

FORESTRY

TEST

**Division B**

**School: \_\_ANSWER KEY\_\_\_\_\_ Team # \_\_\_\_\_\_\_**

**Identify the three trees below, with the Family Name, Scientific Name, and Common Name:**



**FAMILY:**

**Salicaceae** (1 pt)

**SCIENTIFIC NAME:**

**Salix babylonica** (1 pt)

**COMMON NAME:**

**Weeping Willow** (1 pt)



**FAMILY:**

**Cornaceae** (1 pt)

**SCIENTIFIC NAME:**

**Nyssa Sylvatica** (1 pt)

**COMMON NAME:**

**Black Tupelo (Black Gum)** (1 pt)



**FAMILY:**

**Pinaceae** (1 pt)

**SCIENTIFIC NAME:**

**Picea pungens** (1 pt)

**COMMON NAME:**

**Blue Spruce** (1 pt)

**The “Random Questions” Section**

1. **After a tree has been cut down, its wood is dried out, or “seasoned,” before it is used for building and construction. Name the two main benefits of doing this.** (1 point for each correct answer)

The wood is lighter because it contains less water

The wood becomes two to three times stiffer

*(Most kids will probably answer that “The wood becomes lighter” and “The wood becomes stiffer.” It’s OK to give full credit for both those answers. Give an additional 1/2 point if they include “because it contains less water” and an additional ½ point if they quantify the stiffness with “2 and/or 3 times” stiffer.)*

1. **Finish this famous quote by Ralph Waldo Emerson:**

***"The creation of a thousand forests is in one*** *\_acorn\_\_."* (2 points)

1. **How many seeds can one sweetgum fruit hold?** (1 point)

50

1. Which is the only state whose state tree is **not** native to that state?. (1 point)
2. Extract from witch hazel leaves and bark is used in many products that you can buy at the store. What are the two **most common** uses for which people buy witch hazel? (2 points maximum)

For sores/cuts, bruises, and swelling (1 point)

For spot and blemish (acne) control (1 point)

***Half-Credit Answers (.5 point each) for any of the following:***

*Soothe and heal diaper rash - Shrink bags under the eyes - Soothe and reduce external hemorrhoids*

*Varicose vein relief - Soothe poison ivy and poison oak - Treat chicken pox blisters - Soothing razor burn*

*Treating sunburn - Treating dry skin - Treating bug bites - Refreshing tired eyes - Making your own deodorant*

1. About how much of the United States of America is covered by forests? 1/3 or 30-35% (1 pt)
2. Dendrochronology is the science of calculating a tree's age by its rings. (1 pt)
3. What is amber? Tree resin which has been fossilized. (1 pt)
4. Why should you not move firewood? (Yes, this is related to trees! ☺ )

(Maximum of 3 pts., as designated below:

Tree-killing insects and diseases can lurk in firewood. (1 pt)

These insects and diseases can't move far on their own, but when people move firewood they can jump hundreds of miles. (1 pt)

New infestations destroy our forests, property values, and cost huge sums of money to control. (1 pt.)

Give the common name of the tree on which each of these berries and flowers grow. (1 pt. ea)

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Staghorn Sumac

Northern Catalpa

Black Tupelo

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Witch-hazel

Sweetgum

Eastern White Pine



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Common Persimmon

Pawpaw

Downy Serviceberry

**The chart below on the right shows the growth statistics of six**

**different species of trees. From the column on the left, write in the**

**letter of the correct tree next to each of its proper statistics.**

**TREE SPECIES:**

1. **American Holly**
2. **Eastern Redbud**
3. **Flowering Dogwood**
4. **Red Maple**
5. **Sycamore**
6. **White Oak**

|  |  |  |  |
| --- | --- | --- | --- |
| **ANSWER:** | **Size** | **Spread** | **Growth Rate** |
|  |  |  |  |
| **\_\_d\_\_\_** | 40’ – 60’ | 40’ | medium/fast |
|  |  |  |  |
| **\_\_f\_\_\_** | 50’ – 80’ | 50’ – 80’ | slow/medium |
|  |  |  |  |
| **\_\_c\_\_\_** | 15’ | 10’ | slow |
|  |  |  |  |
| **\_\_e\_\_\_** | 40’ – 100’ | 40’ – 70’ | fast |
|  |  |  |  |
| **\_\_a\_\_\_** | 40’ – 50’ | 18’ – 40’ | slow/medium |
|  |  |  |  |
| **\_\_b\_\_\_** | 20’ – 30’ | 25’ – 35’ | medium |
|  |  |  |  |

