

Chordates

5 distinctive traits

1. Notochord
 - Flexible rod, first to appear in embryo
 - Replaced by vertebrae in most
2. Dorsal hollow nerve cord
 - Sits dorsal to alimentary canal
 - Anterior end enlarges to form brain
3. Pharyngeal slits
 - Connects pharyngeal cavity to outside
 - Developed for filter feeding, then gills
4. Postanal tail
 - Evolved for locomotion in water
5. Endostyle (thyroid gland)
 - Filter feeding with mucous

See Fig. 15.1 in text

BIO202 - 2009 Scharf

Chordates

Subphylum Urochordata (tunicates)

- Marine, solitary but can form colonies
- Common name from non-living tunic or test

See Figs. 15.4 and 15.5 in text
- Only larvae have all 5 chordate traits
- Adults are pharynx dominated and filter feed using mucous
- Both sessile and pelagic forms

BIO202 - 2009 Scharf

Chordates

Subphylum Cephalochordata (lancelets)

- Notochord extends into head
- Marine, burrow in sand
- All 5 chordate traits present

See Fig. 15.7 in text
- Segmented trunk musculature
- Bilaterally compressed
- Filter feeds using cilia and mucous
- Sister group of vertebrates?????

BIO202 - 2009 Scharf
