

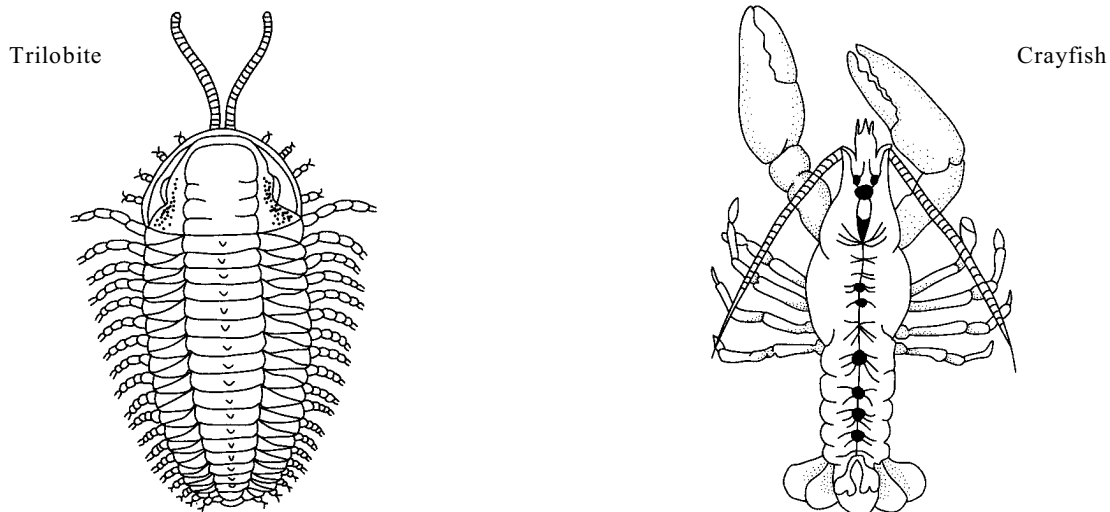
Lab

Investigating Crustaceans

Background Information

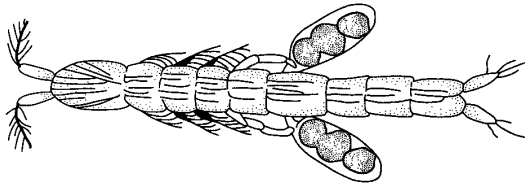
Differences in body form are often observed in animals of the same phylum. In this activity, you will compare segmentation and the development of the members of the phylum *Arthropoda*.

Figure 1 shows a trilobite and a crayfish. Both of these animals are arthropods. The trilobite lived about 300 million years ago during the Paleozoic Era. It is believed to be an ancestor of modern arthropods. The crayfish may have evolved about 225 million years ago. However, the lack of fossil evidence makes it difficult to determine exactly when it first appeared.

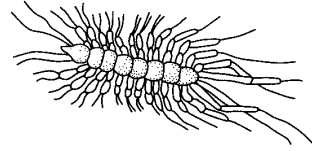
Figure 1

1. Compare the appendages of the two animals.
2. Describe the features that these organisms have in common.
3. Based on Figure 1, summarize the changes that have occurred during the evolution of arthropods.
4. In what two subphyla are these two arthropods classified?

Figure 2



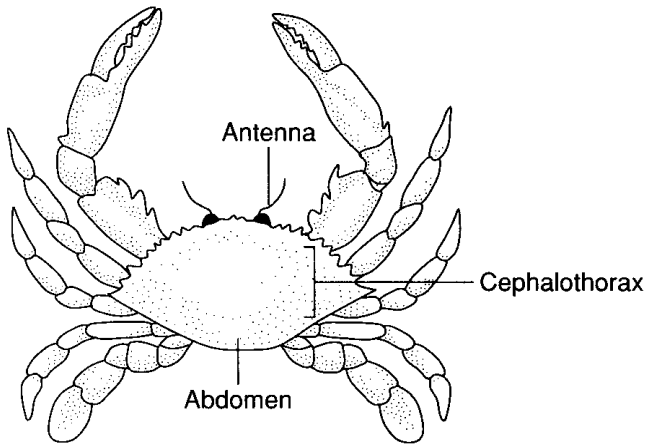
Copepod



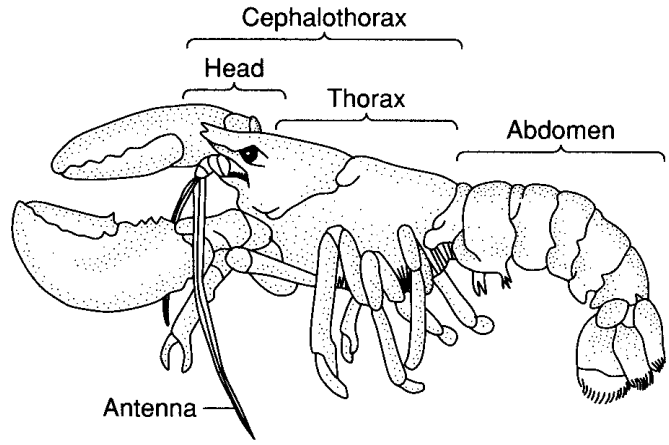
Centipede

5. In what two subphyla are these two arthropods classified?

Figure 3



Blue crab



Lobster

6. Both of these crustaceans are decapods. To what does the term decapod refer?

7. What is the name of the pair of legs that have pinchers?