Porifera

Means “porous”

Includes sea sponges

Eats by filtering food particles from water

Has collar cells with flagella

Current goes through the cavity

Sessile

Has spicules made of spongin for support

Lives on the ocean floor

Uses oxygen but does not have lungs or a heart

Have no nervous system

Cnidaria

Includes jellyfish, anemones, hydra, corals

Lives in the ocean

Uses oxygen but does not have lungs or a heart

Eats by catching prey in tentacles

Digests in a gastrovascular cavity

Has a hydrostatic skeleton

Have radial symmetry

Can be a medusa shape or polyp (umbrella) shape

Have nematocysts for defense

Cannot control their own drift (movement)

Have a simple nervous system, sensitive to touch

Platyhelminthes

Includes Planaria, tapeworms, flukes

Have very flat bodies

Have bilateral symmetry

Usually live in water

Many are parasitic

Eyespots are sensitive to light

Have a pharynx to eat

Can regenerate as a form of reproduction

Have a simple nervous system with a ganglion

May live on land or in the ocean

Nematoda

Includes trichinosis worms, heartworms

Have round, smooth-skinned bodies

Have bilateral symmetry

All are parasitic (live in hosts)

Reproduce by laying eggs

Are often found inside wild animals

Annelida

Includes earthworms, leeches, fireworms

Have segmented bodies inside and out

Consist of a long digestive tube from tip to tail

Have bilateral symmetry

Have a closed circulatory system, more complex than their cousins

Breathes oxygen through their skin, through diffusion

May derive nutrition from soil

May reproduce through regeneration

Has a central nerve cord that responds to many stimuli

Have muscles which pull the body along the ground

Many have bristles around or on the underbelly

Almost all live on land

Mollusks

Includes univalves, bivalves

Includes cephalopods, gastropods

Have a radially symmetric mouth called a “radula”

Have very soft bodies

May have a “foot” or portion that guides/digs the organism

May excrete slime, ink, or other wet substances

Some have a siphon

Some have excellent camouflage or coloring for defense/protection

May have tentacles

May have shells for protection

Most live in the water, but some live on land

May grow their own shells by layers, called a mantle

Have bilateral symmetry

May have complex organs including eyes, antennae

Includes clams and shellfish

Includes squids and octopus

Includes snails and slugs

Have more complex brains with eyes and intelligent movement

Have a variety of ways they move

A few major kinds are filter feeders, but not the majority

Some appendages may regenerate

Echinoderms

Have radial symmetry

Includes urchins, sea cucumbers, sea stars

Have spines or spiny skin made of spicules

Live in the ocean

Have a water-vascular system

Have tube feet with suction cups

May have a stomach that folds out to feed

They do not have any real “head” or anterior end

The mouth is often in the direct center of the organism

Some appendages may regenerate

Invertebrates

Include about 95% of animals

Do not have vertebrae or bones

The majority live in or require wet environments

May have an exoskeleton or unusual endoskeleton

Are all cold-blooded

Have either bilateral, radial, or spherical symmetry

All that reproduce through sexual reproduction lay eggs

Have limited/unique nervous, circulatory, respiratory systems