**Name three differences between buckeyes nuts and horse chestnuts:**

The buckeye nut isn’t edible because it is slightly toxic and has a very bitter taste. Chestnuts, on the other hand, are not only edible but delicious.

Buckeye nuts are often slightly bumpy, as if three or more lumps were pushed together. Horse chestnuts are round or oblong, but they are not as bumpy as buckeye nuts.

Buckeyes begin chestnut-brown, but they darken to a milk chocolate color as they ripen. Horse chestnuts usually stay the same color, which is a dark chestnut brown with a reddish tint.

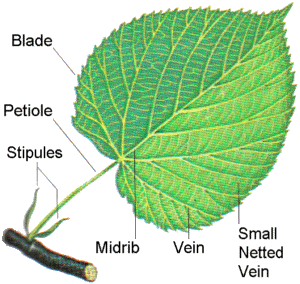
Horse chestnuts are primarily found in Europe and Asia, while buckeyes are primarily found in North America.

Buckeyes are mostly smooth to the touch, while horse chestnuts often have ridges that are easy to feel and sometimes can be seen. Sometimes these ridges are very slight.

Buckeyes were not affected by the fungal blight that devastated America’s chestnut forests.

The center color in both types of nuts is a pale buff or sandy-like color…but in comparison, this center is usually larger in a buckeye that in a horse chestnut.

**Identify the six parts of the leaf shown in the diagram below. Choose the six correct terms from the word bank provided. (1/2 pt each)**

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Blade

Petiole

**WORD BANK**

Blade

Internode

Midrib

Node

Petiole

Pistil

Stigma

Small Netted Vein

Stipule

Vein

Stipules

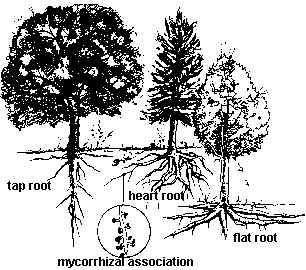
Small

Netted Vein

Vein

Midrib

**Identify the three different types of tree roots shown in the diagram below:** (1/2 pt. ea.)

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Tap Root

Heart Root

Flat Root

**All of the trees pictured below are the state trees of two, three, or four states. Give the common name for each tree, and write in the correct state names below each tree.**



Common Name: Eastern White Pine(1 pt)

State Tree of:

Maine(1 pt)

Michigan(1 pt)

Common Name: American Elm (1 pt)

State Tree of:

Massachusetts (1 pt)

North Dakota(1 pt)

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Common Name: Sugar Maple (1 pt)

State Tree of:

New York(1 pt)

Vermont(1 pt)

West Virginia(1 pt)

Wisconsin(1 pt)

Common Name: Yellow Poplar (1 pt)

State Tree of:

Indiana(1 pt)

Kentucky(1 pt)

Tennessee (1 pt)

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Give the common name of the tree on which each of these leaves grow. (1 pt. ea.)

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Northern Red Oak

*(Give ½ pt. for any other kind of oak, as long as it’s on the official list)*

American Chestnut

Sassafras

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Bitternut Hickory

White Oak

*(Give ½ pt. for any other kind of oak, as long as it’s on the official list)*

Boxelder



What is the common name of this tree? 

White Pine

What is it called when its needles turn this color?

Blister Rust

**TIE-BREAKER QUESTION:**

Studies are currently underway to determine whether or not the planting of large trees in urban areas may help to reduce crime. Do you think this will help to reduce crime? If so, how? If not, why not?

(There is no “correct answer.” Your answer will be scored based on the logic of your argument, and how well you support it.)