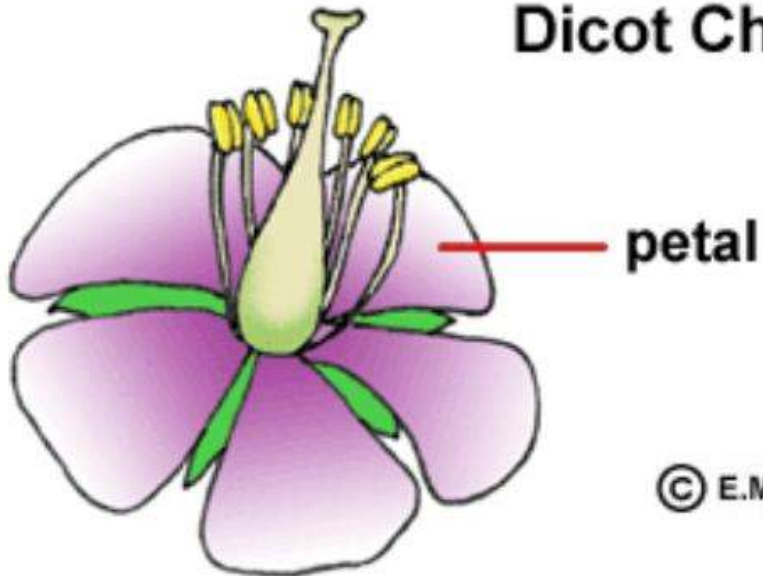


Poaceae, Cyperaceae, Juncaceae

Grass, Sedge and Rush families

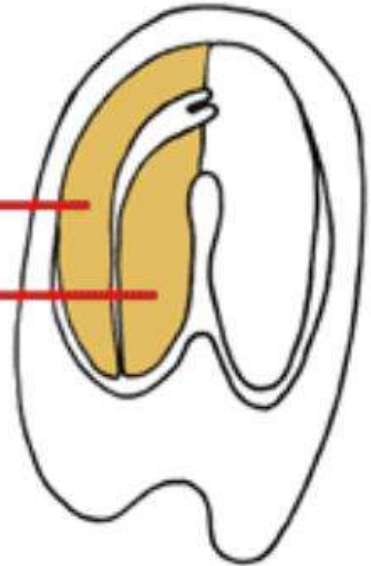


Dicot Characteristics



cotyledon

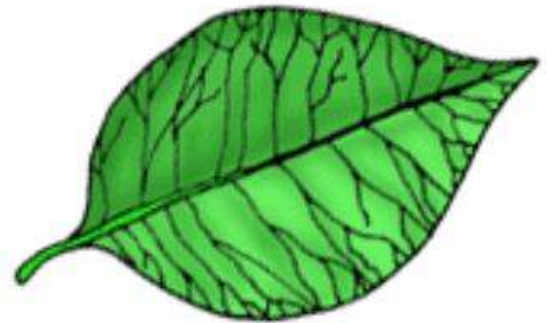
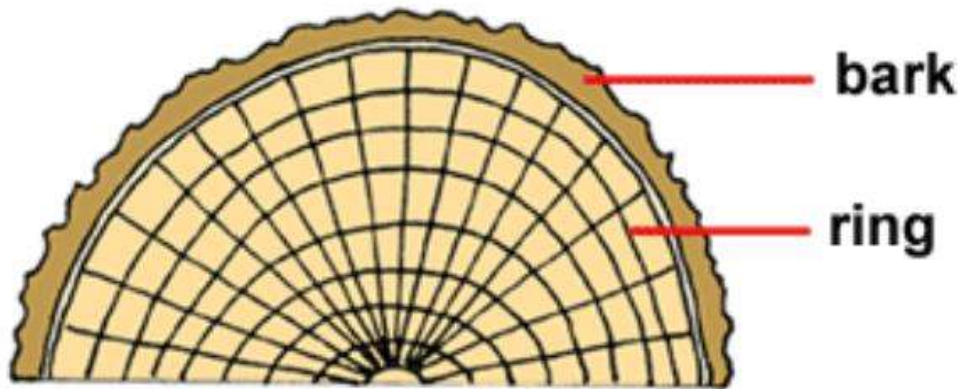
cotyledon



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Flower parts in 4's or 5's.

