

2019 CONTEST SCORESHEETS

Scoresheets included:

- **Trees**
 - ✓ [Junior](#) 15 pts.
 - ✓ [Intermediate](#) 20 pts.
 - ✓ [Senior](#) 30 pts.

- **Plants**
 - ✓ [Junior](#) 10 pts.
 - ✓ [Intermediate](#) 15 pts.
 - ✓ [Senior](#) 20 pts.

- **Forest Health**
 - ✓ [Junior](#) 15 pts.
 - ✓ [Intermediate](#) 20 pts.
 - ✓ [Senior](#) 30 pts.

- **Wildlife on the Forest Hike**
 - ✓ [Junior](#) 20 pts.
 - ✓ [Intermediate](#) 20 pts.

- **Forest Ecosystems (Sand Pine Scrub and Pine Flatwoods for 2019)**
 - ✓ [Junior](#) 20 pts.
 - ✓ [Intermediate](#) 30 pts.

- **Map & Compass**
 - ✓ [Junior](#) 20 pts.
 - ✓ [Intermediate](#) 20 pts.
 - ✓ [Senior](#) 22 pts.

- **Tree Measurement**
 - ✓ [Senior](#) 28 pts.

- **Forest Management (Senior Quiz)**
 - ✓ [Senior](#) 25 pts.

How to update this document:

- To update the year at the top of the page, go to View --> Header and Footer, change the number, and then close the header. All of the other pages will inherit that change. The footer date changes automatically every time you save the document.
- Change the ecosystem names on this page and on the answer sheets to the appropriate ones for the year.
- The individual scoresheets are mostly set up using tables. If you need to alter a particular scoresheet, it will help if you go to Table and turn on Gridlines.
- Save the document and then remove this section before you print the PDFs.

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 15 tree samples. For each tree sample (labeled A through O), find the correct species in the list below and then write the number of the species in the space next to the appropriate letter.

Junior - Tree ID	
BADGE NUMBER:	
TOTAL SCORE:	/ 15

#	Common Name	Scientific Name
1	American Holly	<i>Ilex opaca</i> var. <i>opaca</i>
2	American Sycamore	<i>Platanus occidentalis</i>
3	Bald Cypress	<i>Taxodium distichum</i>
4	Eastern Redcedar	<i>Juniperus virginiana</i>
5	Flowering Dogwood	<i>Cornus florida</i>
6	Laurel Oak	<i>Quercus laurifolia</i>
7	Live Oak	<i>Quercus virginiana</i>
8	Loblolly Pine	<i>Pinus taeda</i>
9	Longleaf Pine	<i>Pinus palustris</i>
10	Melaleuca	<i>Melaleuca quinquenervia</i>
11	Pecan	<i>Carya illinoensis</i>
12	Pignut Hickory	<i>Carya glabra</i>
13	Red Maple	<i>Acer rubrum</i>
14	Sassafras	<i>Sassafras albidum</i>
15	Southern Magnolia	<i>Magnolia grandiflora</i>
16	Sweetgum	<i>Liquidambar styraciflua</i>
17	Tuliptree	<i>Liriodendron tulipifera</i>
18	Turkey Oak	<i>Quercus laevis</i>
19	Water Oak	<i>Quercus nigra</i>
20	Waxmyrtle	<i>Myrica cerifera</i>

A. _____	I. _____
B. _____	J. _____
C. _____	K. _____
D. _____	L. _____
E. _____	M. _____
F. _____	N. _____
G. _____	O. _____
H. _____	

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 20 tree samples. For each tree sample (labeled A through T), find the correct species in the list below and then write the number of the species in the space next to the appropriate letter.

