ABOUT THE STUDY
Pruning is one of the most important cultural practices for maintaining woody plants, including ornamental trees and shrubs, fruits and nuts. It involves both art and science: art in making the pruning cuts properly, and science in knowing how and when to prune for maximum benefits. There are numerous reasons for pruning. Sometimes you want to train or direct the growth of plants into a particular form or a specified space, like a formal hedge. Or you may want to prune mature plants to control their size and shape, as in the case of fruit trees that are pruned low to the ground to aid picking or hedge plants pruned at a particular height. For fruiting plants, pruning plays an important role in improving overall fruit quality, primarily by increasing light penetration into the tree.

NEW PLANTINGS
Choosing a pruning method begins when you choose your grape varieties and the kind of structure to grow them on. Stake all young vines to give them a good start, selecting one strong shoot and removing other growth. For table grapes, train these single shoots up an arbor at least 7 feet tall or on a trellis at least 5 feet tall, advises the University of California's Garden Web. Choose an arbor for a more decorative structure than the traditional post and wire trellises for training grapevines; as vines on arbors mature, they provide shade. If you grow wine grapes, trellis the vines at 40 inches.

CANE PRUNING
A simple pruning method for table grapes, cane pruning involves identifying two to six finger-diameter shoots sprouting from the previous year's growth at the head of the vine's main trunk. In the spring before the vines break dormancy, cut each of these shoots back to one or two buds.

CORDON PRUNING
If you grow wine grapes, use a wire trellis and after the first season, prune your vines to two arms -- cordons -- with one on each side of the main trunk. Some gardeners prefer to use a quadrilateral system with four cordons. For cordon pruning, each year allow spurs to grow about 6 to 8 inches apart on each of the arms. Thus, on arms 3 to 4 feet long, leave six or seven spurs; trim these back to two or three buds each. As the vines grow during the season, secure them to the trellis wires and remove any shoots that haven't produced grape clusters.

RENOVATION PRUNING
If you acquire a property with neglected grapevines or if you don't prune your vines every year, you may need to do a renovation pruning. When you grow grapevines on arbors, watch for older, unproductive canes and prune them out. For all overgrown plantings, remove any dead vines and then the vines older than 1 year old. You can remove large branches near the main trunk over subsequent years if you don't want vines needing renovating. Once you've identified shoots that produce flowers and fruit, you can switch to spur pruning if you prefer.