

LIFE SCIENCES 11

ROUNDWORMS

Phylum	Nematoda
Level of Organization	Organ
Digestive System	Tube
Symmetry	Bilateral
Coelom	Pseudocoelomate
Segmentation	None

Nematodes

- bilateral symmetry with a tubular body tapered at both ends
- half are free-living → either decomposers or prey on tiny invertebrates
 - can be used to control insect pests in crops, flea populations, etc.
- half are parasitic to plants or animals
 - *Trichinella* worms, hookworms, ascarid worms and pinworms
 - filarial worms can block lymphatic veins causing swelling of limbs (elephantiasis)
 - heart worms in cats and dogs is another type of filarial worms
- first organism to evolve a one-way digestive tract
- exchange gases and excrete wastes through their skin
- have ganglia and a nerve cords to coordinate movement
- pseudocoelom is fluid filled
 - acts as a hydrostatic skeleton for the muscles to push or pull against
- reproduce sexually with internal fertilization
 - parasitic nematodes require multiple hosts or multiple location within the same host