Intermediate - Tree ID	
BADGE NUMBER: _____	
TOTAL SCORE: _____	/ 20

#	Common Name	Scientific Name
1	American Elm	<i>Ulmus americana</i>
2	American Holly	<i>Ilex opaca</i> var. <i>opaca</i>
3	American Sycamore	<i>Platanus occidentalis</i>
4	Bald Cypress	<i>Taxodium distichum</i>
5	Black Cherry	<i>Prunus serotina</i>
6	Black Walnut	<i>Juglans nigra</i>
7	Boxelder	<i>Acer negundo</i>
8	Chinese Tallow	<i>Triadica sebifera</i>
9	Common Persimmon	<i>Diospyros virginiana</i>
10	Eastern Redcedar	<i>Juniperus virginiana</i>
11	Flowering Dogwood	<i>Cornus florida</i>
12	Laurel Oak	<i>Quercus laurifolia</i>
13	Live Oak	<i>Quercus virginiana</i>
14	Loblolly Pine	<i>Pinus taeda</i>
15	Longleaf Pine	<i>Pinus palustris</i>
16	Melaleuca	<i>Melaleuca quinquenervia</i>
17	Pecan	<i>Carya illinoensis</i>
18	Pignut Hickory	<i>Carya glabra</i>
19	Red Maple	<i>Acer rubrum</i>
20	Sassafras	<i>Sassafras albidum</i>
21	Slash Pine	<i>Pinus elliotii</i>
22	Southern Magnolia	<i>Magnolia grandiflora</i>
23	Southern Red Oak	<i>Quercus falcata</i>
24	Sweetgum	<i>Liquidambar styraciflua</i>
25	Tuliptree	<i>Liriodendron tulipifera</i>
26	Turkey Oak	<i>Quercus laevis</i>
27	Water Oak	<i>Quercus nigra</i>
28	Waxmyrtle	<i>Myrica cerifera</i>

- | | |
|----------|----------|
| A. _____ | K. _____ |
| B. _____ | L. _____ |
| C. _____ | M. _____ |
| D. _____ | N. _____ |
| E. _____ | O. _____ |
| F. _____ | P. _____ |
| G. _____ | Q. _____ |
| H. _____ | R. _____ |
| I. _____ | S. _____ |
| J. _____ | T. _____ |

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: This station has 30 tree samples. For each sample (labeled A through DD), identify the plant material and then write the common name in the space next to the appropriate letter. Please print neatly and be sure your answer is legible. Common names must be the ones used on the Florida 4-H Forest Ecology website and must be complete. (E.g., "maple" is not a correct answer for "red maple.")

Senior - Tree ID	
BADGE NUMBER:	
TOTAL SCORE:	/ 30

A. _____

P. _____

B. _____

Q. _____

C. _____

R. _____

D. _____

S. _____

E. _____

T. _____

F. _____

U. _____

G. _____

V. _____

H. _____

W. _____

I. _____

X. _____

J. _____

Y. _____

K. _____

Z. _____

L. _____

AA. _____

M. _____

BB. _____

N. _____

CC. _____

O. _____

DD. _____

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 10 plant samples. For each plant sample (labeled A through J), find the correct species in the list below and then write the number of the species in the space next to the appropriate letter.

Junior - Plant ID	
BADGE NUMBER:	
TOTAL SCORE:	/ 10

#	Common Name	Scientific Name
1	Air-potato	<i>Dioscorea bulbifera</i>
2	Beautyberry	<i>Callicarpa</i> spp.
3	Blackberry	<i>Rubus</i> spp.
4	Cabbage palm	<i>Sabal palmetto</i>
5	Cogongrass	<i>Imperata cylindrica</i>
6	Coontie	<i>Zamia pumila</i>
7	Coralbean	<i>Erythrina herbacea</i>
8	Gallberry	<i>Ilex glabra</i>
9	Greenbrier	<i>Smilax</i> spp.
10	Kudzu	<i>Pueraria montana</i> var. <i>lobata</i>
11	Lizard's-tail	<i>Saururus cernuus</i>
12	Muscadine grape	<i>Vitis rotundifolia</i>
13	Poison ivy	<i>Toxicodendron radicans</i>
14	Poison-oak	<i>Toxicodendron pubescens</i>
15	Pricklypear	<i>Opuntia humifusa</i>
16	Resurrection fern	<i>Pleopeltis polypodioides</i> var. <i>michauxiana</i>
17	Saw palmetto	<i>Serenoa repens</i>
18	Spanish moss	<i>Tillandsia usneoides</i>
19	Tread softly	<i>Cnidocolus stimulosus</i>
20	Water hyacinth	<i>Eichhornia crassipes</i>
21	Wiregrass	<i>Aristida stricta</i>

