

Appendix 1

Thought Question for Week 1

Investigating organisms within their natural environment (such as you did in this lab) involves a methodological process that all scientists use. Critical thinking skills (i.e. analysis, inference, and evaluation) are also necessary to properly apply this process. Specifically, how are the steps of the scientific method related to the component skills of critical thinking? In what ways are they similar and different? Use concepts from lecture and specific examples discovered in lab to construct your answer.

Thought Question for Week 8

Animal kingdom diversity is partly the result of genetic and developmental changes and adaptation over time (evolution). In this lab, we observed a vertebrate that illustrates many of the themes we have discussed this term, including mitotic division, genetic expression, development, specialization, and division of labor. Describe the adaptations that are evident with the internal pig organs and relate these features to evolutionary function. How have these adaptations contributed to its ability to successfully survive?