Creature Features

Creating a Complex Invertebrate Creature
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Invertebrates

~ Animals without backbones

~ About 97% of all animals

~ Arthropods (insects, crustaceans, arachnids) are the largest group – about 75% of all Invertebrates
Phylum Porifera

“pore-bearing”

SPONGES

Distinguishing Characteristics:

• Lack true tissue – most primitive of multi-cellular animals
  • No organs
  • Cells loosely organized into layers

• Most have no definite shape – depends on substrate & environmental factors
Lifestyle: sessile

Feeding mechanism: filter feeder
~dependent on movement of water thru body

Defense strategy: release of toxic chemicals
~To prevent fouling organisms from attaching
~To prevent overcrowding on the reef
Phylum Cnidaria
“knife-bearing”
Hydras, Jellies, Anemones & Corals

Distinguishing Characteristics:

• Cnidocytes – (unique to the phylum) specialized cells that contain Cnidae – tiny capsules that contain a coiled tubule and venom. 2 types of cnidae: Nematocysts (toxic) & Spirocysts (sticky)

• Gut cavity – coelenteron – digestion & circulation

• Radial symmetry, hydrostatic skeleton

• Limited organ development
  - nerve net (mouth)
  - no eyes, brain
Class Anthozoa
Sea Anemones & Coral

Distinguishing Characteristics:
• Polyp stage only
• Solitary or colonial

Lifestyle: typically sessile (anemones can move)

Feeding mechanism: nematocysts/spirocysts
• Anemones catch fish
• Corals catch plankton
New Invert species created by High School students
The whole collection!
Now it’s your turn!!!
Thank you for coming!

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