Angiosperm vs. Gymnosperm Study Questions

Please use your Angiosperm and Gymnosperm Pt1 and Pt2 reading that was shared with you in your Google Drive, along with the Angiosperm vs. Gymnosperm Packet that you completed in class to answer these questions and make study cards.

1. What 4 characteristics make a plant a plant?
   a. Make their own food (photosynthesis)
   b. Has a cuticle
   c. Has a cell wall
   d. Reproduces using spores or sex cells

2. What is the organelle where photosynthesis occurs?
   a. Chloroplast

3. What makes a plant green?
   a. Chlorophyll

4. What is the purpose of a cuticle?
   a. Waxy layer that holds the moisture in the plant and keeps the plant from drying out

5. What elements go in to photosynthesis?
   a. Carbon Dioxide, Water, Sunlight (CO2, H2O, Sunlight)

6. What comes out of photosynthesis?
   a. Glucose and Oxygen (O2 and C6H12O6)

7. What two categories are plants classified into?
   a. Vascular
   b. Non-Vascular

8. What types of plants are non-vascular?
   a. Mosses & Liverworts

9. What does it mean to be a non-vascular plant?
   a. **Does not have the piping** to carry water and nutrients throughout a plant
10. What two types of plants are vascular?
   a. Seedless Plants
   b. Plants with seeds

11. What does it mean if a plant is vascular?
   a. It has the piping to carry water and nutrients throughout a plant

12. What two types of vascular plants have seeds?
   a. Angiosperms
   b. Gymnosperms

13. What is a gymnosperm?
   a. A vascular plant with seeds that DOES NOT have flowers

14. What is an angiosperm?
   a. A vascular plant with seeds that HAS flowers

15. Where does a gymnosperm hold its seeds?
   a. In its cones

16. Where does an angiosperm hold its seeds?
   a. In its fruits

17. What is the purpose of a flower?
   a. Attracts pollinators for reproduction

18. What is an example of a gymnosperm?
   a. Conifer
   b. Gingko
   c. Cycad
   d. Gnetophyte

19. What is an example of an angiosperm?
   a. Any plant that produces fruit (apple tree)
   b. Any flowers
   c. Grasses
20. How are flowers used for reproduction?
   a. Colors and Scents attract the pollinators for reproduction

21. Why are gymnosperms important?
   a. Makes wood and paper products
   b. Produces resin which is used in soaps and other goods

22. Why are angiosperms important?
   a. Makes wood products
   b. Makes our food
   c. Makes medicines

23. What are the two classes that angiosperms can be broken into?
   a. Monocots
   b. Dicots

24. What are the four characteristics of monocots?
   a. One cotyledon leaf
   b. Scattered vascular tissue
   c. Parallel leaf veins
   d. Flower petals in 3’s

25. What are the four characteristics of dicots?
   a. Two cotyledon leaves
   b. Vascular tissue in a ring
   c. Branching leaf veins
   d. Flower petals in 4’s and 5’s

26. What is the name for the male or female sex cell in plants?
   a. Gametophyte
27. What are the 4 main parts of a seed?
   a. Seed Coat
   b. Cotyledon
   c. Embryo/Sprophyte
   d. Food Supply

28. Which part of the seed stores food for the growing embryo/sporophyte?
   a. Food Supply

29. Which part of the seed becomes the seeds first leaves?
   a. Cotyledon

30. Which part of the seed is the baby plant?
    a. Embryo/Sporophyte

31. Which part of the seed is the outer coat that protects the seed?
    a. Seed Coat

32. Which animal is responsible for 80% of the Earth’s pollination of crops?
    a. Bees

33. What does it mean when a plant, “germinates?”
    a. Seed begins to grow and develop into a plant