

Bio 10

Lab Practical 3 Review Questions

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Lab 10: The Diversity of Small Things

1. What 2 surfaces did your group test for bacteria using the agar cell culture plates? Which ended up having more bacteria?
2. What are the 3 types or shapes of bacteria we observed in lab?
3. What do you call protists that need to get their food from other organisms, rather than making their own food?
4. How are prokaryotes and eukaryotes different?
5. What are single-celled eukaryotes known as?
6. What kind of protists are *Paramecium*? Amoebas? Seaweed?
7. How do fungi feed?

Lab 11: Evolution of Plants

1. What were some of the restrictions to life on land that early plants faced?
2. Why don't bryophytes grow very big vertically?
3. What is the name of the structure that produces spores in bryophytes, and is it the more dominant/visible or less dominant/visible generation in the bryophyte life cycle?
4. What is meant by the alternation of generations in plant life cycles?
5. What is the difference between xylem and phloem?
6. Of the four major groups of plants, which are directly dependent on water for reproduction?
7. Where is pollen found in gymnosperms? In angiosperms?

Lab 12: Animal Phylogeny

1. What kind of symmetry do sponges have?
2. Where on the animal phylogeny did body tissues first evolve? Body cavity? What phylum has lost its body cavity and has an incomplete gut? What phylum has evolved a pseudocoelom instead of a true coelom?
3. How are cartilaginous fish and bony fish different?
4. How are annelids and roundworms/nematodes different?
5. What are the 4 characteristics of all chordates?
6. Why might the first mammals have been nocturnal, and what adaptations did they have to living at night?
7. How are a complete and an incomplete gut different?

Lab 13: Human Evolution

1. What changes in the skulls did you notice as hominids evolved from *Australopithecus* to *Homo sapiens*?
2. How was the gorilla skull different from *Homo sapiens*?
3. What two species of hominids originated in Africa and migrated around the world?
4. How can we use differences in mitochondrial DNA and the mitochondrial clock to calculate when populations of humans became reproductively isolated from each other?
5. How did *Homo sapiens* get from Northern Asia to North America?
6. What 2 organelles in the cell contain DNA?
7. Why might *Homo erectus* have gone extinct?