Define symmetry and its types.

TERM	DEFINITION
Asymmetry	The arrangement of body parts without a central axis or point (e.g., the sponges).
Bilateral symmetry	The arrangement of body parts such that a single plane passing between the upper and lower surfaces and through the longitudinal axis divides the animal into right and left mirror images (e.g., the vertebrates).
Radial symmetry	The arrangement of body parts such that any plane passing through the oral-aboral axis divides the animal into mirror images (e.g., the cnidarians). Radial symmetry can be modified by the arrangement of some structures in pairs, or other combinations, around the central axis (e.g., biradial symmetry in the ctenophorans and some anthozoans, and pentaradial symmetry in the echinoderms).

Define Cephalization?

Bilateral animals move primarily in one direction, one end of the animal is continually encountering the environment. The end that meets the environment is usually where complex sensory, nervous, and feeding structures evolve and develop. These developments result in the formation of a distinct head and are called **cephalization.**

Cephalization occurs at an animal's **anterior** end. **Posterior** is opposite anterior; it is the animal's tail end.

Define comparative embryology?

The study of **comparative embryology** is based on the observation that embryological events may be similar because of shared ancestry. As with other comparative studies, however, embryologists must sort homologous developmental