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____
- I. _____
- J. _____

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 15 plant samples. For each plant sample (labeled A through O), find the correct species in the list below and then write the number of the species in the space next to the appropriate letter.

Intermediate - Plant ID

BADGE NUMBER: _____

TOTAL SCORE: _____ / 15

#	Common Name	Scientific Name
1	Air-potato	<i>Dioscorea bulbifera</i>
2	Beautyberry	<i>Callicarpa</i> spp.
3	Blackberry	<i>Rubus</i> spp.
4	Bracken fern	<i>Pteridium aquilinum</i>
5	Buttonbush	<i>Cephalanthus occidentalis</i>
6	Cabbage palm	<i>Sabal palmetto</i>
7	Cogongrass	<i>Imperata cylindrica</i>
8	Coontie	<i>Zamia pumila</i>
9	Coralbean	<i>Erythrina herbacea</i>
10	Fetterbush	<i>Lyonia lucida</i>
11	Florida rosemary	<i>Ceratiola ericoides</i>
12	Gallberry	<i>Ilex glabra</i>
13	Greenbrier	<i>Smilax</i> spp.
14	Ground blueberry	<i>Vaccinium myrsinites</i>
15	Japanese climbing fern	<i>Lygodium japonicum</i>
16	Japanese honeysuckle	<i>Lonicera japonica</i>
17	Kudzu	<i>Pueraria montana</i> var. <i>lobata</i>
18	Lizard's-tail	<i>Saururus cernuus</i>
19	Muscadine grape	<i>Vitis rotundifolia</i>
20	Poison ivy	<i>Toxicodendron radicans</i>
21	Poison-oak	<i>Toxicodendron pubescens</i>
22	Pricklypear	<i>Opuntia humifusa</i>
23	Resurrection fern	<i>Pleopeltis polypodioides</i> var. <i>michauxiana</i>
24	Saw palmetto	<i>Serenoa repens</i>
25	Spanish moss	<i>Tillandsia usneoides</i>
26	Tread softly	<i>Cnidioscolus stimulosus</i>
27	Virginia creeper	<i>Parthenocissus quinquefolia</i>
28	Water hyacinth	<i>Eichhornia crassipes</i>
29	Winged sumac	<i>Rhus copallinum</i>
30	Wiregrass	<i>Aristida stricta</i>
31	Yellow jessamine	<i>Gelsemium sempervirens</i>

A. _____ I. _____

B. _____ J. _____

C. _____ K. _____

D. _____ L. _____

E. _____ M. _____

F. _____ N. _____

G. _____ O. _____

H. _____

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 20 plant samples. For each plant sample (labeled A through T), find the correct species in the list below and then write the number of the species in the space next to the appropriate letter.

