

Gymnosperms & Angiosperms Unit Test Study Guide

Your Gymnosperms & Angiosperms Unit Test will be on: _____

Prescribed Learning Outcomes: F2a, F2b, F2c, F2d, F2e, F2f

How you will be asked to demonstrate the PLOs for this unit:

Please be aware that all notes, homework, activities, etc. completed throughout the course of this unit will serve as study material for your test.

- Know the definitions of and be prepared to use/apply the vocabulary terms used throughout the course of this unit (refer to your notes, assignments and labs)
- Know the functions of the three plant organs (roots, stems & leaves).
- Describe the major characteristics of both gymnosperms and angiosperms.
- What adaptations do seed plants (gymnosperms and angiosperms) have for survival on land with respect to alternation of generations, needles/leaves, seeds, fruit, pollen, vascular tissue, etc.? Compare and contrast the adaptations that gymnosperms and angiosperms have for survival on land.
- Distinguish between primary and secondary stem growth, and discuss the role(s) of meristematic tissue in that growth.
- Be prepared to describe locations, structures, and functions of the following tissues: meristematic (apical meristem, cork cambium, vascular cambium, pericycle), parenchyma, sclerenchyma, and vascular tissue.
- What are the two types of vascular tissue? Know their structural compositions and their functions. Be prepared to discuss how materials are transported in each of these tissues (i.e. adhesion, cohesion, capillary action, transpiration pull, and the pressure flow hypothesis).
- Be prepared to discuss reproduction in seed plants (alternation of generations in gymnosperms and angiosperms).
- Differentiate between monocots and dicots. Be prepared to classify an angiosperm as either monocot or dicot, based on certain characteristics.

- Be prepared to discuss the role of hormones in growth and development. Know the roles of auxin in stem growth, root growth, and branching, as well as the role of cytokinins.
- What are tropisms? Be prepared to classify an organism based on its response to an environmental stimuli.
- Know the parts of a flower and their functions.