

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_ Per: \_\_\_\_\_

### Unit 5 Study Guide

**Directions:** Complete all sections to the best of your ability. On the day of the Quiz (the due date for this assignment) turn this in with all of your Unit 5 notes attached. Please remember to study the concepts, not just the correct answer.

**Vocabulary:** Fill in the definition for each word. Use your book and/or class notes. You can put the definitions in your own words.

Angiosperm: \_\_\_\_\_

\_\_\_\_\_

Gymnosperm: \_\_\_\_\_

\_\_\_\_\_

Fragmentation: \_\_\_\_\_

\_\_\_\_\_

Fruits: \_\_\_\_\_

\_\_\_\_\_

Seeds: \_\_\_\_\_

\_\_\_\_\_

Vegetative Propagation: \_\_\_\_\_

\_\_\_\_\_

Vascular Tissues: \_\_\_\_\_

\_\_\_\_\_

Xylem: \_\_\_\_\_

\_\_\_\_\_

Phloem: \_\_\_\_\_

\_\_\_\_\_

Rhizoids: \_\_\_\_\_

\_\_\_\_\_

Roots: \_\_\_\_\_

\_\_\_\_\_

Stems: \_\_\_\_\_

\_\_\_\_\_

Leaves: \_\_\_\_\_

\_\_\_\_\_

Stomata: \_\_\_\_\_

\_\_\_\_\_

Cuticle: \_\_\_\_\_

\_\_\_\_\_

Cotyledon: \_\_\_\_\_

\_\_\_\_\_

Epidermis: \_\_\_\_\_

\_\_\_\_\_

(Evapo)transpiration: \_\_\_\_\_

Tropism: \_\_\_\_\_

Pollination: \_\_\_\_\_

Germination: \_\_\_\_\_

Stamen: \_\_\_\_\_

Pistil: \_\_\_\_\_

### Multiple Choice

- \_\_\_ 1. Mosses and grapefruit trees are both plants, so we know that
  - A. they both have vascular systems
  - B. their cells have nuclei and cell walls
  - C. they both are gymnosperms
  - D. they both produce seeds
  
- \_\_\_ 2. In most plants, water and nutrients travel through the
  - A. transit system
  - B. vascular system
  - C. cuticle system
  - D. transpiration system
  
- \_\_\_ 3. The movement of water vapor out of a plant and into the air is called
  - A. photosynthesis
  - B. vascular movement
  - C. transpiration
  - D. germination
  
- \_\_\_ 4. Plants grow in
  - A. nearly every environment
  - B. moist conditions only
  - C. cold, dry conditions only
  - D. tropical conditions only
  
- \_\_\_ 5. The first plants adapted to life on land were probably much like
  - A. green algae
  - B. mosses
  - C. ferns
  - D. dissolved nutrients
  
- \_\_\_ 6. Fertilized fern eggs grow structures that will produce and release
  - A. spores
  - B. seeds
  - C. cuticles
  - D. pollen
  
- \_\_\_ 7. A daisy seed starts to grow. This process is called
  - A. transpiration
  - B. meiosis
  - C. pollination
  - D. germination

- \_\_\_ 8. A plant whose seeds are not in a flower or fruit is a(n)  
A. cuticle  
B. embryo  
C. gymnosperm  
D. pollinator
- \_\_\_ 9. In angiosperms, the sperm and egg cells are found in the  
A. egg  
B. pollen  
C. flower  
D. cone
- \_\_\_ 10. Inside a fruit ovary are one or more  
A. pistils  
B. seeds  
C. spores  
D. anthers
- \_\_\_ 11. Animals are important to plant reproduction because they  
A. destroy unwanted species  
B. transport seeds and pollen  
C. produce food for the plants  
D. aid in photosynthesis
- \_\_\_ 12. Plants provide humans with  
A. meiosis and food  
B. carbon dioxide and meiosis  
C. oxygen and carbon dioxide  
D. food and oxygen
- \_\_\_ 13. All plants are  
A. unicellular organisms and consumers  
B. unicellular organisms and producers  
C. multicellular organisms and consumers  
D. multicellular organisms and producers
- \_\_\_ 14. In most plants, the vascular system  
A. gathers the Sun's energy for photosynthesis  
B. controls the flow of oxygen and carbon dioxide  
C. prevents too much water from evaporating  
D. carries water and nutrients through the plant
- \_\_\_ 15. Transpiration refers to  
A. getting energy from sunlight  
B. moving water and nutrients through the plant  
C. moving water vapor from the plant  
D. sprouting a new plant from a seed
- \_\_\_ 16. Plants grow in diverse places because they  
A. reproduce in any conditions  
B. are consumers  
C. adapt to their environment  
D. have to feed animals
- \_\_\_ 17. The first plants needed ways to  
A. reproduce in water  
B. become consumers  
C. support their bodies