#	Common Name	Scientific Name
1	Air-potato	<i>Dioscorea bulbifera</i>
2	Beautyberry	<i>Callicarpa</i> spp.
3	Blackberry	<i>Rubus</i> spp.
4	Bracken fern	<i>Pteridium aquilinum</i>
5	Buttonbush	<i>Cephalanthus occidentalis</i>
6	Cabbage palm	<i>Sabal palmetto</i>
7	Cogongrass	<i>Imperata cylindrica</i>
8	Coontie	<i>Zamia pumila</i>
9	Coral ardisia	<i>Ardisia crenata</i>
10	Coralbean	<i>Erythrina herbacea</i>
11	Fetterbush	<i>Lyonia lucida</i>
12	Florida rosemary	<i>Ceratiola ericoides</i>
13	Gallberry	<i>Ilex glabra</i>
14	Greenbrier	<i>Smilax</i> spp.
15	Ground blueberry	<i>Vaccinium myrsinites</i>
16	Japanese climbing fern	<i>Lygodium japonicum</i>
17	Japanese honeysuckle	<i>Lonicera japonica</i>
18	Kudzu	<i>Pueraria montana</i> var. <i>lobata</i>
19	Lizard's-tail	<i>Saururus cernuus</i>
20	Muscadine grape	<i>Vitis rotundifolia</i>
21	Poison ivy	<i>Toxicodendron radicans</i>
22	Poison-oak	<i>Toxicodendron pubescens</i>
23	Pricklypear	<i>Opuntia humifusa</i>
24	Primrose-willow	<i>Ludwigia peruviana</i>
25	Resurrection fern	<i>Pleopeltis polypodioides</i> var. <i>michauxiana</i>
26	Saltbush	<i>Baccharis</i> spp.
27	Saw palmetto	<i>Serenoa repens</i>
28	Saw-grass	<i>Cladium jamaicense</i>
29	Spanish moss	<i>Tillandsia usneoides</i>
30	Switchcane	<i>Arundinaria gigantea</i>
31	Tread softly	<i>Cnidioscolus stimulosus</i>
32	Virginia creeper	<i>Parthenocissus quinquefolia</i>
33	Water hyacinth	<i>Eichhornia crassipes</i>
34	Wild azalea	<i>Rhododendron canescens</i>
35	Winged sumac	<i>Rhus copallinum</i>
36	Wiregrass	<i>Aristida stricta</i>
37	Yellow jessamine	<i>Gelsemium sempervirens</i>

Senior - Plant ID	
BADGE NUMBER: _____	
TOTAL SCORE:	_____ / 20

- | | |
|----------|----------|
| A. _____ | K. _____ |
| B. _____ | L. _____ |
| C. _____ | M. _____ |
| D. _____ | N. _____ |
| E. _____ | O. _____ |
| F. _____ | P. _____ |
| G. _____ | Q. _____ |
| H. _____ | R. _____ |
| I. _____ | S. _____ |
| J. _____ | T. _____ |

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 15 insect, disease, and stress samples. For each sample (labeled A through O), find the correct identification in the list below and then write the number in the space next to the appropriate letter.

Junior - Forest Health	
BADGE NUMBER:	
TOTAL SCORE:	/ 15

Insects

1. Ambrosia beetle
2. Black turpentine beetle
3. Cicadas
4. Eastern tent caterpillar
5. Fall webworm
6. Southern pine beetle

Diseases

7. Armillaria root rot
8. Cedar-apple rust
9. Fusiform rust
10. Hypoxylon canker
11. Needlecast
12. Pitch canker

Stresses

13. Catface
14. Lightning
15. Mistletoe

- | | |
|----------|----------|
| A. _____ | I. _____ |
| B. _____ | J. _____ |
| C. _____ | K. _____ |
| D. _____ | L. _____ |
| E. _____ | M. _____ |
| F. _____ | N. _____ |
| G. _____ | O. _____ |
| H. _____ | |

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 20 insect, disease, and stress samples. For each sample (labeled A through T), find the correct identification in the list below and then write the number in the space next to the appropriate letter.

