

NEDWIDEK - 2 of 2
 ZCCS, 2009

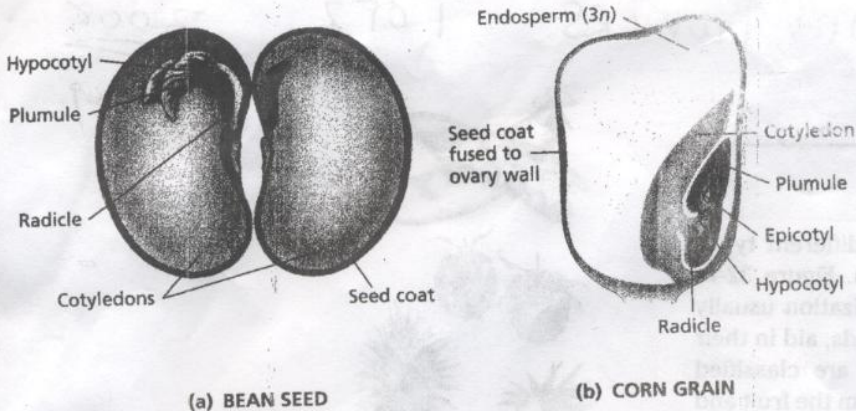


FIGURE 32-5
 This diagram shows a flower with all four whorls of flower parts—sepals, petals, stamens, and carpels. Many flowers lack one or more of these whorls.

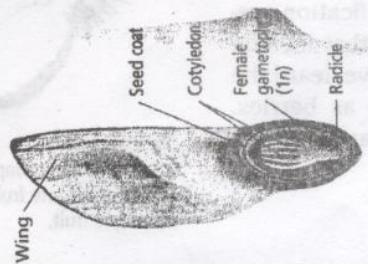
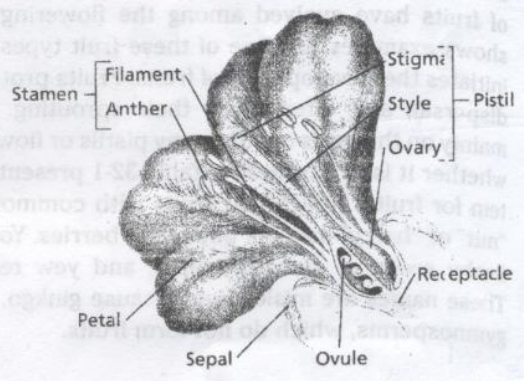
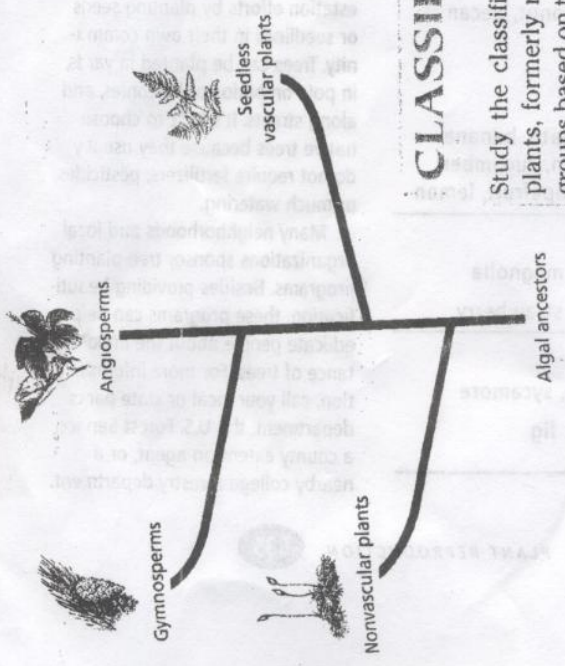


FIGURE 32-12
 (a) A bean seed has two cotyledons and no endosperm. (b) A corn grain contains a single seed, which has one cotyledon and endosperm. (c) A pine seed has eight cotyledons and tissue from the female gametophyte.

FIGURE 30-2
 This phylogenetic tree shows how plants evolved from green algae. The earliest plants were nonvascular and radiated into more-complex forms of vascular plants.



CLASSIFYING PLANTS

Study the classification of plants in Table 30-1. The 12 phyla of plants, formerly referred to as *divisions*, can be divided into two groups based on the presence of vascular tissue. The three phyla of

TABLE 30-1 The 12 Phyla of the Plant Kingdom

Type of plant	Phylum	Common name	Approximate number of species
Nonvascular	Bryophyta	mosses	10,000
	Hepatophyta	liverworts	6,500
	Anthocerotophyta	hornworts	100
Vascular, seedless	Psilotophyta	whisk ferns	10-13
	Lycophyta	club mosses	1,000
	Sphenophyta	horsetails	15
	Pterophyta	ferns	12,000
Vascular, seed			
Gymnosperms	Cycadophyta	cycads	100
	Ginkgophyta	ginkgoes	1
	Coniferophyta	conifers	550
Angiosperms	Gnetophyta	gnetophytes	70
	Anthophyta	flowering plants	240,000
	class Monocotyledones	monocots	70,000
	class Dicotyledones	dicots	170,000