Echinodermata:

Domain – Eukaryote  
Kingdom – Animalia  
**Phylum – Echinodermata**  
Class: Asteroidea  
ID: starfish  
Class: Crinoidea  
ID: sea lilies & feather stars  
Class: Echinoidea  
ID: sea urchin, sand dollars  
Class: Ophiuroidea  
ID: brittle star & basket stars  
Class: Holothuroidea  
ID: sea cucumber

**Important:**

**Phylum name means** – “Spiny Skin”

**Habitat** - Marine

**Coelom** - eucoelomate

**Symmetry / Body Plan** - Symmetry – bilateral & pentaradial (depends on developmental stage), and No head

**Cellular Organization** – Tripoblastic

**Reproduction** – Dioecious  
- Bipinnaria larva

**Digestion** – the coelom circulates gases and nutrients throughout the body.

**Circulation** – gas exchange occurs through skin gills, with no true respiratory system or circulatory system.

**Nervous system** – No cephalization (no brain) and no centralization of nervous control, Nerve ring present.

**Key characteristics / special adaptations / unique feature**

- Deuterostome radiation (discuss meaning)
- Pentamerous, with endoskeleton composed of ossicles.
- Water vascular system