

Key to Brachiopod Identification

Order	Athyrida	Orthida	Productida	Rhynchonellida	Spiriferida	Spiriferinida	Strophomenida	Terebratulida
First appearance	Silurian	Early Cambrian	Ordovician	Early Ordovician	Mid-Ordovician	Devonian	Mid-Cambrian	Early Devonian
Final appearance	Jurassic	Late Permian	Triassic	Recent	Jurassic	Jurassic	Early Jurassic	Recent
Profile	Variable	Plano-convex or bi-convex	Concavo-convex	Biconvex (nut-like)	Usually bi-convex	Variable	Thin, usually concavo-convex	Biconvex (bulbous)
Outline	Circular-oval	Subcircular-oval	Variable	Circular-oval	Variable	Often wing-shaped	Semi-circular; width > length	Circular-oval, rarely wing-shaped
Hingeline	Astrophic	Usually strophic, elongated	Strophic, elongated	Astrophic, pointed	Strophic or astrophic	Strophic (elongated)	Strophic, long	Astrophic, short
Pedicle	Yes	Yes	Often lost in adults	Yes	No	No	Usually no	Yes
Beak	Prominent	Small-moderate	Small-prominent	Prominent	Variable	Prominent, curved	Usually small	Prominent
Teeth	Occasionally	Simple	Pre-Late Devonian only	No	Yes	Yes	Variable	Usually
Ribs	Occasionally	Usually strong	Variable	Strong	Yes or no	Strong, deep	Fine	Variable
Sulcus	Occasionally	Commonly	No	Deep	Yes or no	Devonian only	No	No
Plication	Occasionally	No	No	Strong	Variable	Yes	No	Variable
Punctae	No	Ocasionally	No	Rarely	Yes or no	Very rarely	Rarely (sometimes pseudo-punctate)	Yes

Brachidium	Usually looped	Complex, coiled	Variable	No	Spiral	Spiral	Unspecified	Simple loop
Other features	Occasionally with spines	Well developed interarea on both valves, ridge-like cardinal process	Spines on ventral valve or both	Small interarea on ventral valve		Interarea on ventral valve, interrupted by delthyrium	Well-defined interarea; spines; small bumps cover internal surface of shells	