

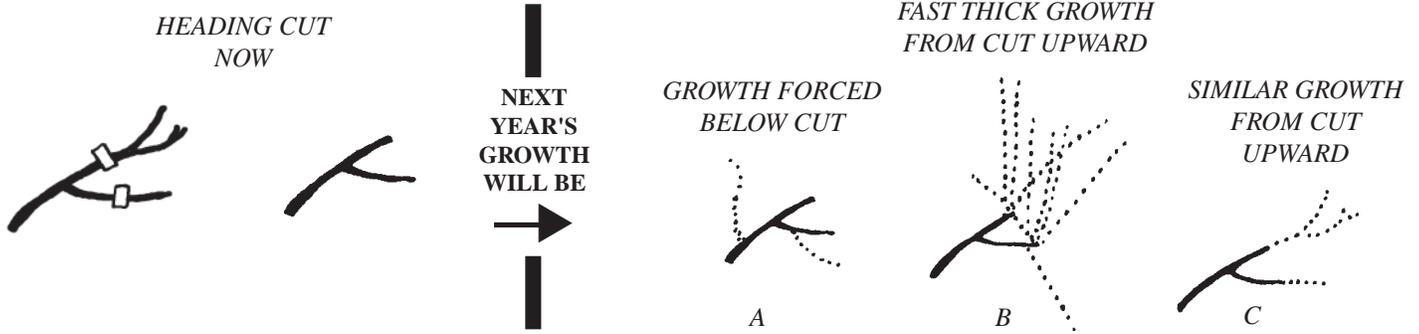
A
Tree Biology
Pop Quiz



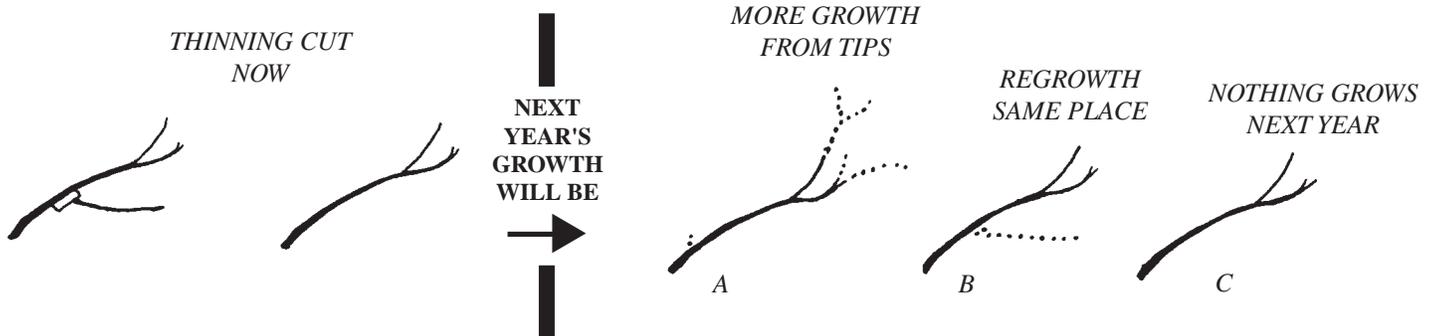
TREE CARE INFORMATION THAT SAVES TREES' LIVES

There may be more than one right answer in this pop quiz. Circle any and all that apply.

1) When a cut is made on a tree branch that looks like the following picture, it is called a **non-selective heading cut**. How will the branch grow in response the next year?



