

Cephalopod Lab

1. List the phylum, class, family or order, ammonite suture pattern (if applicable), and genus for each of the specimens 1-13.
2. Draw the general soft-part cephalopod morphology and label its parts (fig. 9.8).
3. Draw a cephalopod and label its parts (fig. 9.12).
4. Draw the inner morphology of Nautilus (Fig. 9.10).
5. Where do cephalopods live and describe their lifestyle (how they swim)?
6. What are the three main subclasses of cephalopods and how do they differ?
7. What is the time range of the three subclasses of cephalopods and when was their peak?
8. When did the first cephalopods appear in the fossil record and what was the evolutionary history?
9. Describe the evolution of the ammonoids and what is the difference in suture patterns between the Paleozoic and Mesozoic ammonoids.
10. Draw and describe the difference between the ammonitic, ceratitic, goniatitic, and orthoceratitic suture patterns.
11. What is an index fossil and which type of cephalopod was the most useful one in the Mesozoic and why?
12. What is sexual dimorphism and what is the evidence for this in ammonite shells?
13. Describe the paleoecology of variously shaped cephalopods.
14. What forms dominate the gastropods fauna today and where do they live?
15. Draw and describe the soft-part morphology of squids.
16. Draw and describe the morphology of belemnites.
17. What subclass are most living cephalopods? Describe the various types of environments and ways of swimming, etc.