D. use oxygen

- \_\_\_ 18. Being nonvascular limits moss's ability to
- A. photosynthesize
  - B. control transpiration
  - C. grow tall
  - D. produce oxygen
- \_\_\_ 19. Fertilized fern eggs
- A. grow structures that produce and release spores
  - B. produce embryos inside of seeds
  - C. become structures for producing seeds
  - D. are also called pollen
- \_\_\_ 20. A young, undeveloped plant, with its nutrients and protective coating, is called
- A. an embryo
  - B. a seed
  - C. a spore
  - D. pollen
- \_\_\_ 21. Germination occurs when
- A. an egg is fertilized
  - B. a spore is produced
  - C. a plant's seeds are scattered
  - D. a seed starts to grow
- \_\_\_ 22. What does pine tree pollen come from?
- A. male cones
  - B. pine embryos
  - C. fertilized eggs
  - D. female cones
- \_\_\_ 23. A flower houses the sperm and egg cells of a(n)
- A. gymnosperm
  - B. fruit
  - C. angiosperm
  - D. pistil
- \_\_\_ 24. Plants help humans survive by providing us with
- A. food, carbon dioxide, and fuel
  - B. oxygen, fuel, and food
  - C. carbon dioxide, methane, and fuel
  - D. fuel, oxygen, and methane
- \_\_\_ 25. When they collect nectar from flowers, bees also transport
- A. pistils from flower to flower
  - B. pollen from flower to flower
  - C. seeds from flower to flower
  - D. nutrients from flower to flower
- \_\_\_ 26. Plants can be found in many shapes and sizes because they
- A. all can grow in any conditions
  - B. are a diverse group of organisms
  - C. can reproduce anywhere
  - D. make up all living things on land
- \_\_\_ 27. All plants, no matter how different,
- A. have cells without cell walls
  - B. are unicellular organisms and producers
  - C. are multicellular organisms and producers
  - D. have cells without a nucleus

- \_\_\_ 28. Which of these structures helps a plant reduce water loss?  
A. chloroplasts  
B. xylem  
C. cuticle  
D. roots
- \_\_\_ 29. A plant without a vascular system must  
A. obtain energy without photosynthesis  
B. live in the water  
C. have a long root system  
D. move water from cell to cell
- \_\_\_ 30. The first plants to live on land had some advantages, including  
A. reduced access to oxygen and water  
B. greater access to oxygen and sunlight  
C. greater access to carbon dioxide and sunlight  
D. reduced access to water and sunlight
- \_\_\_ 31. After moss plants have produced sperm and eggs, fertilization requires that  
A. the spores germinate  
B. the plants pollinate  
C. water be present  
D. the mosses die back
- \_\_\_ 32. A seed and a spore are similar in that seeds and spores both  
A. contain a food supply for the young plant  
B. have a protective outer coating  
C. contain an embryo inside  
D. have pollen tubes
- \_\_\_ 33. Germination is part of the reproduction process of all  
A. living plants  
B. living things with nuclei  
C. living mosses  
D. living things with seeds
- \_\_\_ 34. Which is an advantage of reproduction with seeds?  
A. Seeds can travel far from the parent plant.  
B. A Seed contains an embryo that lives only a short time.  
C. Seeds don't store food, so they don't waste energy.  
D. Seeds are spread only under ideal conditions.
- \_\_\_ 35. In a year when an apple tree doesn't have many flowers,  
A. its apples aren't as sweet  
B. its apples have fewer seeds  
C. it bears fewer apples  
D. every flower has several apples
- \_\_\_ 36. Bees are important to angiosperm reproduction because when they collect nectar for food, they also transport  
A. pistils from flower to flower  
B. pollen from flower to flower  
C. seeds from flower to flower  
D. nutrients from flower to flower
- \_\_\_ 37. Plants make it possible for humans to get energy from food by producing  
A. carbohydrates, oxygen, and sugars  
B. oxygen, carbon dioxide, and water  
C. sugars, water, and carbohydrates  
D. natural resources, oxygen, and water

Fill Out the Plant Reproduction Cladogram

A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