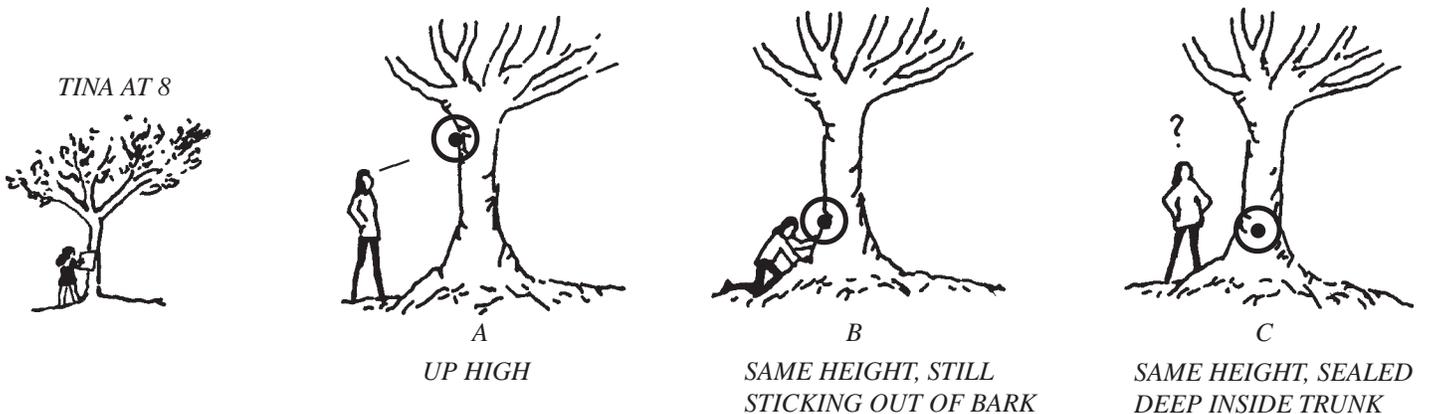
2) When a branch is cut as shown in the picture below, it is called a **thinning cut**. How will the branch probably grow next year?



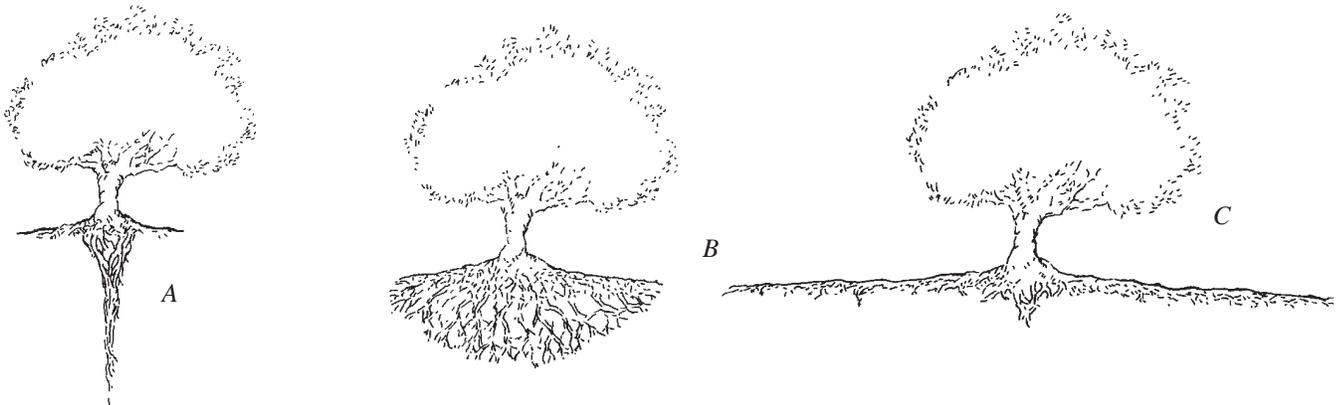
3) The name of a person who specializes in trees is a/an:

- a) Arborist
- b) Entomologist
- c) Cambologist

4) When Tina was eight years old she used a nail to hang a Lemonade Stand sign on a young sapling tree. She took down the sign but forgot the nail. Now Tina is fifty years old and the tree is fifty eight. Which picture shows where the nail is now?



- 5) Alice is building her dream home in the middle of a wooded lot. She wants it to feel like she is living in a forest. She doesn't want to harm the trees by cutting too many of the roots during construction. Which of the following pictures best represents where most trees' roots grow?

