Name Period

Life on Earth Focus Guide

Ch. 24 Early Earth and the Origins of Life

- ❑ Understand the Miller-Urey experiment and its implications (p. 459)
- ❑ Understand the current thoughts about the first cells

Prokaryotes

- ❑ Know the difference between prokaryotes and eukaryotes
- ❑ Structure, shapes, etc. of prokaryotes (p. 462)
- ❑ Gram + vs. Gram – bacteria (p. 462-463)
- ❑ Four metabolic categories of prokaryotes (p. 465)
- ❑ Earliest prokaryotes were probably chemoautotrophs
- ❑ Nitrogen fixation and Metabolic Relationships to Oxygen (p. 466, 583, 875)
- ❑ 3 domains system of classifying living things (p.470-471)

Ch. 25 The Origins of Eukaryotic Diversity (Protists)

- ❑ Endosymbiosis and the genesis of eukaryotes from prokaryotes (p. 484)
- ❑ Know some "classic" protest examples and why the group "Protista" is not a single kingdom
- ❑ Ecological importance of protists (p. 499-500)

Ch. 36 Fungi

- ❑ Vocabulary for fungi structures and fungi nutrition
- ❑ Note the structure, examples, and function of Zygomycota, Ascomycota, and Basidiomycota from lab
- ❑ Basic lifecycle of fungi (use a mushroom as the example)
- ❑ What are molds, yeast, lichens, and mycorrhizae?
- ❑ Anatomy of a lichen (p. 522 Fig. 26.26)

Ch. 26, 28, 29 Plants

- ❑ Understand the process of "Alternation of Generations" (p.506)
- ❑ Moss, Fern and Seed plants lifecycles (p. 575)
- ❑ Know representative plants from the different divisions and whether they are non-vascular, seedless vascular, or seeded vascular plants (p. 513-519)
- ❑ Gymnosperm vs. Angiosperm w/ examples
- ❑ Flower parts (p. 519)
- ❑ Roots, stems, Leaves structure and function (Ch. 28-29 covered in lab)
- ❑ Transpiration (p.589-591)

Ch. 27 Introduction to Animal Evolution

- ❑ What is an animal?
- ❑ Know the stages of embryo formation: Zygote → Blastula → Gastrula (p. 744-745)
- ❑ Types of symmetry (p. 533)
- ❑ Cephalization
- ❑ Germ layers (p. 745)
- ❑ Body cavity

Invertebrates

- ❑ Understand how representative animals from each Phylum are classified by key characteristics/structures/DNA of the Phyla

Vertebrate Evolution and Diversity

- ❑ Know the two invertebrate subphyla of chordates and how they are related to vertebrates
- ❑ Glance through the chapter so that you have an overview of the vertebrates