will be provided.
6. Individual and team woodworking projects must arrive at the site by Sept. 25, 2023.
7. Submit/deliver woodworking projects to: Wood Utilization Center, Robinson Center for Appalachian Resource Sustainability, 130 Robinson Road, Quicksand, KY 41339.
8. Awards will be given as follows: Blue, Red, and White ribbons in each event. Blue ribbons will be awarded at the Awards Ceremony. Red and White ribbons will be mailed after the event. The highest three overall high scores in the junior and senior division will receive a medallion. The overall combined highest total score in the senior division will receive the Albert Spencer Win With Wood scholarship, provided by the Kentucky Forest Industries Association. The scholarship is for \$500 to be used at the University of Kentucky Martin-Gatton College of Agriculture, Food and Environment.
9. Juniors are considered in the age group of 9–13 years old as of Jan. 1, 2023, and seniors are considered in the age group of 14–18 years old as of Jan. 1, 2023.
10. Each event will have a judge and event assistants as needed.
11. In the event of a tie score, the scores for Wood ID and Tree ID will be combined and the highest score will win the scholarship. In the event that doesn't break the tie, the event coordinator and statisticians will determine who had the highest score in individual events in this order:

Compass and Pacing

Tree Measurement

Invasive Species

Woodworking & Forestry Equipment Tool ID (combined score)

If this process does not determine a winner, then there will be a coin flip by the event coordinator to determine who wins the scholarship.

Compass and Pacing

Seniors 100 points -- 45 minutes

Juniors 50 points – 25 minutes

Senior participants will use a compass to measure the azimuth of ten lines to the nearest degree and then measure the distance from point to point by pacing. The junior participants will use a compass to measure the azimuth of five lines to the nearest degree and measure the distance from point to point by pacing.

Time: 45 minutes will be allotted for this exercise.

Scoring: 10 points per station. Points will be awarded as follows.

5 points for each azimuth with 1 point deduction for each 2 degrees error up to 10 degrees. Over 10 degrees error will result in a score of 0 for that azimuth.

5 points for each distance with a 1 point deduction for each 2 foot error.

Equipment: Compasses will be supplied by the competitor or the competitor's school. No measuring devices are to be used for pacing. Only the competitor's feet, required clothing, and a calculator are allowed.

Green = Junior Blue = Senior

Name _____ School _____

Compass and pacing

A compass and calculator will be available for this event. The event will require approximately 45 minutes to complete.

Each station has a number associated with it. Be sure to write the information on the corresponding line. A total of 10 points is possible for each station. 5 points for each azimuth. 1 point will be deducted for every 2 degrees error up to 10 degrees. 5 points for each distance with 1 point deduction for every 2 feet error up to 10 feet. The shaded columns are for the judge's use. Do not write in the shaded columns.

Station #	Azimuth	Deduction	Distance	Deduction
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
	Total deductions			

Score (100 – Azimuth deduction – Distance deduction)

Forestry Equipment Identification

Seniors 100 points – 30 minutes

Juniors 50 points – 15 minutes

Participants will demonstrate their ability to identify tools used in forestry. Twenty items will be on display for senior participants to identify and 10 for the junior participants. Items can be found in Forestry Suppliers catalog or website.

Time: 30 minutes or about 1.25 minutes per item.

Scoring: Five points will be given for each item identified correctly. Each item must be correctly identified. Points will be awarded as follows.

4 points for correct identification

4 points for function

2 points for correct spelling

Correct identification of the items will be determined by the judges in the event of an incorrect spelling. The judge's decision is final. Spelling will be based on the following list. The spelling is to be exactly as it appears including capitalization. Function will be selected from a list. Answers must be PRINTED.

Biltmore stick
diameter tape
increment borer
bark gauge
altimeter
mirror sighting compass
tree marking gun
planimeter
canthook
hard hat
fusee
drip torch
backpack fire pump
plastic flagging
clinometer
tree injector
fiberglass tape measure

tree caliper
pulaski axe
fire rake
staff compass
tree planting bar
hip chain
log scale
fire swatter
chainsaw
safety glasses

Forestry Equipment Identification (con't)