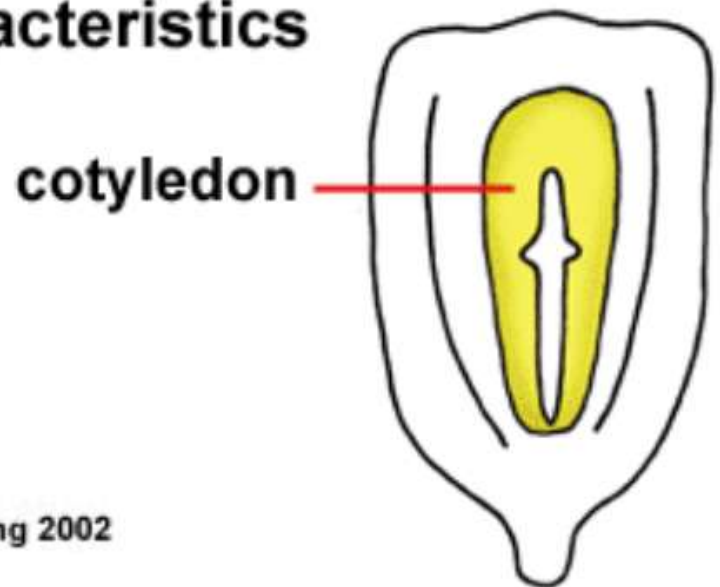
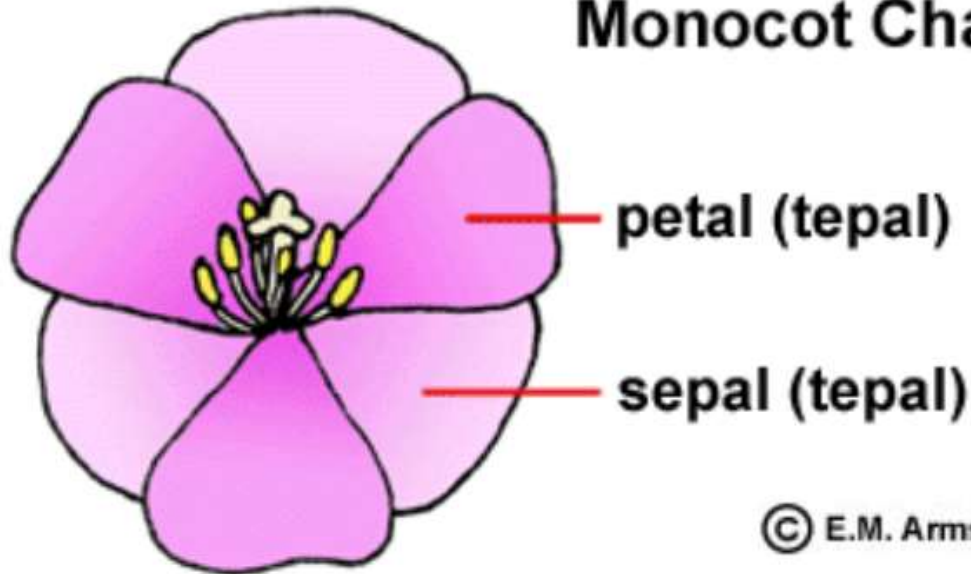
Seed with two cotyledons.



Wood with concentric growth rings.

Leaf with net venation.