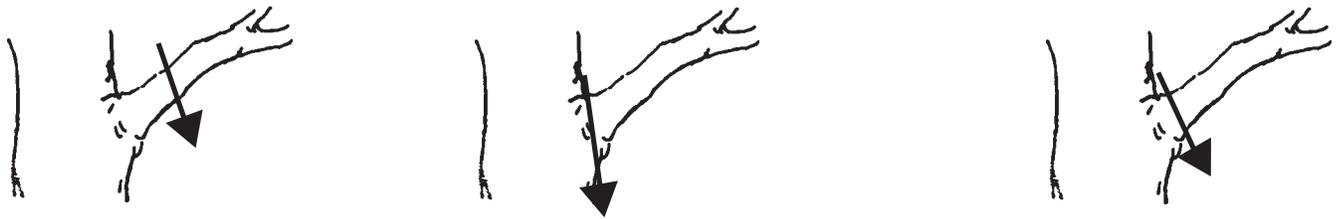


- 6) Alex needs to cut off a lower limb of a tree because it is in the way of people walking down the sidewalk. Which picture shows the best place to make the cut?

a) Stub cut

b) Flush cut

c) Collar cut



- 7) Trees in the woods lose their lower limbs when they are shaded out by the entire forest canopy. Trees are well adapted to losing their lower limbs. Trees planted in cities often require their lower limbs to be removed to make way for foot or vehicular traffic. But it is important to slowly prune them, cutting off only a few limbs in a year and starting only after the tree has become established. If you prune too many limbs at once the tree will be injured because:

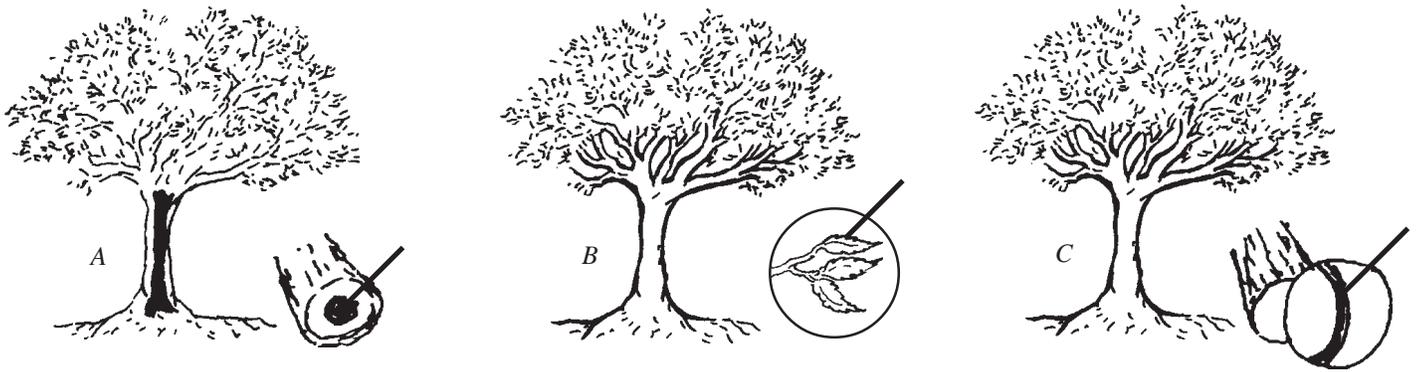
- a) it will stunt the tree's growth.
- b) lower limbs feed the lower trunk making it strong.
- c) lower limbs control root growth early in the tree's life.