Functions

- a. measure height and diameter of standing trees
- b. measures tree diameter
- c. extracts a core sample from logs
- d. measures bark thickness
- e. used on a staff to determine directions
- f. hand held device for determining directions
- g. measures volume of wood in a log
- h. used to roll logs by hand
- i. cuts trees and logs
- j. protects eyes
- k. lights backfires with liquid fuel
- l. carries and sprays water for fires
- m. measures angles and slopes
- n. applies herbicide into tree bark
- o. measures lengths
- p. chopping and grubbing firelines
- q. removes litter and small trees
- r. measures elevation
- s. planting seedlings
- t. measures area on maps
- u. protects heads
- v. lights backfires w/o liquid
- w. smothers fires
- x. measures angles
- y. marks plots

Green = Junior Blue = Senior

Name _____ School _____

Forestry Equipment Identification

Each tool has a number associated with it. Be sure to put the name of the tool on the correct line. You have a maximum of 1.25 minutes per sample. You will receive 4 points for correct identification, 20 point for correct spelling, and 4 points for correct function. The shaded columns are for the judge's use only. Do not write in those columns. PRINT all answers.

#	Tool ID	ID (4 pt.)	Spelling (2 pt)	Function (Select from list)	Function (4 pts)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
	totals				

Total score

*Back of Forestry Equipment Identification Scoresheet.

Correct identification of the items will be determined by the judges in the event of an incorrect spelling. The judge's decision is final. Spelling will be based on the following list. The spelling is to be exactly as it appears including capitalization. Functions will be selected from a list, some functions may be used more than once. Answers must be PRINTED.

fiberglass tape measure	tree caliper
fusee	pulaski axe
increment borer	fire rake
clinometer	staff compass
altimeter	tree planting bar
mirror sighting compass	hip chain
tree marking gun	log scale
planimeter	fire swatter
canthook	chainsaw
hard hat	safety glass
diameter tape	
drip torch	
backpack fire pump	
plastic flagging	
bark guage	
tree injector	
Biltmore stick	

Forestry Equipment Identification

Functions

- a. measure height and diameter of standing trees
- b. measures tree diameter
- c. extracts a core sample from logs
- d. measures bark thickness
- e. used on a staff to determine directions
- f. hand held device for determining directions
- g. measures volume of wood in a log
- h. used to roll logs by hand
- i. cuts trees and logs
- j. protects eyes
- k. lights backfires with liquid fuel
- l. carries and sprays water for fires
- m. measures angles and slopes
- n. applies herbicide into tree bark
- o. measures lengths
- p. chopping and grubbing firelines
- q. removes litter and small trees
- r. measures elevation
- s. planting seedlings
- t. measures area on maps
- u. protects heads
- v. lights backfires w/o liquid
- w. smothers fires
- x. measures angles
- y. marks plots

Invasive Forest Plant Identification

100 Points – seniors

50 Points – juniors

Participants will demonstrate their ability to identify invasive forest plant species. Five plants will be marked for juniors to identify. Seniors will have to identify 10 plants. A set of flash cards are available on the web at <http://win-with-wood.ca.uky.edu/>. The flash cards are to be used to learn the names and spelling of different invasive forest plant species prevalent in Kentucky. A list of potential Species will be listed on the back of score sheet.

Time: 25 – 30 minutes

Junior Scoring:

Plant Identification 6 points

Correct spelling 4 points

Total 10 point X 5 plants = 50 points

Senior Scoring:

Plant identification 6 points

Correct spelling 4 point

Total 10 points X 10 plants = 100 points

INVASIVE SPECIES LIST

Correct identification of the plants will be determined by the judges in the event of an incorrect spelling and the judge's decision is final. Spelling will be based on the following list. The spelling is to be exactly as it appears below including proper capitalization.

- musk thistle
- Japanese knotweed
- English ivy
- burning bush
- Chinese yam
- crown vetch
- poison hemlock
- Oriental bittersweet
- yellow and white sweet clover
- Chinese and European privet
- Japanese honeysuckle
- mimosa
- garlic mustard
- princess tree
- Johnson grass
- purple loosestrife
- bush honeysuckle
- winter creeper
- Japanese stilt grass
- kudzu
- autumn olive
- sericea lespedeza
- common reed
- Chinese silver grass
- multiflora rose
- tree of heaven

Green = Junior
 Blue = Senior

Invasive Forest Plant Identification Senior Score Card

Name _____ School _____

Each plant has a number associated with it. Correct spelling for the common name of each plant will be based on the list in the rule book. Seniors (Blue Sheet) will identify 10 plants for a total of 100 points and Juniors (Green Sheet) will identify 5 for a total of 50 points on the test. Point distribution for each segment is identified at the top of the chart. Do not write in the shaded areas. Print all answers.

