Chapter 5

Radial Symmetry

•Cnidarians are a large, diverse, and well-known assemblage of relatively primitive yet versatile marine invertebrates, including jellyfishes, sea anemones, corals, and hydroids.

•They are distinguished by their characteristic nematocyst containing stinging cells (cnidocytes), some of which are painful and even deadly to humans.













- The 7800 species of polychaete annelids feed in an impressive variety of ways, including
 - ingesting organic rich sediments,
 - preying on other animals,
 - and using a complex system of tentacles to function as filter or suspension feeders.



kilograms.

Chapter 5 Arthropoda (f) (f) crab, and (g) barnacie.

















sea urchins and sand dollars (Class Echinoidea)

hard internal skeleton called a "test"

Urchins:

feeding: grazers and predators

defense: spines, and specialized tube feet with beaks for biting and removing debris

Sand dollars

feeding: suspension feed on detritus defense: hard "test" and bury in sand

Sea Stars (Class Asteroidea)

5 arms to many arms



Feeding: Top predators on each other, molluscs, or corals

Defense: tough leathery skin, spines and toxin in some

Sensitive to climate change (eg, Heliaster, sunstar in Gulf of California

Segmented worms (Phylum Annelida)

Class Polychaeta in Marine habitats

cavity. (Courtesy of T.



Chapter 5

Fig. 5.28 The filtering structures of a tube-dwelling polychaete worm (Courtesy of T. Phillipp)





the open sea (tunicates and lancelets)