ANSWERS

- 1. B – Fast regrowth from cut end
- 2. A – More growth from tips
- 3. A – An arborist
- 4. C – Same height sealed deep inside trunk
- 5. C – Roots look like a pancake
- 6. C – Best cut is collar cut
- 7. B – Weak trunk - Lower limbs feed lower trunk

- 8) Pruning correctly can be done anytime of the year. But if you can, **avoid** pruning your tree which of the following times. This will give it the best conditions for recovery.
- a) June (sunny, but not hot)
 - b) April (leaves are emerging)
 - c) January (sap is down the tree is dormant)
 - d) October (tree is losing it's leaves)

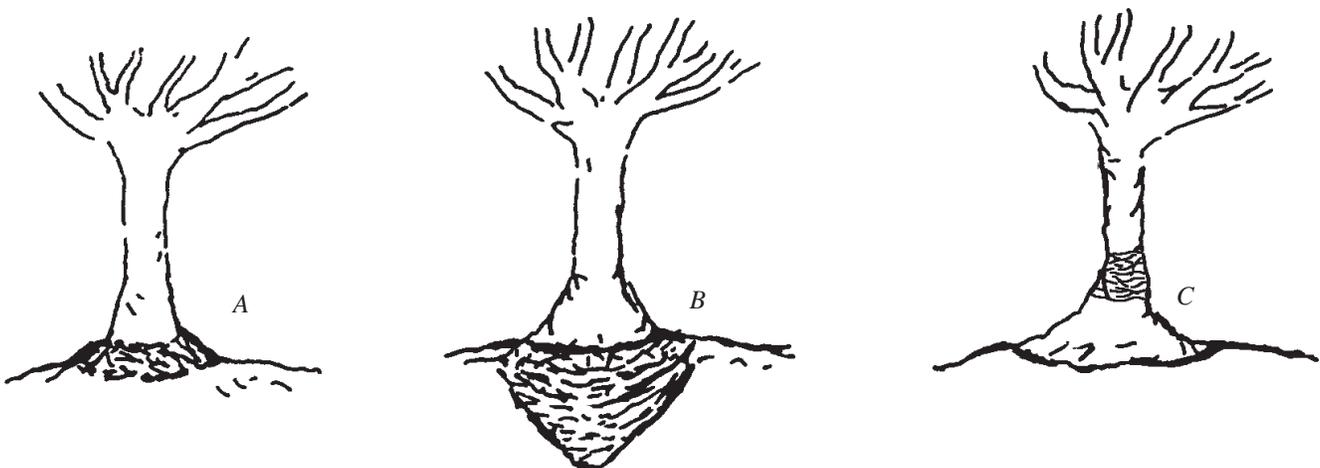
- 9) The most actively growing, most living part of a tree is:
- a) the heartwood, deep inside the core of the trunk.
 - b) the canopy of leaves.
 - c) a sheath of cells just below the bark (cambium).



- 10) True or False - Circle the correct answer

- T or F a) Adding peat moss to the planting hole when planting a new tree will make it grow faster and give it a better chance at survival.
- T or F b) After pruning off a tree limb, it is a good practice to seal the cut with pruning paint or wound dressing.
- T or F c) When planting a new tree, it is a good idea to cut back the top growth to compensate for root loss (caused when the tree was dug in the nursery).

- 11) The trunk collar is a vulnerable part of a tree. Which picture shows the trunk collar?



12) Girdling a tree can kill it. Girdling means:

- a) cutting a ring around the tree through the bark, or leaving something tied around the trunk.
- b) covering up the leafy crown of the tree so that it can't photosynthesize.
- e) burying the trunk collar with soil or other material so that the tree suffocates.

13) Which picture(s) best represents the natural shape of a tree?



A



B



D



C



E



F

14) City trees live only a fraction of the years that the same species usually live in forests. Which are the most common causes of premature urban tree death? Circle any and all that apply.

