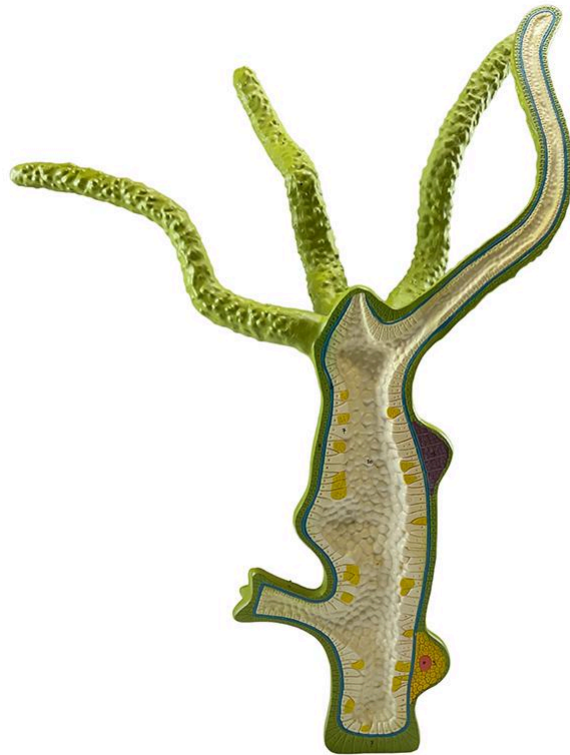


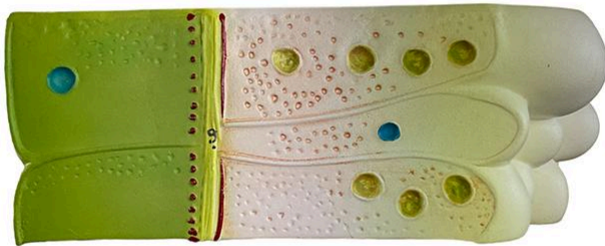


MG10253 | HYDRA, 4 PARTS











This 4-part Hydra anatomical model features longitudinal and transverse views, detailing structures such as ectoderm, mesoglea, gastrovascular cavity, gametes (ova and sperm), buds, and mouth opening. The magnified representation reveals various cellular structures, including cnidocytes, epithelial, sensory, and interstitial cells, as well as the nerve net. The model is mounted on a base for easy observation and handling.

Applications:

Ideal for teaching and research in biology, zoology, and comparative anatomy. Suitable for the study of cnidarian morphology, aiding in the understanding of the structure and function of a hydra. Allows for practical training in the identification of microscopic structures in a simple multicellular organism.

Technical Features:

- * Magnified representation (250x) for better visualization of structures.
- * High-precision molding.
- * Manufactured from stable synthetic material and resin, approved in toxicological tests.
- * Numbered and hand-painted with didactic colors.
- * Includes an information card with related structures.
- * Replica with high anatomical fidelity.
- * Additional block model showing the magnified anatomy of a cnidocyte.
- * Mounted on a polymer base.

3D Technology and Augmented Reality:

Our anatomical models offer a visual complement through information cards that activate 3D models viewable in augmented reality (AR). This interactive platform aids learning, allowing for comparative analysis of anatomical structures and offering resources for education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Scale: 250 times natural size.
- * Material: Synthetic resin.

Main Structures:

Tentacles: Thin, elongated structures surrounding the hydra's mouth, used in prey capture and locomotion.



Hypostome: The region of the hydra's mouth, located at the oral end of the body, surrounded by tentacles.

Mesoglea: Acellular gelatinous layer located between the ectoderm and endoderm, providing structural support and aiding in nutrient diffusion.

Endoderm: Inner cell layer of the hydra's body wall, responsible for digestion and nutrient absorption. Contains glandular cells that secrete digestive enzymes and nutritive-muscular cells that aid in digestion and body movement.

Ectoderm: Outer cell layer of the hydra's body wall, which protects the animal and participates in locomotion and prey capture. Contains epitheliomuscular cells, sensory cells, interstitial cells, and cnidocytes.

Gastrovascular cavity: Internal space of the hydra's body, where digestion occurs. Also known as the coelenteron.

Testis: Male reproductive structure of the hydra, responsible for sperm production.

Ovary: Female reproductive structure of the hydra, responsible for egg production.

Basal disc: Adherent structure at the aboral end of the hydra, allowing the animal to attach to the substrate.

Bud: Structure associated with the asexual reproduction of the hydra, through budding.

Other structures can be verified directly on the physical piece or on the interactive 3D model.

About the Anatomical Models:

Developed with resin replication technology, offering an alternative for teaching and research. They present the essential morphological characteristics, combining cost-effectiveness, durability, hand painting, and numbering for precise identification of structures.

List of all visible structures:

- Tentacles
- Hypostome
- Mesoglea
- Endoderm



- Ectoderm
- Gastrovascular cavity
- Testis
- Ovary
- Basal disc
- Pedal disc
- Nerve net
- Sensory cell
- External longitudinal myoneme
- Cnidoblast
- Internal circular myoneme
- Nutritive-muscular cell
- Epitheliomuscular cell
- Interstitial cell
- Gland cell
- Food vacuole
- Nematocist
- Filiform tube
- Cnidocil
- Nucleus
- Nematocist
- Nucleus
- Cnidocil
- Thread