

# Plants 4

- send answer to iClicker Question 14A now.
- Angiosperms II
  - life cycle
  - animation
  - flowers
  - Fruits
    - peanut demo
- S'phyte/G'phyte review
- iClicker Question 14B

Be sure to have:

- peanut
- cup

Due in lab **this** week:

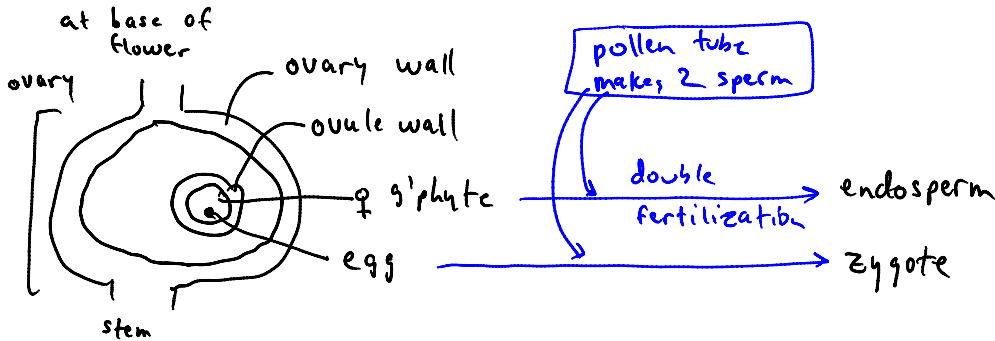
⇒ Plant Diversity pre-lab (Lab Manual p 87 and on-line)

⇒ Eukaryotic Cells lab report

Current Research #1 Due in lecture Friday 3/12  
 (see website for Plants 3 lecture if you didn't get a copy)

Angiosperm life cycle - same as gymnosperm, except

- pollen made in anther (not ♂ cone)
  - megaspore, etc made in ovary (not ♀ cone)
- } usually both in same flower
- usually self in-fertile (to prevent inbreeding)

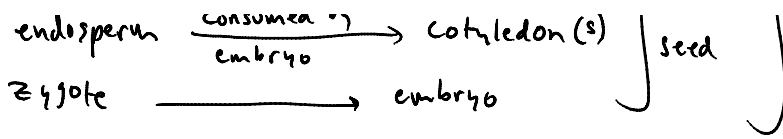


then

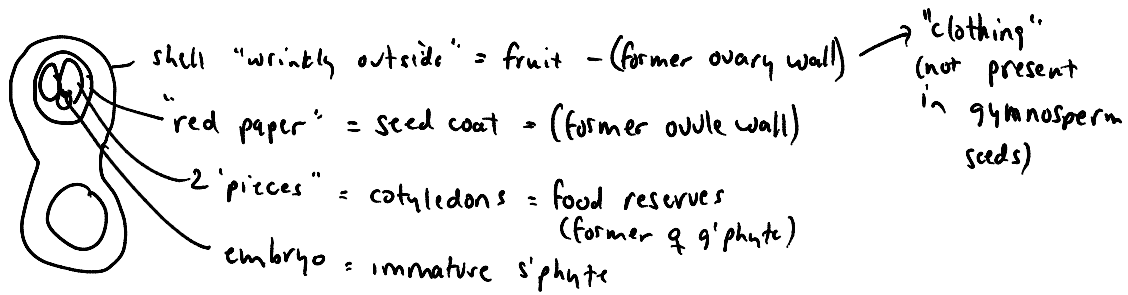
ovary wall → grow into → fruit skin & "flesh"

ovule wall → seed coat

} mature fruit



fruit structure ex. peanut



Puzzle peanut is fruit found underground  
 - why is that surprising?  
 plant buries fruit as it forms

Angiosperm advantages (vs. pines)

- ① flower is pollinated by animals (mostly)
  - \* more efficient than wind
  - \* specialize for unique pollinators (co-evolution interacting species evolve together)
 => drives enormous diversity of flowers & insects  
attracting pollinators - colors, shapes, & smells
- ② fruits - protection for seed & extra food
  - dispersal by herbivores (eat & deposit seeds in feces)

Review

	<u>Moss</u>	<u>fern</u>	<u>pine</u>	<u>angiosperm</u>
s'phyte	tiny stalk	most of plant	most of plant	most of plant
g'phyte	most of plant ♂, ♀, ♀	tiny & underground ♂, ♂, ♀	♂ = pollen ♀ in ovule	♂ = pollen ♀ in ovule
H <sub>2</sub> O for fertil?	Y	Y	N	N
dispersed by?	Spores	Spores	Seeds	Seeds

Vascular  
system

little

yes

yes

yes