


Echinodermata

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Echinos "hedgehog" + derma "skin"

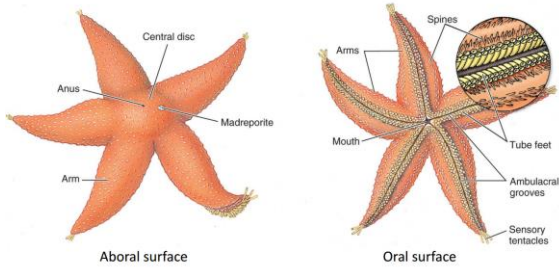
- Strictly marine
- Pentamerous radial symmetry*
- Endoskeleton of ossicles
- Water vascular system



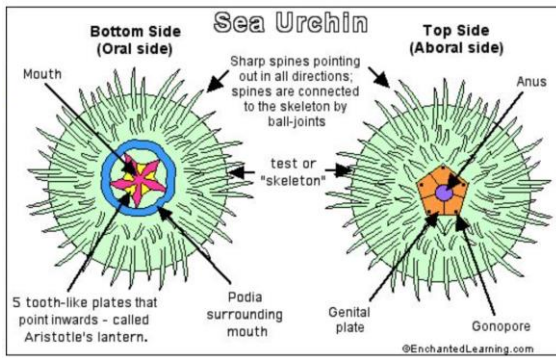
Phylum Echinodermata: Classes

- Class Crinoidea
 - sea lilies, feather stars
- Class Asteroidea
 - sea stars
- Class Ophiuroidea
 - brittle and basket stars
- Class Echinoidea
 - urchins, sand dollars
- Class Holothuroidea
 - sea cucumbers

Phylum Echinodermata: External Anatomy

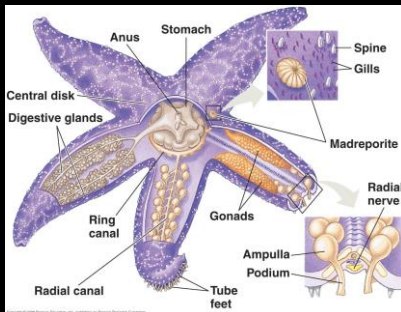


Phylum Echinodermata: External Anatomy



Phylum Echinodermata: Internal Anatomy

5 sets of body parts orient around a central disc



Internal Anatomy: Water Vasc. System

Madreporite > ampulla > stone canal > ring canal > radial canal > lateral canal > tube foot