Plant #	Plant Name	Correct ID 6 pts.	Correct Spelling 4 pts.
1.			
2			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
Totals:			
Total Score:			

Potential Species List:

musk thistle	yellow and white sweet clover	Chinese and European privet
garlic mustard	Japanese honeysuckle	mimosa
Japanese knotweed	princess tree	Johnson grass
English ivy	purple loosestrife	bush honeysuckle
burning bush	winter creeper	Japanese stilt grass
Chinese yam	kudzu	autumn olive
crown vetch	sericea lespedeza	common reed
poison hemlock	Chinese silver grass	tree of heaven
Oriental bittersweet	multiflora rose	

Green = Junior Blue = Senior

Invasive Forest Plant Identification Junior Score Card

Name _____ School _____

Each plant has a number associated with it. Correct spelling for the common name of each plant will be based on the list in the rule book. Seniors (Blue Sheet) will identify 10 plants for a total of 100 points and Juniors (Green Sheet) will identify 5 for a total of 50 points on the test. Point distribution for each segment is identified at the top of the chart. Do not write in the shaded areas. Print all answers.

Plant #	Plant Name	Correct ID 6 pts.	Correct Spelling 4 pts.
1.			
2			
3.			
4.			
5.			
	Totals:		
	Total Score:		

Potential Species List:

musk thistle	yellow and white sweet clover	Chinese and European privet
garlic mustard	Japanese honeysuckle	mimosa
Japanese knotweed	princess tree	Johnson grass
English ivy	purple loosestrife	bush honeysuckle
burning bush	winter creeper	Japanese stilt grass
Chinese yam	kudzu	autumn olive
crown vetch	sericea lespedeza	common reed
poison hemlock	Chinese silver grass	tree of heaven
Oriental bittersweet	multiflora rose	

Tree Identification

100 Points – 30 Minutes

Participants will demonstrate their ability to identify trees in eastern Kentucky. Five trees will be marked for juniors to identify. Seniors will have to identify ten trees. A key will be provided for the students to use to identify the specimens. In addition to identifying the trees, the students will have to answer two of the following questions about each tree.

- Is this tree a broadleaf or a conifer?
- Is the leaf margin entire, serrated, or lobed?
- Does the tree have alternate or opposite leaf arrangement?
- Does the tree have simple or compound leaves?
- Do the leaves or needles have flat scales?
- Are the leaves or needles in bundles or individually borne?
- Do the leaves or needles have two white lines on the bottom?

Time: 25-30 minutes

Junior Scoring:

- Tree Identification 8 points
- Question #1 4 points
- Question #2 4 points
- Correct Spelling 4 points
- Total 20 points x 5 trees = 100 points

Senior Scoring:

- Tree Identification 4 points
- Question #1 2 points
- Question #2 2 points
- Correct Spelling 2 points
- Total 10 points x 10 trees = 100 points

Correct identification of the trees will be determined by the judges in the event of an incorrect spelling. The judge's decision is final. Spelling will be based on the following list.

boxelder	ash	white oak
silver maple	holly	red oak
red maple	black walnut	honey locust
sugar maple	sweet gum	black locust
buckeye	yellow-poplar	Sassafras
pawpaw	cucumber tree	Elm
bitternut hickory	basswood	ginkgo
shagbark hickory	pitch pine	red cedar
mockernut hickory	white pine	Eastern hemlock
redbud	Virginia pine	Kentucky coffee tree
dogwood	sycamore	hawthorn
beech	cherry	Black Gum
Cotton Wood	Black Oak	Persimmon
Tulip Poplar		

Green = Junior Blue = Senior

Name _____ School _____

Tree Identification (Junior Division)

Each tree has a number associated with it. Each tree has two associated questions. Correct spelling for individual trees will be based on the list in the rule book. There is a total of 50 points on the test. Each tree consists of 10 points. Point distribution for each segment is identified at the top of the chart. Do not write in the shaded areas. Print all answers.

Tree #	Tree Name	Associated Tree Question	Correct ID 4 pts.	Correct Associated Question 2 pts. each	Correct Spelling 2 pts.
1.					
2.					
3.					
4.					
5.					
			Totals:		
				Total Score:	

Green = Junior
Blue = Senior

Name _____ School _____

Tree identification (Senior Division)

Each tree has a number associated with it. Each tree has two associated questions. Correct spelling for individual trees will be based on the list in the rule book. There is a total of 100 points on the test. Each tree consists of 10 points. Point distribution for each segment is identified at the top of the chart. Do not write in the shaded areas. Print all answers.

