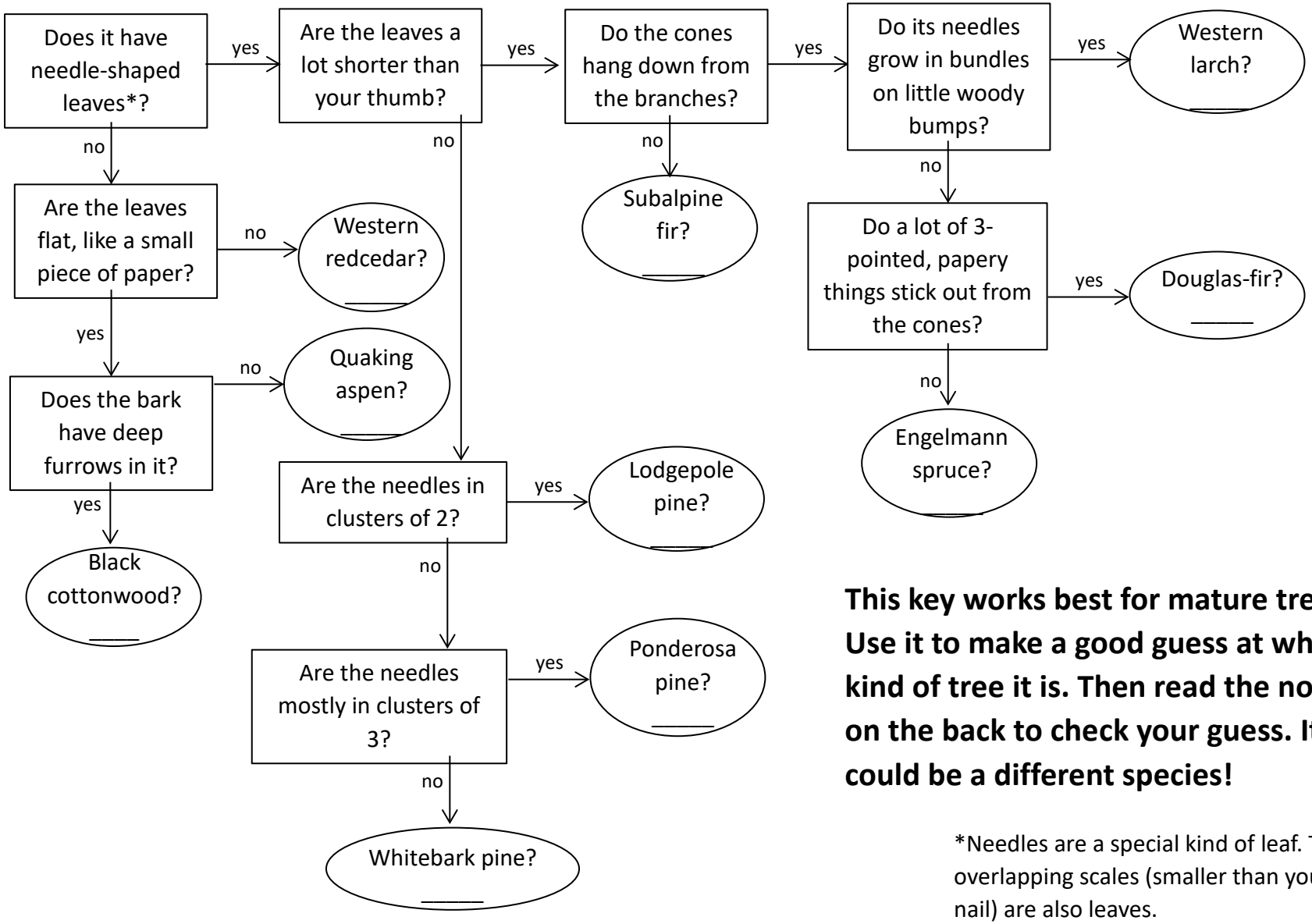
Handout E10-page 1. Identify 10 summer trees!

Name _____



This key works best for mature trees. Use it to make a good guess at what kind of tree it is. Then read the notes on the back to check your guess. It could be a different species!

*Needles are a special kind of leaf. Tiny, overlapping scales (smaller than your pinkie nail) are also leaves.

Handout E10-page 2. Check your tree identification:

1. **Black cottonwoods** have long, flat, wide leaves that may be very shiny and have pointed tips. The buds at the ends of their twigs are pointy. In spring, they are also very sticky. Old cottonwoods have gray, deeply furrowed bark. Cottonwood seeds are packaged with lots of cottony fluff, which helps them float a long way on wind and water.
2. **Douglas-firs** have short, flat needles and brown, furrowed bark. The buds at the ends of their twigs are pointy. Their cones feel kind of papery (like spruce cones) but with this difference: Little, 3-pointed "wings" stick out from the cones. It looks like tiny mice are trying to burrow in, but they can't hide completely!
3. **Engelmann spruces** have short needles with very sharp tips, which gives them the name "sticky spruce." Their cones feel kind of papery. Their bark is grayish, with roundish pieces that sometimes flake off.
4. **Lodgepole pines** have fairly long needles that usually grow from the twig in bundles of 2. Their cones are pointy and very prickly. Sometimes their cones are closed tight so the seeds can't get out; sometimes they are open. Lodgepole pine bark is dark and scaly.
5. **Ponderosa pines** have long very needles that usually grow from the twig in bundles of 3. Their cones are big and have prickles on them. Their bark is yellowish or brown, sometimes even orange. It falls off in pieces that look like they belong in a jigsaw puzzle. Ponderosa pine bark has a vanilla-like smell, especially in the spring.
6. **Quaking aspens** have flat, roundish leaves with a pointed tip. The leaves move almost all the time because they are very sensitive to wind. Their bark is mostly grayish-white and smooth, although old trees can have furrowed bark near the ground. Their seeds are packaged with cottony fluff that helps them float long distances on wind and water.
7. **Subalpine firs** have short, flat needles and gray bark. Their bark often looks like it has blisters on it. Their cones grow at the very tops of the trees, pointing upward toward the sky. The cones don't fall off. Instead, they fall apart on the tree, and the pieces fall to the ground.
8. **Western larches** have short, soft needles. They grow in tufts of 10 or more out of little woody bumps on the twigs. The leaves turn gold in the autumn and then fall off. Therefore, they are conifers (cone bearers) but not evergreens like pines, firs, and spruces. Western larch cones are small and light. The tree's bark is brown to reddish-brown.
9. **Western redcedars** have leaves that look like tiny, overlapping scales. Many leaves grow in a long row on each twig. The branches sometimes look a little like ferns. Their cones are small–about as big across as your thumbnail. Western redcedar bark is grayish, with furrows and loose strands. It looks like someone tried to peel or shred the bark.
10. **Whitebark pines** have fairly long needles that grow from the twig in clusters of 5. Their cones are purplish-brown but turn brown as they age. The cones don't usually fall off the tree. Most of them ripen in the treetops and then get pulled apart by Clark's nutcrackers, who their large seeds. The pieces of cone that the nutcrackers remove fall to the ground under the tree. Whitebark pine's bark is whitish on young trees and gray to black on older trees.