

Plant WebQuest: Activity

Tracheophytes (aka Vascular Plants)

Division Coniferophyta: Gymnosperms

- <http://www.nhptv.org/natureworks/nwep14e.htm>
 1. Spruce, cedar, and pine trees are all examples of _____.
 2. How does the cone shape help protect the plants from snow?
 3. About how many species of conifers are there?
 4. What is the cup of a yew tree called?
 5. Why do birds sometimes eat only the cup and leave the seeds of yew trees?
 6. What type of gymnosperm resembles a palm, but is not really a palm?
 7. What group of gymnosperms has only one surviving species?
 8. Where are ginkgo biloba trees originally from?
- <http://faculty.fmcc.suny.edu/mcdarby/Animals&PlantsBook/Plants/04-Gymnosperms.htm>
 1. What adaptation allowed plants to make the move to life on land?
 2. List the four groups of gymnosperms and give an example of each.
 -
 -
 -
 -
 3. Gymnosperms were the first widely distributed plant group; what major animal group are gymnosperms linked to?
 4. What is the “main plant” of gymnosperms?
 5. What are cones?

6. In pine trees which is larger, the male or female cones?
7. What structure encases the fertilized egg cell?
8. What is the advantage of a needle over a flat leaf?
9. What is the function of a cuticle?

Division Anthophyta: Angiosperms

- <http://www.nhptv.org/natureworks/nwep14f.htm>
 1. Angiosperms are _____ plants.
 2. Where are angiosperm seeds found?
 3. What process must angiosperms go through before they can reproduce?
 4. What are the male sex organs of angiosperms?
 5. Where is the pollen made in angiosperms?
 6. What are the female sex organs of angiosperms?
 7. Where is the pollen left on angiosperms?
 8. What does cross-pollinate mean?
 9. How many seed leaves do monocots start with?
 10. How many seed leaves do dicots start with?
 11. About how many species of monocots are there?
 12. About how many species of dicots are there?
- <http://faculty.fmcc.suny.edu/mcdarby/Animals&PlantsBook/Plants/05-Angiosperms.htm>
 1. Even though most plants are angiosperms, gymnosperms still have an advantage in certain environments. In what type of environments are gymnosperms more successful than angiosperms?

2. Angiosperms get their name because the _____ are produced inside a _____.
 - What is the function of the fruit in an angiosperm?

3. Seeds are designed to travel in different ways.
 - List two types of fruits that are designed to fly through the air.
 -
 -
 - List one type of fruit that is designed to float across water.
 -
 - List one type of fruit that is designed to attach to passersby.
 -

4. Angiosperms are vascular plants with xylem and phloem.
 - In which direction does xylem flow?
 - In which direction does phloem flow?

5. Angiosperms have true roots; what are the two functions of roots?

6. Angiosperms have stems; what are the two functions of stems?

7. What structure is the site of photosynthesis in angiosperms?

8. How can a plant control the amount of carbon dioxide it takes in and the amount of water it loses?

9. What type of stem is capable of photosynthesis?

10. What type of stem is present in trees?

11. What are the male and female gametophytes in angiosperms?
 - Male:
 - Female:

12. What is the ovary converted to in angiosperms?

13. What type of environmental cues do plants wait for before germinating?

-
-

14. Fill in the missing information for the chart below.

Monocots	Dicots
	Two-piece seeds
Flower parts in multiples of 3	
Parallel leaf veins	
	Root systems have one major root
Stems don't grow in ring pattern	

15. Animals and plants have evolved together, with animals acting as pollinators for plants. List two examples of this type of coevolution.

-
-