Tree #	Tree Name	Associated Tree Question	Correct ID 4 pts.	Correct Associated Question 2 pts. each	Correct Spelling 2 pts.
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Totals:			
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Total Score:	
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Tree Measurement

Junior Division – 50 points possible

Senior Division - 100 points

Time Limit - 45 minutes

Participants will demonstrate skills in determining standing tree measurements in order to estimate board foot volumes of designated trees. Due to the limited merchantable volume of the trees we have on the Quicksand research station we will provide the heights of the trees in merchantable logs to help the student derive the tree volume. The Doyle Rule will be used to estimate tree volume.

Time: Each participant will have 45 minutes to complete the exercise.

Scoring: Youth will identify designated trees and estimate their diameters, we will provide on the score sheet the merchantable heights (to ten-inch top diameter) and the youth will use these numbers to derive tree board foot (bdft) volumes.

- 4 points for each correct DBH measurement, 2 points for each DBH measurement +/- one inch deviation from correct answer.
- 6 points for correct tree volume, 2 points for each board foot (bdft) measurement +/- 5 bdft deviation from correct answer.

The total points will be calculated with a maximum score of 50 points for junior contestants and 100 points for senior contestants.

Equipment: Youth will need a clipboard and pencil, a calculator is optional. Biltmore sticks with volume tables in Doyle scale on them, will be supplied at the contest.

Green= Junior
Blue=Senior

TREE MEASUREMENT SCORE SHEET

School Name:	Contestant's Name/Number:
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No.	DBH (4 pts.)	Number of logs in tree	Volume Board Feet (6 pts.)	Score
1		1/2		
2		1		
3		1 1/2		
4		2		
5		2 1/2		
Junior Contest Score				
Senior Contest Score				

Scoring: Seniors (Contestant Score _____ X 2 = Senior Contest Score)

Important Notes

* Log and Tree scale (Doyle rule) volume estimates are on your scale stick. Be sure to use the Log scale side for diameter and log volume, and the tree scale side to estimate DBH and volume for standing trees.

*DBH= Diameter Breast Height (4 ½ feet above ground).

*Tree Scale (International ¼ inch rule) will be on back of Tree Measurement score sheet.

*Copy of Tree Scale (Doyle rule)

Volume of Trees, Doyle Log Scale Form Class 78								
	Number of 16' logs							
	1/2	1	1- 1/2	2	2 - 1/2	3	3 - 1/2	4
DBH (inches)	Volume in board feet							
10	8	14	17	20	21	22	-	-
11	13	22	27	32	35	38	-	-
12	18	29	36	43	48	53	54	56
13	24	38	48	59	66	73	76	80
14	32	48	62	75	84	93	98	103
15	36	60	78	96	108	121	128	136
16	40	72	94	116	132	149	160	170
17	48	86	113	140	161	182	196	209
18	60	100	132	164	190	215	232	248
19	72	118	156	195	225	256	276	297
20	84	135	180	225	261	297	322	346
21	98	154	207	260	302	344	374	404
22	112	174	234	295	344	392	427	462
23	120	195	264	332	388	444	483	522
24	128	216	293	370	433	496	539	582
25	145	241	328	414	486	558	609	660
26	162	266	362	459	539	619	678	737
27	181	292	398	505	594	684	749	814
28	200	317	434	551	651	750	820	890
29	221	346	475	604	714	824	902	980
30	242	376	517	658	778	898	984	1069
31	265	408	562	717	850	983	1080	1176
32	288	441	608	776	922	1068	1176	1283
33	300	474	654	835	994	1152	1268	1385
34	312	506	700	894	1064	1235	1361	1487
35	338	544	754	964	1149	1334	1472	1610
36	364	581	808	1035	1234	1434	1583	1732
37	392	618	860	1102	1318	1534	1694	1854
38	420	655	912	1170	1402	1635	1805	1975
39	435	698	974	1250	1498	1746	1932	2118
40	450	740	1035	1330	1594	1858	2059	2260

Wildlife Identification

Senior 100 points – 30 minutes

Junior 50 points – 15 minutes

Participants will demonstrate their ability to identify various species of wildlife in Kentucky. Seniors will have 10 specimens to identify and juniors will have 5 specimens. Specimens may be whole animals, animal parts (skins, skulls, claws, tails, feet, teeth, feathers, scales, etc.), evidence of feeding activity, eggs, scat, or tracks.