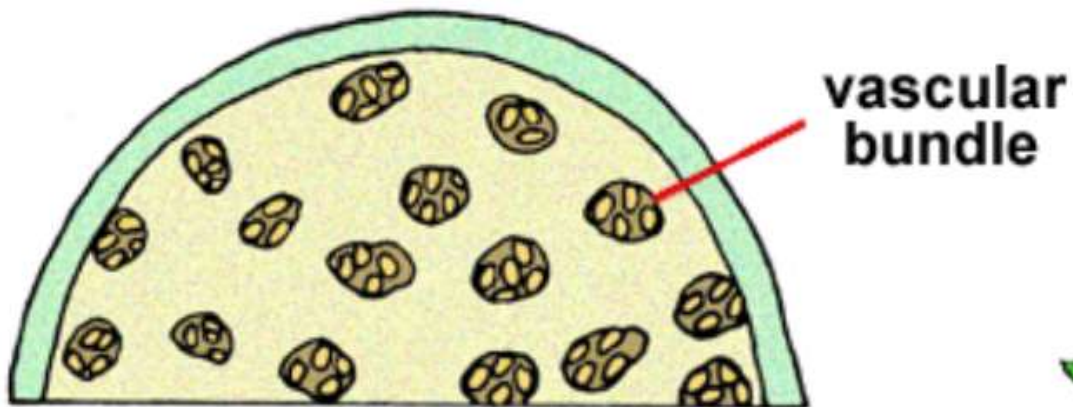
Monocot Characteristics



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Flower parts in 3's.

Seed with one cotyledon.



Stem with vascular bundles.

Leaf with parallel venation.

Monocots are divided into two major lines (informal groups)

❖ **Petaloid** monocots – showy flowers e.g. Liliaceae, Orchidaceae

❖ **Graminoid** monocots – small inconspicuous flowers; increasing specialization towards wind pollination; parallel leaf venation

e.g. Poaceae, Cyperaceae, Juncaceae

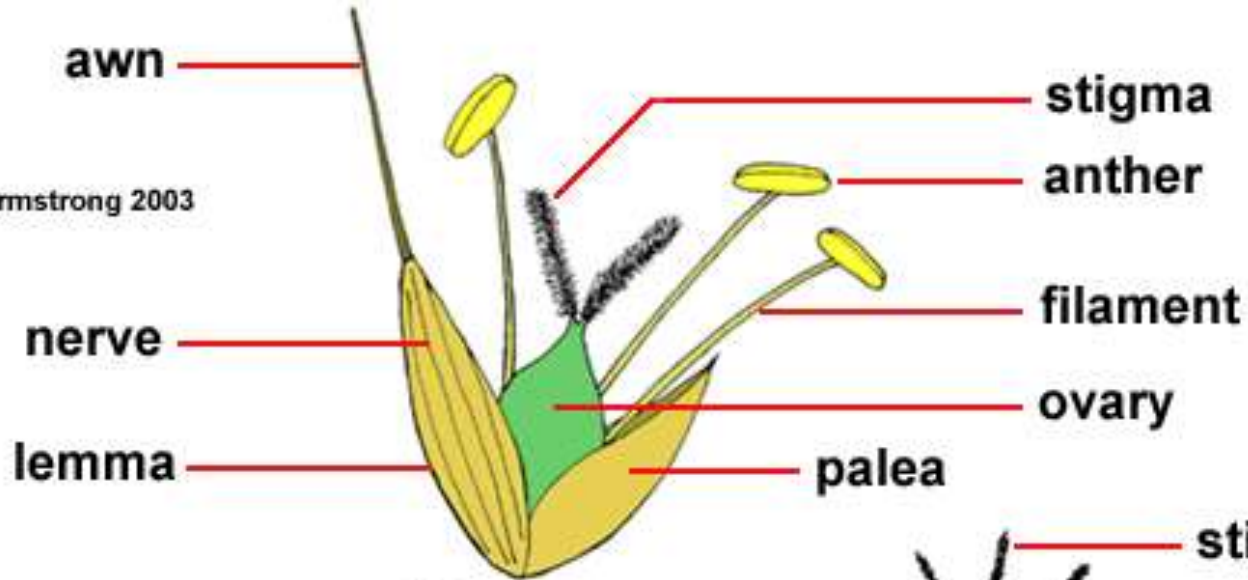
Poaceae

- One of the largest plant families
 - 10,000 species worldwide, 160 in El Dorado County
- Important crop plants worldwide
 - Corn, rice, wheat, oats, barley, rye
 - Sugarcane
- Important ecologically
 - Grasslands - Savanna, steppe, prairie or pampas ecosystems
 - Bamboo forests

