

NAME: _____

Answer as concisely as possible. Grading is on a 100 point scale with 105 total points possible.

1. For tree species from **Day 1**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|---|-------|------------------|
| A. The simple alternate leaf of this angiosperm is less notable than its tan prickly twigs and bark. | | |
| B. This northeastern angiosperm has aromatic twigs and peeling, flammable bark. | | |
| C. This angiosperm goes by 3 common names, one due to a bark trait, one for the leaf shape, and one or herbivory. | | |
| D. This tree from California and Oregon has scale-like leaves that make it a popular ornamental. | | |
| E. This angiosperm that reaches about 100 ft tall is valued for furniture and gunstocks, and is browsed by ungulates. | | |

2. For tree species from **Day 2**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|--|-------|------------------|
| A. This dioecious circumpolar gymnosperm is often shrub-like with linear to lanceolate leaves. | | |
| B. This tree lives up to 3,200 years, is extremely large, and derives its name from Cherokee for 'big tree'. | | |
| C. This northwestern gymnosperm has scale-like leaves, and is used for decking among other products. | | |
| D. This species is found within 50 miles of the Pacific coast and reaches heights in excess of 350 feet. | | |
| E. This obligate wetland species is the only member of its genus on the east coast. | | |

3. For tree species from **Day 3**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|---|-------|------------------|
| A. The helical fruits of this angiosperm are its most distinct feature. | | |
| B. This Californian angiosperm grows to 60 feet tall and often grows with grey pine on xeric sites. | | |
| C. Before being mostly extirpated from the eastern mountains, this was a valuable timber and wildlife species. | | |
| D. This Pacific coast angiosperm is a shade tolerant climax species that has been used for its bark. | | |
| E. This angiosperm found at mid-elevations in the Great Basin Desert only reaches 30 feet tall, but is a deer browse. | | |

_____ points

4. For tree species from **Day 4**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|---|-------|------------------|
| A. The bracts on the cones of this species are diagnostic. It is easily killed by fire, and is only native to California. | | |
| B. This Appalachian gymnosperm is a popular Christmas tree, although it has adelgid problems in its native range. | | |
| C. This broadly distributed eastern Angiosperm has light weight, rot resistant wood and pinnately compound leaves. | | |
| D. The ski-track looking bark on this Appalachian angiosperm is a good identification feature. | | |
| E. The silver fuzzy terminal bud is a great ID feature for this eastern Angiosperm. | | |

5. For tree species from **Day 5**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|---|-------|------------------|
| A. This species grows in the California and Oregon mountains, and is found at timberline. It is named for its bark. | | |
| B. This northwestern tree grows to 270 feet in height, has 1 inch needles, and is a popular Christmas tree. | | |
| C. This high elevation tree w/ shallow roots is intolerant of fire, and is predominantly regenerated by fine-scale windthrow. | | |
| D. This circumpolar boreal species is found in very wet, boggy sites, and is a highly managed pulpwood species. | | |
| E. This deciduous species is found in the Inland Empire region of the western US. It is an early successional species. | | |

6. For tree species from **Day 6**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|--|-------|------------------|
| A. This is the oldest tree in the world, at more than 5000 years. | | |
| B. This species from the desert southwest has 2-4 needles per fascicle and reaches only 66 feet tall at its largest. | | |
| C. The pyramidal and distinct apophyses of the cones of this species from California and Oregon make ID easy. | | |
| D. This broadly distributed western species has 4 subspecies, one of which gives it its specific epithet. | | |
| E. This primarily Alaskan species is the largest member of its genus in the world. | | |

7. For tree species from **Day 7**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|---|-------|------------------|
| A. This tree has 5 needles per fascicle and resin-covered cones with unarmed umbos. | | |
| B. This tree has 2 needles per fascicle that will break if folded in half. | | |
| C. This high elevation species with 5 needles per fascicle is known for its ability to avoid breaking branches in high wind. | | |
| D. This tree has one needle per fascicle. | | |
| E. This tree is native to just 3 counties in California, yet is one of the most important plantation timber species globally. | | |

8. For tree species from **Day 8**, list the Genus and specific epithet of each described below (2 points if full name is correct, 10 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|---|-------|------------------|
| A. This tree has 5 needles per fascicle and resin-covered cones with unarmed umbos. | | |
| B. This tree is being decimated in the Appalachian mountains by wooly adelgid. | | |
| C. Pando, a large clone in Utah, is the world's heaviest genetic organism. | | |
| D. This species has about 5 million acres of plantations in the Pacific Northwest. | | |
| E. This tree was the first to get its genome sequenced. | | |

9. For tree species from **EUROPE or ASIA**, list the Genus and specific epithet of each described (1 point if full name is correct, 8 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|--|-------|------------------|
| A. Invasive in the US, the pulp from this Chinese angiosperm has been used historically for crafts. | | |
| B. Very similar to an angiosperm we learned in lab, this species is being sold in the east b/c it is resistant to anthracnose. | | |
| C. Orange bark on this gymnosperm is a good identification feature. Many of them have been planted in the northeast. | | |
| D. Extinct in the wild, this is now a popular urban tree globally, although the females can create a nuisance when coning. | | |
| E. The country of Turkey leads the world in export of nuts produced from this small shrub. | | |
| F. The silver leaves on this angiosperm are the best way to identify it if you should see it in the western US. | | |
| G. This widespread angiosperm is important for wildlife, and responds well to pollarding in its native range. | | |
| H. The poor form of this urban angiosperm makes it problematic when planted along with others in its Genus. | | |

10. For tree species from **the SOUTHERN HEMISPHERE**, list the Genus and specific epithet of each described (1 point if full name is correct, 8 points total) Spelling can be creative, but don't push it.

| Question | Genus | specific epithet |
|--|-------|------------------|
| A. This angiosperm has a unique adaptation that allows it to 'steal' the position of a dominant canopy tree in the forest. | | |
| B. This gymnosperm, sacred to the Maori people, is now primarily protected in parks in New Zealand. | | |
| C. The common name of this angiosperm roughly translates to 'burning ember' from its native Portugese. | | |
| D. This angiosperm is extremely important to the tropical pulp markets as a plantation species. Its leaves are blue-green. | | |
| E. This is the oldest and tallest gymnosperm on its continent. It is also monotypic. | | |
| F. These angiosperms are known as the 'lighthouses of Patagonia'. Their wood is low-density and relatively soft. | | |
| G. This shrubby angiosperm is well-adapted to tolerate high salt levels and fluctuation water tables found on the coast. | | |
| H. The English common name of this gymnosperm has little to do with its ecology. This is a hardy species from Chile. | | |

11. *Identify and explain 3 different sources of variation we observe within a tree species. (6 points)*

12. *Define the following terms. (3 points)*

raceme:

reniform:

dendrology:

_____ points