Scoring: Six points will be given for each item identified correctly. Each item must be correctly identified by common name and whether it is a mammal, fish, bird, or reptile. Points will be awarded as follows. Answers must be PRINTED. List of possible species will be printed on back of score sheet.

<u>Seniors</u>	<u>Juniors</u>	
6 points	6 points	for correct identification
2 points	2 points	for identifying mammal, fish, bird, or reptile
2 points	2 points	for correct spelling

Correct identification of the items and spelling will be determined by the judges. The judge's decision is final. Spelling will be based on the following list. Ten samples will be pulled from this list for the seniors and five samples will be pulled for the juniors.

Samples:

Mammal: red fox, gray fox, beaver, black bear, coyote, wolf, bobcat, fox squirrel, gray squirrel, cougar, raccoon, flying squirrel, opossum, chipmunk, striped skunk, spotted skunk, cottontail rabbit, whitetail deer, long tail weasel, groundhog, least weasel, mink, river otter, muskrat, and elk.

Fish: bluegill, green sunfish, rock bass, redear sunfish, longear sunfish, warmouth, rainbow trout, brown trout, largemouth bass, smallmouth bass, Kentucky bass, white bass, striped bass, yellow bass, hybrid striped bass, white crappie, black crappie, muskellunge, sucker, drum, carp, blue catfish, channel catfish, flathead catfish, bullhead catfish, walleye, and sauger.

Bird: turkey, grouse, quail, dove, duck, goose, crow, woodcock, whippoorwill, cardinal, wood thrush, bluebird, screech owl, great horned owl, barred owl, barn owl, red-tail hawk, red-shouldered hawk, Cooper's hawk, bald eagle, kestrel, osprey, peregrine falcon, blue jay, kingfisher, blue heron, sandhill crane, and robin.

Reptile: box turtle, snapping turtle, softshell turtle, black rat snake, black racer, eastern garter snake, smooth earth snake, brown snake, diamondback water snake, northern water snake, copperbelly water snake, ringneck snake, timber rattlesnake, copperhead, cottonmouth, pigmy rattlesnake, green snake, milk snake, black kingsnake, hognose snake, corn snake, skink, and fence li

Green = Junior
Blue = Senior

Name _____ School _____

Wildlife Identification

Each sample has a number associated with it. Be sure to put the common name of the animal on the correct line. You will receive 6 points for correct identification, 2 points for correct spelling, and 2 points for telling whether it is a mammal, fish, bird, or reptile. The shaded columns are for judges' use only. Do not write in those columns. Answers must be PRINTED.

#	Wildlife ID	ID (6 pts.)	Spelling (2 pts.)	Mammal, fish, bird, or reptile.	Type (2 pts.)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
	Totals				

Total _____

List of possible Wildlife species:

red fox, gray fox, beaver, black bear, coyote, wolf, bobcat, fox squirrel, gray squirrel, cougar, raccoon, flying squirrel, opossum, chipmunk, bluegill, green sunfish, rock bass, redear sunfish, longear sunfish, warmouth, turkey, grouse, quail, dove, duck, goose, crow, woodcock, whippoorwill, cardinal, box turtle, snapping turtle, softshell turtle, black rat snake, black racer, eastern garter snake, striped skunk, spotted skunk, cottontail rabbit, whitetail deer, long tail weasel, groundhog, least weasel, mink, rainbow trout, brown trout, largemouth bass, smallmouth bass, Kentucky bass, white bass, wood thrush, bluebird, screech owl, great horned owl, barred owl, barn owl, red-tail hawk, smooth earth snake, brown snake, diamondback water snake, northern water snake, river otter, muskrat, elk, striped bass, yellow bass, hybrid striped bass, white crappie, black crappie, red-shouldered hawk, Cooper's hawk, bald eagle, kestrel, osprey, peregrine falcon, copperbelly water snake, ringneck snake, timber rattlesnake, copperhead, muskellunge, sucker, drum, carp, blue catfish, channel catfish, flathead catfish, bullhead catfish, walleye, and sauger, blue jay, kingfisher, blue heron, sandhill crane, and robin, cottonmouth, pygmy rattlesnake, green snake, milk snake, black kingsnake, hognose snake, corn snake, skink, and fence lizard.

