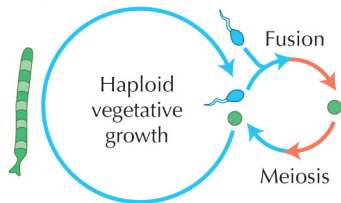
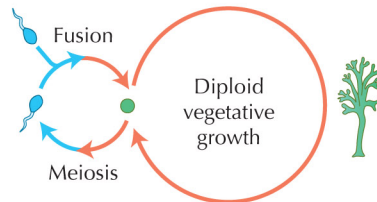


A Haploid life cycle



B Diploid life cycle



C Haploid–diploid life cycle

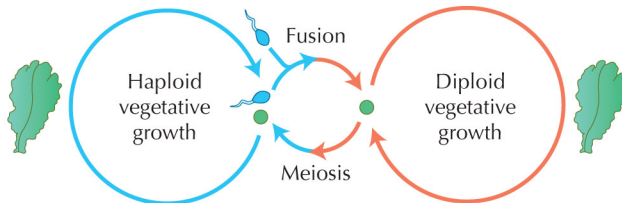


FIGURE 23.28. Eukaryotic life cycles vary in the time spent in haploid vs. diploid phases. (A) In many protists, mitotic divisions and development occur only in haploids: Fusion of gametes is followed immediately by meiosis. (B) Most animals have an almost entirely diploid life cycle, with no mitosis or development of haploids. (C) Many organisms spend substantial times as both haploids and diploids. These stages may be morphologically similar, as shown here, or may be distinct. The three possibilities are illustrated by species of alga: (A) *Ulothrix*; (B) *Fucus*; (C) *Ulva*. Larger cycles represent vegetative growth and smaller cycles represent sexual reproduction.

23.28, redrawn from Mable B.K. et al., *BioEssays* 20: 453–462, © 1998 John Wiley & Sons