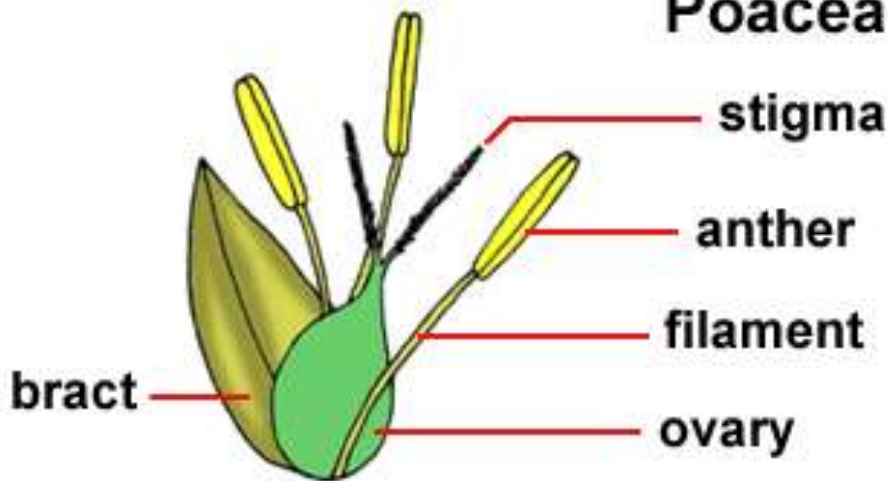
Three families in El Do County

Family	Native	Rare	Serpentine	Speciose genera	
Poaceae (Grass)	160	6	12	<i>Agrostis</i> 24,	
				<i>Elymus</i> 18	
				<i>Poa</i> 19	
Cyperaceae (Sedge)	123	11	4	<i>Carex</i> 92	
				<i>Cyperus</i> 8	
Juncaceae (Rush)	45	1	0	<i>Juncus</i> 39	

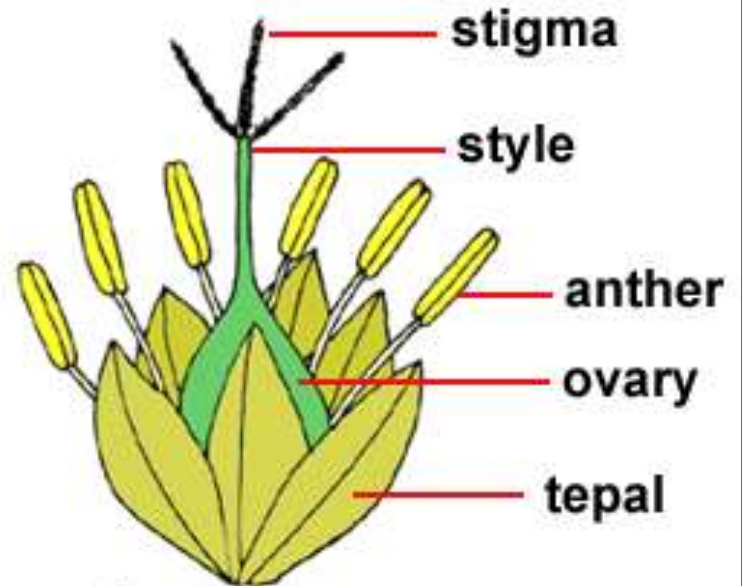
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Poaceae



Cyperaceae



Juncaceae

How to remember:

'**Sedges have edges, rushes are round, grasses have knees** that bend to the ground.'

The 'knees' of **grasses** are joint-like nodes found along **round**, hollow stems. The stems of **sedges** and **rushes** are solid; in cross-section the stems of **rushes are round**, while those of **sedges** are triangular and so **have edges**.

Ecology

- Grasses (Poaceae) define “grasslands”
 - Annual to perennial life history
 - Changes in CA grasslands due to introduced European grasses
- Sedges (Cyperaceae) are perennial plants generally found in shady wetlands and meadows
 - Tules are esp. important in fresh water marshes
- Rushes (Juncaceae) are annual to perennial plants of meadows and wetlands

Stipa pulchra
Purple Needle grass
CA's State grass



Carex xerophila
"new" species
Chaparral Sedge



Juncus baliticus Baltic Rush