Intermediate - Forest Health

BADGE NUMBER:

TOTAL SCORE: / 20

Insects

- | | |
|-----------------------------|----------------------|
| 1. Ambrosia beetle | 13. Cedar-apple rust |
| 2. Black turpentine beetle | 14. Fireblight |
| 3. Cicadas | 15. Fusiform rust |
| 4. Eastern tent caterpillar | 16. Hypoxylon canker |
| 5. Fall webworm | 17. Needlecast |
| 6. Ips beetle | 18. Oak leaf blister |
| 7. Pine sawflies | 19. Pitch canker |
| 8. Pine tip moth | |
| 9. Pine webworm | |
| 10. Southern pine beetle | |

Stresses

20. Catface
21. Galls
22. Lightning
23. Mistletoe

Diseases

11. Annosus root rot
12. Armillaria root rot

- | | |
|----------|----------|
| A. _____ | K. _____ |
| B. _____ | L. _____ |
| C. _____ | M. _____ |
| D. _____ | N. _____ |
| E. _____ | O. _____ |
| F. _____ | P. _____ |
| G. _____ | Q. _____ |
| H. _____ | R. _____ |
| I. _____ | S. _____ |
| J. _____ | T. _____ |

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will be identifying 30 insect, disease, and stress samples. For each sample (labeled A through DD), find the correct identification in the list below and then write the number in the space next to the appropriate letter.

Senior - Forest Health	
BADGE NUMBER:	
TOTAL SCORE:	/ 30

Insects

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Ambrosia beetle 2. Black turpentine beetle 3. Cicadas 4. Cottonwood leaf beetle 5. Cypress twig gall midge 6. Eastern tent caterpillar 7. Fall webworm 8. Ips beetle 9. Pine sawflies 10. Pine tip moth 11. Pine webworm 12. Scale insects 13. Southern pine beetle 14. Sycamore lacebug 15. Twig girdler | <ol style="list-style-type: none"> 19. Cedar-apple rust 20. Fireblight 21. Fusiform rust 22. Hispidus canker 23. Hypoxylon canker 24. Laurel wilt 25. Needlecast 26. Oak leaf blister 27. Pitch canker 28. Powdery mildew 29. Sycamore anthracnose 30. Tar spot |
|--|---|

Diseases

- | | |
|--|---|
| <ol style="list-style-type: none"> 16. Annosus root rot 17. Armillaria root rot 18. Bacterial leaf scorch | <h3 style="margin: 0;">Stresses</h3> <ol style="list-style-type: none"> 31. Catface 32. Galls 33. Lightning 34. Mistletoe 35. Witches'-broom |
|--|---|

- | | |
|----------|-----------|
| A. _____ | P. _____ |
| B. _____ | Q. _____ |
| C. _____ | R. _____ |
| D. _____ | S. _____ |
| E. _____ | T. _____ |
| F. _____ | U. _____ |
| G. _____ | V. _____ |
| H. _____ | W. _____ |
| I. _____ | X. _____ |
| J. _____ | Y. _____ |
| K. _____ | Z. _____ |
| L. _____ | AA. _____ |
| M. _____ | BB. _____ |
| N. _____ | CC. _____ |

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

O. _____ DD. _____

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Mammals

1. Armadillo
2. Black bear
3. Bobcat
4. Cottontail rabbit
5. Florida panther
6. Gray squirrel
7. Opossum
8. Pocket gopher
9. Raccoon
10. Red fox
11. Sherman's fox squirrel
12. Striped skunk
13. White-tailed deer
14. Wild pig

Reptiles

15. American alligator
16. Black racer
17. Coral snake
18. Cottonmouth
19. Cuban brown anole
20. Eastern box turtle
21. Eastern diamondback rattlesnake
22. Eastern indigo snake
23. Fence lizard
24. Five-lined ground skink
25. Gopher tortoise
26. Green anole
27. Pygmy rattlesnake
28. Yellow rat snake

Amphibians

29. Cuban treefrog
30. Eastern narrowmouth toad
31. Eastern newt
32. Green treefrog
33. Southern leopard frog
34. Southern toad