- a) lack of water the first summer
- b) weed wackers
- c) compaction (squeezing out air pockets) of the soil caused by foot or vehicular traffic
- d) tree topping (bad pruning)
- e) de-icing salt (in cold climates)
- f) planting two to four inches too deep

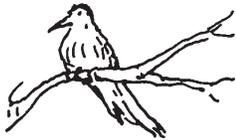
ANSWERS

- 8. B & D – Avoid pruning in the spring and fall
- 9. C – Most active part of the tree is the cambium
- 10. (a) F; (b) F; (c) F
- 11. A - Never cover up the trunk collar with soil, mulch, or have it sit in water. It smothers the tree. Bashing the trunk collar with lawn mowers, cars and such can cause the base to rot out
- 12. A – Girdling is cutting a ring through the bark around the tree
- 13. A, B, C, D, E, F – All show natural shape of trees
- 14. ALL are common causes for premature urban tree death

15) Sometimes it is necessary to stake a tree the first year it is in the ground in order to keep it from blowing over, but not always. Staking should be done sparingly. Why?

- a) People forget to untie the tree, and in a couple of years it is girdled by the ties.
- b) When the trunk is free to sway in the wind, the tree grows a stronger, better tapered trunk.
- c) People forget to remove the stakes and they interfere with root development.

16) Trees are good habitat. Which of the following are common visitors to trees:



A - Birds



B - Raccoons



C - Kids



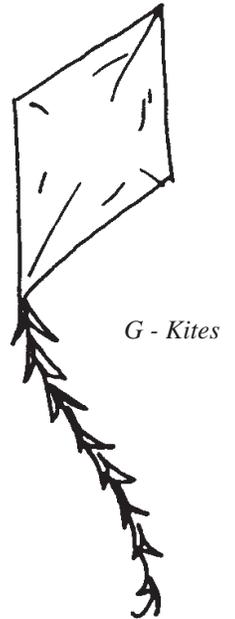
D - Opossums



E - Bees & Bugs



F - Squirrels



G - Kites

17) After suffering construction injury (cut roots, soil compaction or fill dirt), how long does it usually take for the trees to die, fall over or show signs of decline?

- a. 3 months - 6 months
- b. 1 year - 3 years
- c. 4 years - 7 years

18) Many people suffer from arborphobia (an irrational fear of large trees). Trees don't fall over because they're too big. Trees that "fail" usually have a defect. Many defects can be identified by careful observation. Match symptom (letter) to defect (number).

1. Weak Limb 2. Roots Dying 3. Internal Rot 4. Edge Tree, candidate for blow-down
 Letter (____) Letter (____) Letter (____) Letter (____)



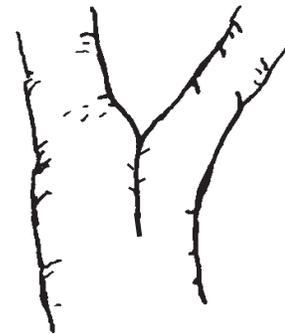
a. no trunk taper, small top canopy



b. Mushrooms or conks on trunk and trunk collar



c. branches dying from tips back



d. 'included', (trapped) bark

19) The three best things you can do for trees are:

- a) weed, water, mulch.
- b) fertilize, insect control, prune regularly.
- c) regular exercise, low fat diet, learning to express anger in a constructive way.

20) An average deciduous tree in a temperate climate will gain most of its height in about how many years?

- a) 25 b) 100 c) 250

ANSWERS

- | | |
|---|-------------------------------|
| 15. A – Tree is girdled by ties and B – Swaying strengthens trunk | 18. 1-D; 2-C; 3-B; 4-A |
| 16. ALL examples are common visitors to trees | 19. A – Weed, water and mulch |
| 17. C – 4 - 7 years | 20. A – 25 years |

About PlantAmnesty

PlantAmnesty is a 501(c)3 non-profit organization to promote better pruning, plant care, and respect for plants as an integral part of our urban ecology.

You can receive more information or request order blanks to be sent to you on the following topics:

- Pruning Information – Shrubs, Vines, Trees, Rehabilitative Pruning
- Tree Care Information – Tree Planting, Hazard Trees, Ordinances, Construction Damage, Heritage Tree Program, Anti-topping Literature, Trees and Views, and more.
- Public Education – Public Service Announcements, Brochures, Tree Biology Pop Quiz, Tree Sheriff Badges, Videos, “Water-Me Please” Tree Hangers, and more.
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