

SPRUCE

- ✦ needles grow individually on the branch (as opposed to in clusters)
- ✦ needles are stiff and sharp
- ✦ the cross section of the needles are either square or triangular in and can be easily rolled between your fingers
- ✦ when needles are detached from branch, woody projections are left behind and the branch feels rough
- ✦ cones grow from a central stem and feel papery and thin; scales overlap



PINE

- ✦ needles grow in clusters of 2, 3, or 5
- ✦ pines with clusters of 2 are red pines
- ✦ pines with clusters of 3 are yellow pines
- ✦ pines with clusters of 5 are white pines
- ✦ needles are bundled together at the base of the cluster
- ✦ needles lengths vary greatly among the different pines
- ✦ cones grow from a central stem and feel woody and thick; scales overlap
- ✦ seeds are located at base of scales; some cones have scales tipped with a sharp point



FIR

- ✦ needles grow individually on the branch (as opposed to in clusters)
- ✦ needles are flexible and flat
- ✦ cannot be rolled between your fingers
needles have suction cup-like attachments, there are no woody projections
- ✦ when needles are detached from branch, a small circular leave scar is left and the branch feels smooth
- ✦ cones scales overlap and are not woody (feel papery and flexible)
cones grow upward toward the sky and often fall apart while still on the tree



HEMLOCK

- ✦ easily recognizable by their gracefully drooped branches
- ✦ needles grow along opposite sides of the branch (as opposed to all around) and are attached by woody pegs
- ✦ needles are flat with 2 white perpendicular lines on the underside
- ✦ needles are blunt at the tips
- ✦ cones grow at tips of branches and are only about 1 inch in size
- ✦ cones scales are thin and flexible