Birds

35. American crow
36. Barred owl
37. Blue jay
38. Carolina chickadee
39. Chuck-will's-widow
40. Eastern towhee
41. Florida scrub jay
42. Northern bobwhite
43. Northern mockingbird
44. Pileated woodpecker
45. Red-bellied woodpecker
46. Red-cockaded woodpecker
47. Red-shouldered hawk
48. Sharp-shinned hawk
49. Tufted titmouse
50. Turkey vulture
51. Wild turkey
52. Wood duck
53. Wood stork

Junior - Wildlife Hike	
BADGE NUMBER:	
TOTAL SCORE:	/ 20

- | | |
|----------|----------|
| A. _____ | K. _____ |
| B. _____ | L. _____ |
| C. _____ | M. _____ |
| D. _____ | N. _____ |
| E. _____ | O. _____ |
| F. _____ | P. _____ |
| G. _____ | Q. _____ |
| H. _____ | R. _____ |
| I. _____ | S. _____ |
| J. _____ | T. _____ |

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Mammals

1. Armadillo
2. Black bear
3. Bobcat
4. Cottontail rabbit
5. Florida panther
6. Gray squirrel
7. Opossum
8. Pocket gopher
9. Raccoon
10. Red fox
11. Sherman's fox squirrel
12. Striped skunk
13. White-tailed deer
14. Wild pig

Reptiles

15. American alligator
16. Black racer
17. Coral snake
18. Cottonmouth
19. Cuban brown anole
20. Eastern box turtle
21. Eastern diamondback rattlesnake
22. Eastern indigo snake
23. Fence lizard
24. Five-lined ground skink
25. Gopher tortoise
26. Green anole
27. Pygmy rattlesnake
28. Yellow rat snake

Amphibians

29. Cuban treefrog
30. Eastern narrowmouth toad
31. Eastern newt
32. Green treefrog
33. Southern leopard frog
34. Southern toad

Birds

35. American crow
36. Barred owl
37. Blue jay
38. Carolina chickadee
39. Chuck-will's-widow
40. Eastern towhee
41. Florida scrub jay
42. Northern bobwhite
43. Northern mockingbird
44. Pileated woodpecker
45. Red-bellied woodpecker
46. Red-cockaded woodpecker
47. Red-shouldered hawk
48. Sharp-shinned hawk
49. Tufted titmouse
50. Turkey vulture
51. Wild turkey
52. Wood duck
53. Wood stork

Intermediate - Wildlife Hike	
BADGE NUMBER:	
TOTAL SCORE:	/ 20

- | | |
|----------|----------|
| A. _____ | K. _____ |
| B. _____ | L. _____ |
| C. _____ | M. _____ |
| D. _____ | N. _____ |
| E. _____ | O. _____ |
| F. _____ | P. _____ |
| G. _____ | Q. _____ |
| H. _____ | R. _____ |
| I. _____ | S. _____ |
| J. _____ | T. _____ |

Junior - Forest Ecosystems	
BADGE NUMBER:	
TOTAL SCORE:	/ 20

Ecosystem Questions

Sand Pine Scrub

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Pine Flatwoods

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

**Intermediate -
Forest Ecosystems**

BADGE NUMBER:

TOTAL SCORE: / 30

Ecosystem Questions

Sand Pine Scrub

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____

Pine Flatwoods

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____

Plant ID

Sand Pine Scrub

- A. Chapman oak (*Quercus chapmanii*)
- B. Sand live oak (*Quercus geminata*)
- C. Sand pine (*Pinus clausa*)
- D. Myrtle oak (*Quercus myrtifolia*)

14. _____
15. _____

Pine Flatwoods

- A. Hawthorn (*Crataegus* sp.)
- B. Gallberry (*Ilex glabra*)
- C. Flatwoods plum (*Prunus umbellata*)
- D. Fetterbush (*Lyonia lucida*)

14. _____
15. _____

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Junior - Map & Compass	
BADGE NUMBER:	
TOTAL SCORE:	/ 20

Map Symbols

Please provide the correct answer (A, B, C, or D) to each of the ten questions displayed on the table.

