

FORESTRY

DESCRIPTION: In this event, students will be asked to identify trees by their scientific names (Genus and species) and answer correlated questions pertaining to tree structure, ecology, and economic characteristics.

A TEAM OF UP TO: 2

APPROXIMATE TIME: 50 minutes

EVENT PARAMETERS: Students may bring and use reference publications, identification guides and keys, measuring devices, magnifiers, or any resources they have developed to identify the specimens and to answer the correlated questions: Students may not use any electronic devices. The Event Supervisor will not provide any resources. The national tree list can be found on the Official Science Olympiad Web Page at <http://www.v.soinc.org>:

THE COMPETITION:

1. This event may be held either indoors or in a wood lot or both. Specimens (or pictures if necessary) will be lettered or numbered at stations. The team will be given one answer sheet on which to record the Genus and species name and the answer to the correlated question.
2. Leaf specimens may be live or preserved depending on availability and may be accompanied by twigs, cones, seeds, or other parts of the tree. Identification will be based on an examination of living or preserved leaf specimens (compound leaves should be intact). For each specimen, students will be asked a correlated question that pertains to the tree's structure, ecology, or economic characteristics. Structural characteristics may include leaf types, leaf shapes, leaf margins, leaf venation, leaf arrangement on the stem, twigs, bark, flowers, cones, fruits, seeds, and tree shapes.
3. Ecological characteristics may include habitats, adaptations to the environment, biomes, succession, and relationships (e.g., symbiosis and competition) with animals or other plants. Economic characteristics may include beneficial or detrimental aspects of trees such as sources of food, medicine, building materials, chemicals, fuel, fiber, and trees as nuisance species
4. It is recommended that state and regional contests be limited to local or regional trees (e.g., trees east or west of the Rockies). State and regional directors should prepare a list, which includes the trees students are expected to master. State directors should send the state tree lists to competing teams as soon as possible so teams may gather specimens. The national tree contest will include specimens from the National Audubon Society Field Guide to Trees (Eastern and Western region), which can be ordered using the Science Olympiad Teaching Guide order form-see: <http://www.soinc.org/guides.htm>.

EXAMPLES:

1. SPECIMEN: Colorado *pinyon-Pinus edulis*

Correlated Question: In what habitat would you most likely find this specimen? a. high mountain sub-alpine zones

b. dry, rocky lower mountain slopes

c. moist, acidic soils near the Pacific coast

d. moist soils along stream banks and flood plains Answer: B

2. SPECIMEN: Osage-orange - *Madura /Jomifera*

Correlated Question: Native Americans used Wood from this tree to make



SCORING: The Genus and species answer along with the answer to the correlated question will be weighted equally. No credit will be given for incorrectly spelled Genus and species names. Although correct spelling is desirable, there is no penalty for incorrectly spelling the answers to the correlated questions. Tiebreaker questions will be included in the competition. Ranking will be based on the highest number of correct answers.