13 Minor Eucoelomate Phyla

A convenient grouping of Eucoelomata in which:

1. The body is not metamerically segmented at least in the adult, but may be annulated.
2. There is no distinct head, although a prostomium or proboscis may be present. The body is often worm-like.
3. The gut is straight, coiled or U-shaped.
4. The nervous system is simple: a cerebral ganglion may be present or absent; a circum-oesophageal ring connects with a single ventral nerve cord which may or may not be ganglionated.
5. Organs of special sense are usually lacking.
6. The epidermis may be covered with a thin cuticle or it may secrete a shell or tube around the body.
7. Appendages are generally lacking, although tentacles or spines are sometimes present anteriorly.
8. The body usually contains circular and longitudinal muscles, but these may be lacking in certain Bryozoa. Circular muscles are lacking in the Chaetognatha.
9. A coelom is present and is often subdivided into distinct regions.
10. Excretory organs may be present or absent. When present they are of the nephridial type.
11. Blood vascular system is often reduced or lacking. When present it is of the closed type.
12. The products of the gonads are passed to the exterior through nephridia or via the coelom through gonoducts.
13. The sexes may or may not be separate.
14. Larval forms of various kinds occur, some of which resemble trochophores.
The eight minor coelomate phyla treated here are divisible into three groups. The first, which comprises the Echiurida, Sipunculida and Priapulida, shows certain affinities with the Annelida:Polychaeta although their systematic status is still in doubt. The second group consists of the Brachiopoda, Phoronidea and the Bryozoa, all of which are characterized by the presence of a lophophore, a circular, crescentic or spirally coiled crown of ciliated tentacles surrounding the mouth. The third group comprises the Pogonophora and Chaetognatha and is characterized by the absence of a lophophore and a pattern of embryological development which links them with the Echinodermata and Chordata.