2 point for each correct answer.

1. _____

6. _____

2. _____

7. _____

3. _____

8. _____

4. _____

9. _____

5. _____

10. _____

Intermediate - Map & Compass

BADGE NUMBER:

TOTAL SCORE: / 20

Do not write in the scoring box.

SCORE

Symbols subtotal: _____ (0-10)

Degrees subtotal: _____ (0-5)

Distance subtotal: _____ (0-5)

TOTAL: _____ (out of 20)

Map Symbols

Please provide the correct answer (A, B, C, or D) to each of the ten questions displayed on the table.

1 point for each correct answer.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Compass

Please provide the correct bearing and distance in feet as listed below.

Full points (5) if answers are within 5 degrees or feet. One point off for each additional 5 degrees or feet in error.

1. To get from Point A to Point B you need to travel at a bearing of _____ degrees.
2. To get from Point C to Point D you need to travel _____ feet.

Senior - Map & Compass	
BADGE NUMBER:	
TOTAL SCORE:	/ 22

Do not write in the scoring box.

Map Symbols

Please provide the correct answer (A, B, C, or D) to each of the ten questions displayed on the table.

1 point for each correct answer.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

SCORE		
Symbols subtotal: _____ (0-10)		
Line	Bearing (2)	Distance (2)
A-B	_____	_____
B-C	_____	_____
C-A	_____	_____
Compass subtotal: _____ (0-12)		
TOTAL: _____ (out of 22)		

Compass

Please provide the correct bearing and distance in feet between each pair of points.

12 points possible: 4 points per line: 2 points bearing, 2 points distance.
 1/2 point taken off for each increment of 5 degrees or 5 feet in error.

<u>Line</u>	<u>Bearing</u>	<u>Distance</u>
A-B	_____	_____
B-C	_____	_____
C-A	_____	_____

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Instructions: You will measure 4 standing trees and fill out the table below. For each tree, identify the species and estimate the diameter, merchantable height, and volume. Diameters should be measured and recorded in even 2-inch diameter classes. Heights should be measured in 16-foot logs to the nearest full half-log. Merchantable height should be measured from stump height to either an 8-inch top diameter, a major fork, or a serious defect that affects more than half the tree's diameter at that point. Tree volumes can be found in the table at the bottom of this page.

Senior - Tree Measurement	
BADGE NUMBER:	
TOTAL SCORE:	/ 28

Tree #	Species (1 pt)	DBH (2 pts)	Height (2 pts)	Volume (2 pts)	Score
1					
2					
3					
4					

Volume Table

HEIGHT (NUMBER OF 16-FOOT LOGS)									
DBH	1	1½	2	2½	3	3½	4	4½	5
10	36	48	59	66	73	-----	-----	-----	-----
12	56	74	92	106	120	128	137	-----	-----
14	78	105	132	153	174	187	200	-----	-----
16	106	143	180	210	241	263	285	-----	-----
18	136	184	233	274	314	344	374	-----	-----
20	171	234	296	348	401	440	480	511	542
22	211	290	368	434	500	552	603	647	691
24	251	346	441	523	605	664	723	782	840
26	299	414	528	626	725	801	877	949	1,021
28	347	482	616	733	850	938	1,027	1,114	1,201
30	403	560	718	854	991	1,094	1,198	1,306	1,415
32	462	644	826	988	1,149	1,274	1,400	1,518	1,637
34	521	728	934	1,119	1,304	1,447	1,590	1,727	1,864
36	589	826	1,063	1,274	1,485	1,650	1,814	1,974	2,135
38	656	921	1,186	1,428	1,670	1,854	2,038	2,224	2,410
40	731	1,030	1,329	1,598	1,868	2,081	2,294	2,494	2,693

2019 FLORIDA 4-H FOREST ECOLOGY CONTEST

Senior - Forest Management	
BADGE NUMBER:	
TOTAL SCORE:	/ 25

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____