

## Plants short test – What to Know

- Major characteristics of plants
- Basic plant kingdom cladogram – Figure 22-6 in text
  - 4 main types of plants
  - Distinguish seed plants from non-seed plants
  - Interpret evolutionary relationships
- What plants need to survive
- Gymnosperms
  - Define
  - Examples
  - Distinguishing characteristics
- Angiosperms
  - Define
  - Examples
  - Distinguishing characteristics
- 3 main organs of seed plants – roots, stems, leaves
  - Function of each
- Ground, vascular and dermal tissue
  - Function of each
  - Identify each in diagrams
  - Vascular tissue - xylem & phloem – function of each
- Meristematic tissue
  - Function
  - Primary vs. secondary growth
- Stems
  - Identify monocot and dicot stems in diagrams
  - Main features of monocot and dicot plants
  - Layers of a tree
    - Names
    - Where does heartwood come from?
- Leaves
  - Palisade mesophyll, spongy mesophyll – functions
  - Stomata, guard cells
    - Identify in diagram
    - Describe function, timing of function
    - Role of water pressure in function
- Capillary action – relationship to vascular plants
- Pressure flow hypothesis