- 1. Chapter 18 Protista plantae and fungi
  - a. Main message
    - i. Eukaryotic cells have a nucleus and other membrane-bound components sexual reproduction is among the evolutionary innovations of the eukaryote
  - b. Key concepts
    - i. Eukaryotic cells are generally larger than prokaryotic cells effective predation escape from predation and greater metabolic capacity are some of the adaptive benefits of larger cell size
    - ii. Eukaryotes are distinguished by having a nucleus and complex subcellular organization
    - iii. The many membrane enclosed compartments enable eukaryotic cells to function efficiently through division of labor among specialized organelles
    - iv. Sexual reproduction which generates genetically diversity within a population is a key evolutionary innovation of eukaryotes
    - v. The domain eukaryote encompasses animal's plants fungi and a catch all category the protists
    - vi. Some protests most fungi and all plants and animals are multicellular multicellularity makes large individuals possible
    - vii. The kingdom protists are an artificial grouping of mainly single cell creukaryotes that includes algae and protozoans
    - viii. Plants are descendants from green algae the evolutionary mnovations of different plant groups include vascular associated and flowers
    - ix. Fungi include yeasts moles in the scooms they acquire nutrients by absorption and arcsin pomant decomposer
    - x. Some funging m symbolic relation how with other organisms such as with a

