

Domain	Eukaryota
Kingdom	Animalia
Phylum	Brachiopoda

Brachiopods

550 MYA – PRESENT

Brachiopods are a group of marine invertebrate animals that have two hinged shells called valves. Their hinged characteristic allows them to open for feeding or close tightly for protection. The valves of some groups are made of calcium phosphate, while others are made of calcium carbonate. Brachiopods are filter feeders and extract food particles out of the water using looped rows of tentacles, called a

lophophore. Brachiopods vary in size from about 1 mm to about 100 mm while the largest ever recorded was about 200 mm.

The two valves of a brachiopod are slightly different. Each individual valve is bilaterally symmetrical, while the two valves are asymmetrical, one valve is often bigger than the other.

Fossil Record

Brachiopods first appear in the fossil record very early in the Cambrian and were very common marine fauna during the Paleozoic. They were severely affected by the Permian–Triassic extinction event 252 million years ago and never fully recovered. Today they make up only a minor part of marine fauna.

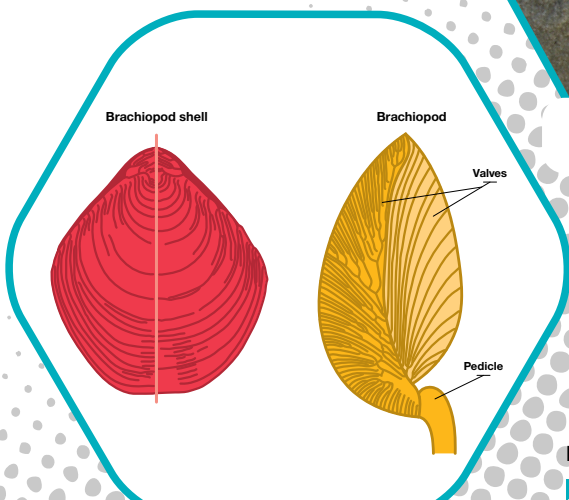
Habitat and Lifestyle

Some brachiopods are burrowers, but most live attached by a pedicle, or stalk, to rocks, other brachiopods, shells, or to soft sediment.

Today, brachiopods live in the ocean from the tropics to the poles and tend to be restricted to deeper water.



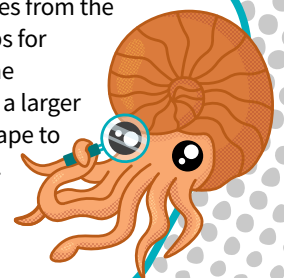
Modern brachiopod, *Lingula anatina*.
Image from Arrlxx, iStock.



Illustrations of typical Brachiopod morphology, showing individual valve bilateral symmetry, and cross-valve asymmetry.

DID YOU KNOW

Brachiopods are sometimes called lamp shells, a name which comes from the Romans, who used oil lamps for lighting. This is because some modern brachiopods have a larger valve that is similar in shape to an old Roman oil lamp.



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