Woodworking Tool Identification

Senior 100 points – 30 minutes

Juniors 50 points – 15 minutes

Participants will demonstrate their ability to identify tools used in woodworking, as well as their function. Ten items will be on display for senior participants to identify. Of these 20 tools five will be marked for junior participants.

Scoring: Five points will be given for each item identified correctly. Points will be awarded as follows.

4 points for correct identification

4 points for correct function

2 point for correct spelling

Correct identification of the items, function and spelling will be determined by the judges. The judge's decision is final. Spelling will be based on the following list. Answers must be PRINTED.

Equipment and function list:

Chisel	a manual hand tool used for cutting joinery
Awl	sets a small hole used for starting a drill bit
Drill handle	a manual tool used for drilling holes for screws and nails
Brace and Bit	a manual tool used for drilling large holes for big screws and bolts
Compass/Dividers	a manual tool used for layout work, such as, marking holes for location and size
Hammer	a manual tool used for driving nails and removing nails
Pliers	a multipurpose tool uses for turning, twisting, and loosening
Plane	a manual tool used to smooth the surface of a piece of wood
File	a manual tool used for shaping wood and sharpening the edges of some tools
Screw driver	a manual tool used for turning or tightening screws and removing screws
Square	a manual tool used for marking and inspecting perpendicular cuts
Reciprocating saw	an electric hand held tool used for cutting awkwardly positioned objects
Hand saw	a manual tool used for cutting objects into pieces
Tape measure	a tool used for measuring objects and marking position of cuts
Electric sander	a hand held electric tool used for smoothing and flattening surfaces for finishing
Electric hand drill	a hand held tool used for drilling holes for inserting screws and bolts
Saber saw	an electric hand held tool used for cutting irregular shapes
Jig saw	a machine used for cutting very detailed irregular shapes
Belt sander	an electric hand held tool used for smoothing and flattening surfaces (edges)
Electric hand planer	a hand held tool used for smoothing or removing wood from the edge of a door

Router	a hand held electric tool used for profiling the edge of a piece of wood
Circular saw	a hand held electric tool used for cutting wood into two pieces
Band saw	a machine used for cutting circles and irregular shapes
Drill press	a machine used for drilling precise holes
Jointer	a powerful machine used to smooth and flatten a surface on a piece of wood
Wood lathe	a machine used to shape a cylindrical piece of wood
Radial arm saw	a machine used to precisely cut wood
Disc and belt sander	a machine used to smooth the ends and surfaces of wood
Table saw	a machine used to precisely cut wood
Bench grinder	a machine used to sharpen metal woodworking tools

Green = Junior Blue = Senior

Name _____ School _____

Woodworking Tool Identification

Each tool has a number associated with it. Be sure to put the name of the tool and its function on the correct line. You will receive 2 points for correct identification, 1 point for correct spelling, and 2 points for correct function. The shaded columns are for judge's use only. Do not write in those columns. Please PRINT all your answers. You have 75 seconds to identify each tool.

#	Tool ID	ID (2 pt.)	Spelling (1 pts.)	Function (write in the letter from the list below)	Func. (2 pts.)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Totals					
				Total	

*Back of Woodworking Tool Identification Score sheet

Correct identification of the items, function and spelling will be determined by the judges. The judge's decision is final. Spelling will be based on the following list. Answers must be PRINTED.

Equipment and function list:

Pliers	Router
Plane	Circular saw
Hammer	Table saw
Chisel	Band saw
Compass/Dividers	Drill press
Belt sander	Jointer
Jig saw	Wood lathe
Saber saw	Disc and belt sander
Awl	Radial arm saw
Drill handle	Tape measure
Brace and Bit	Electric hand planer
File	Bench grinder
Screw driver	Reciprocating saw
Square	Hand saw
Electric sander	Electric hand drill

