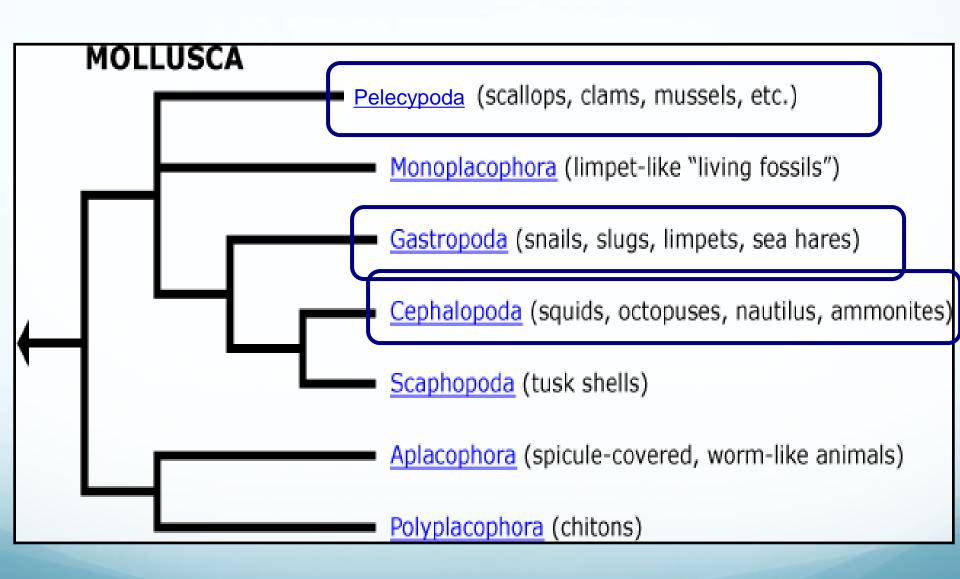




Bivalves are the second largest class within the Mollusca. Over evolutionary time they have become flattened side to side. Two mantle lobes cover the body organs and secrete the two shell valves that are hinged dorsally. Extant bivalves are an important component of marine and freshwater ecosystems, with more than 80% of species living in ocean habitats, and exhibiting varied ecologies.

Sessile epifaunal bivalves, such as oysters and mussels, attach themselves to hard surfaces using cement or byssal threads, while infaunal burrowers bury themselves to different depths in sand or sediment on the seafloor or in riverbeds. Other sessile forms bore into hard sediments, coral or wood. Some species such as scallops are free-living and can move through the water by clapping the two shell valves together, or can dig into the sediment using their muscular foot. Although some bivalves are deposit feeders, the majority use greatly enlarged gill surfaces to filter food particles from the surrounding water.



Bivalvia

