



PLANT EVOLUTION WEBQUEST

Click to visit: <http://www.natmus.humboldt.edu>

Click on the "Exhibits link," then click on **A Plant's History** link

Step 1: click on left most link: **What Makes a Plant a Plant?** and scroll down to the **TIMELINE**

1. How long ago was the primary evidence of photosynthesis? _____
2. Estimate: when did conifers appear on the Earth? _____
3. Estimate: when did flowering plants appear on Earth? _____

Step 2: return to **What Makes a Plant a Plant?** link.

1. What are four characteristics that make a plant a plant?

2. What is the formula for photosynthesis?
Carbon Dioxide+_____+Light Energy→_____+Oxygen
3. What does the cell wall do for the plant? _____
4. What is the purpose of the cuticle? _____

Step 3: click on **The Making of a Seed: Cone or Flower?**

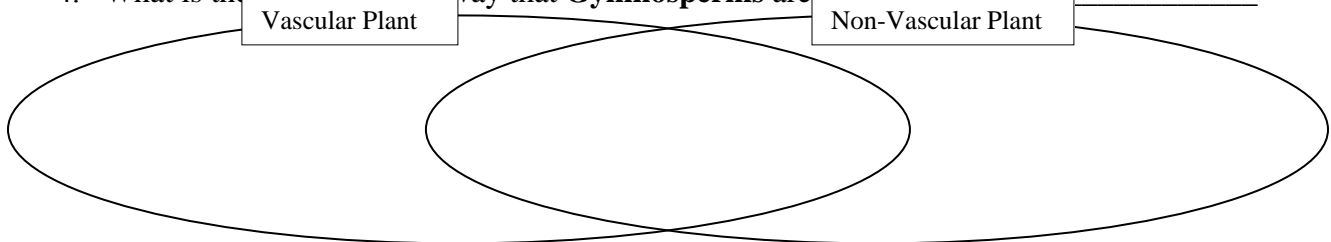
Step 4: click on **Gymnosperm** (click again to enlarge)

1. What is a **Vascular** plant? (hint: the answer is at the very top)

2. When did **Gymnosperms** first arrive on Earth? _____

3. List three examples of a **Gymnosperm**: _____,
_____, and _____.

4. What is the most common way that **Gymnosperms** are pollinated?



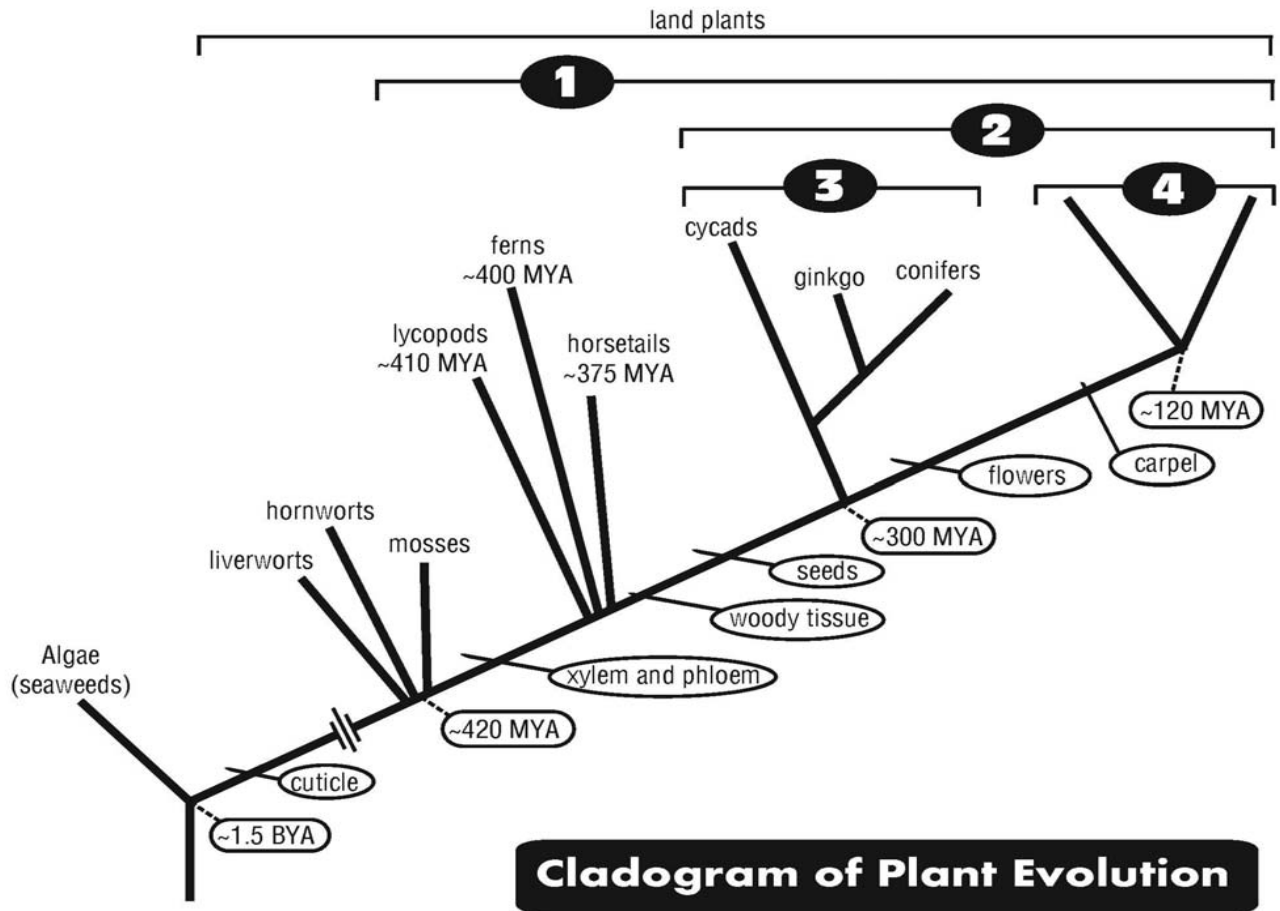
Step 5: Return to **The Making of a Seed...**

Step 6: click on **Angiosperm** (click again to enlarge)

1. Where do **Angiosperms** keep their seeds? _____
2. How are these plants seeds pollinated? _____

3. When did **Angiosperms** appear on Earth? _____
4. Name 3 examples of **Angiosperms**: _____,
_____, and _____.
5. Based on what you now know...What are some angiosperms that humans eat? _____
_____. (Over...)

Step 7: Go back to **A Plant's History Home page** and click on **Evolution of Land Plants** link.
 Step 8: click on the **Cladogram** (branching diagram) showing **Plant Evolution**. Look over the cladogram and fill in terms for 1-4.



Step 9: Below the cladogram on the **Plant Evolution page**, click on the following links.

1. Click on *Angiosperms*. What are three ways angiosperms are different than gymnosperms?

2. Click on *Gymnosperms*. What does Gymnosperm mean?

3. Click on *Conifer*. What is a conifer?

4. Click on *lycopods*, *ferns* or *horsetails* and list at least one interesting fact.

5. Click on *liverworts*, *hornworts* or *mosses* and list at least one interesting fact.

6. Click on *algae* and list at least one interesting fact.