- A. - a manual hand tool used for cutting joinery
- B. - sets a small hole used for starting a drill bit
- C. - a manual tool used for drilling holes for screws and nails
- D. - a manual tool used for drilling large holes for big screws and bolts
- E. - a manual tool used for layout work, such as, marking holes for location and size
- F. - a manual tool used for driving nails and removing nails
- G. - a multipurpose tool uses for turning, twisting, and loosening
- H. - a manual tool used to smooth the surface of a piece of wood
- I. - a manual tool used for shaping wood and sharpening the edges of some tools
- J. - a manual tool used for turning or tightening screws and removing screws
- K. - a manual tool used for marking and inspecting perpendicular cuts
- L. - an electric hand held tool used for cutting awkwardly positioned objects
- M. - a manual tool used for cutting objects into pieces
- N. - a tool used for measuring objects and marking position of cuts
- O. - a hand held electric tool used for smoothing and flattening surfaces for finishing
- P. - a hand held electric tool used for drilling holes for inserting screws and bolts
- Q. - an electric hand held tool used for cutting irregular shapes
- R. - a machine used for cutting very detailed irregular shapes
- S. - an electric hand held tool used for smoothing and flattening surfaces (edges)
- T. - a hand held electric tool used for smoothing or removing wood from the edge of a door
- U. - a hand held electric tool used for profiling the edge of a piece of wood
- V. - a hand held electric tool used for cutting wood into two pieces
- W. - a machine used to shape a cylindrical piece of wood
- X. - a machine used for cutting circles and irregular shapes
- Y. - a machine used for drilling precise holes
- Z. - a powerful machine used to smooth and flatten a surface on a piece of wood
- AA. - a machine used to precisely cut wood
- BB. - a machine used to smooth the ends and surfaces of wood
- CC. - a machine used to precisely cut wood.
- DD. - a machine used to sharpen metal woodworking tools.

Wood Identification

Senior 100 points – 30 minutes

Junior 50 points – 15 minutes

Participants will demonstrate their ability to identify various Eastern hardwoods and softwoods used in the forest products industry in Kentucky. Seniors will have 10 specimens to identify and juniors will have 5 specimens.

Scoring: Six points will be given for each item identified correctly. Each item must be correctly identified by common name and whether it is a hardwood or softwood species. Knife cutting will not be allowed. Cuts in the wood samples to be identified will be made prior to the event. Points will be awarded as follows. Answers must be PRINTED.

<u>Seniors</u>	<u>Juniors</u>	
6 points	6 points	for correct identification
2 points	2 points	for identifying hardwood or softwood
2 points	2 points	for correct spelling

Correct identification of the items and spelling will be determined by the judges. The judge's decision is final. Spelling will be based on the following list. Ten samples will be pulled from this list of twenty species for the seniors and five of the sample in red will be pulled for the juniors.

Samples:

ash	hardwood
black walnut	hardwood
black cherry	hardwood
American chestnut	hardwood
soft maple	hardwood
hard maple	hardwood
birch	hardwood
white oak	hardwood
yellow-poplar	hardwood
red oak	hardwood
gum	hardwood
sycamore	hardwood
hickory	hardwood
American beech	hardwood
American basswood	hardwood
hemlock	softwood
bald cypress	softwood
Eastern red cedar	softwood
white pine	softwood
Southern yellow pine	softwood

Green = Junior
Blue = Senior

Name _____ School _____

Wood Identification

Each wood sample has a number associated with it. Be sure to put the common name of the wood on the correct line. You will receive 6 points for correct identification, 2 points for correct spelling, and 2 points for telling whether it is a hardwood or softwood. The shaded columns are for judges' use only. Do not write in those columns. Answers must be PRINTED.

#	Wood ID	ID (6 pts.)	Spelling (2 pts.)	Hardwood or Softwood	Type (2 pts.)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
	Totals				

Total _____

Individual Woodworking Project

Participants will demonstrate their ability design and produce an item made of wood. This item is to be completed and must arrive for judging by September 25, 2023. Students entering this competition are allowed to participate in other events as well. Items will be returned. We cannot be responsible for any damage to or losses of any item.

Scoring: The item produced must meet the following minimum criteria in order to qualify for competition:

1. Produced with 4 pieces of stock (any species or composite)
2. Use of least one type of wood joint
3. Use of three (3) different tools

Each item will be judged as follows:

- 20 points for form and function
- 20 points for complexity of design
- 20 points for stain and/or finish quality
- 20 points for overall quality of workmanship and appearance
- 20 points for correct presentation of the information form (see attached)

Individual Woodworking Project

Fill out this form completely and correctly and return with your project.
Please PRINT. This is worth 20 points in the judging of your project.

Name: _____

Club/School: _____

Teacher/Leader: _____

Type of wood or composite used: _____

Names and placement of joints used: _____

Color and type of stains and/or finishes: _____

Names of the 3 tools used:

1.

2.

3.

I, _____, pledge that the project submitted for
judging is my individual work.

Individual Woodworking Project

Minimum requirements to qualify:

1. 4 pieces of stock
2. 1 type of wood joints
3. Arrived on site of competition by September 25, 2023.

