



**Figure 11-40** A diagram illustrating the life cycle of a “typical” dinoflagellate whose vegetative cells are haploid. Diploid, motile zygotes (planozygotes) may be present following gamete fusion and again following germination of nonmotile hypnozygotes. Temporary asexual cysts are formed in some species. The vegetative stage of some dinoflagellates may be nonmotile and/or strikingly different in appearance from the typical dinoflagellate motile cell morphology. However such organisms are recognizable as dinoflagellates due to the presence of dinospores (asexual or sexual motile cells with a dinoflagellate morphology) at some point in their life cycle.