



**FIGURE 27.1.** Steps in the construction of gene phylogenies. Phylogenetic analysis of genes can be divided into a few key steps: Choose a gene of interest (shown here as gene #5), identify homologs (genes 1–4 and 6), align homologs to each other (shown by *green lines*), and calculate a gene tree. (Based on Eisen J.A. *Genome Research* **8**: 163–167, Fig. 1, © 1998 CSHLP.)