Judging of the item

Form and function

Function	5
Proportional	5
Balance	5
Harmony in style	5

Complexity of design

(Judging will be on a range from 1 – 20. Complexity of design will be based on any of the following criteria: use of more than 1 joint type, use of complex joints, difficulty of assembly, curves or intricate shapes, carvings, and other intricate design features.)

20

Stains and finishes

Sanding quality	5
Staining (consistency of color, lack of blotching, runs, etc)	5
Finish coats (lack of runs, even thickness, sheen, lack of brush marks, etc)	5
Overall finishing quality	5

Overall quality or workmanship and appearance

(Judging will be on a range of 1 – 20. 1 pt will be deducted for each defect in machining, assembly, jointery, gluing, fastening, hardware application or use)

20

Information Sheet

All information must be complete, PRINTED, and the form must be signed in order to qualify for the total in this category) (deduct 1 point for each error in spelling, grammar or unreadable information)

20

Total

Team Woodworking Project

Minimum requirements to qualify:

1. 8 pieces of stock
2. 2 types of wood joints
3. Produced with 6 different machines
4. Arrived on site of competition by September 25, 2023.

Judging of the item

Form and function

Function	5
Proportional	5
Balance	5
Harmony in style	5

Complexity of design

(Judging will be on a range from 1 – 20. Complexity of design will be based on any of the following criteria: use of more than 2 joint types, use of complex joints, difficulty of assembly, curves or intricate shapes, carvings, and other intricate design features.)

20

Stains and finishes

Sanding quality	5
Staining (consistency of color, lack of blotching, runs, etc)	5
Finish coats (lack of runs, even thickness, sheen, lack of brush marks, etc)	5
Overall finishing quality	5

Overall quality or workmanship and appearance

(Judging will be on a range of 1 – 20. 1 pt will be deducted for each defect in machining, assembly, joinery, gluing, fastening, hardware application or use)

20

Information Sheet

All information must be complete, PRINTED, and the form must be signed in order to qualify for the total in this category) (deduct 1 point for each error in spelling, grammar or unreadable information)

20

Total

Team Woodworking Project

Participants will demonstrate their ability to design and mass produce an item made of wood. This item is to be completed and sent for judging by September 25, 2023. This will be produced as a group from each club or school. Students entering this competition are allowed to participate in other events as well. Winners will be presented a plaque in honor of their school. Items will be returned. We cannot be responsible for any damage to or losses of any item.

Scoring: The item produced must meet the following minimum criteria in order to qualify for competition:

1. Produced with pieces of stock (any species or composite)
2. Use of one type of wood joint

Each item will be judged as follows:

- 20 points for form and function
- 20 points for complexity of design
- 20 points for stain and/or finish quality
- 20 points for overall quality of workmanship and appearance
- 20 points for correct presentation of the information form (see attached)

Team Woodworking Project

Fill out this form completely and correctly and return with completed project. Please PRINT. This is worth 20 points in the judging of your project.

Name of class: _____

School: _____

Teacher: _____

Type of wood or composite used: _____

Names and placement of joints used: _____

Color and type of stains and/or finishes: _____

Names of tools used:

SCHOOL/CLUB REGISTRATION SECTION

WIN WITH WOOD DAY

Oct. 3, 2023

THE UNIVERSITY OF KENTUCKY

ROBINSON CENTER FOR APPALACHIAN RESOURCE SUSTAINABILITY

WOOD UTILIZATION CENTER

School/Club name: _____

Address: _____

Phone number: _____

FAX number: _____

Teacher/Contact name: _____

Total Number of Competitors: _____

Please list the list names of competitors on the attached **Event Participation Form**. Please keep in mind that each event has a junior level (age 9-13) and a senior level (age 14-18) **age as of Jan. 1, 2023. Upon arrival on the day of the event, each teacher/contact should report to the registration desk and report any cancellations and/or substitutions.**

Please return the school participation registration form before **Sept. 25, 2023**, to: Betty Hardin at 130 Robinson Road, Jackson, KY 41339. For more information contact: Betty at (606) 666-2438 ext.232 or email betty.hardin@uky.edu

*W= white, B= Black or African American, A=Asian/Pacific Islander, N= Native American Indian/Alaska Native,
O=Other/More than 1 race
**M=Male, F=Female
***Y=Yes, N=No



Disclosure of race, gender and ethnicity (Hispanic/Non-Hispanic)
is voluntary

