

Vertebrates and Invertebrates Study Guide

invertebrates	ANIMALS WITHOUT BACKBONES (95% of all animals)
symmetry	the property where parts of an animals body match up around a midpoint or line
sponges	Simplest class of invertebrates with hollow bodies made of two cell layers
cnidarians	the class of invertebrates with tentacles and stinging cells (coral & jellyfish)
mollusks	the class of invertebrates with shells and soft bodies (clams, oysters, octopus, snails, slugs)
echinoderms	a class of spiny skinned invertebrates with endoskeletons ex: sea urchins, starfish
arthropods	class of invertebrates with jointed legs & sectioned bodies (insects, arachnids, crustaceans, centipedes & millipedes)
exoskeleton	hard coverings that protect the body of all arthropods
arachnids	arthropods with 4-5 pair legs, 2 body sections, and fangs (ex. spiders, ticks, scorpions)
insects	arthropods with 1 pair antennae, 3 pair legs, 1-2 pair wings, 3 body sections (ex. ants, beetles, crickets)
crustaceans	arthropods with 2 pair antennae, 2-3 body sections, able to chew (ex. crabs shrimp, lobster)
centipedes	arthropods with 1 pair legs on each body section
millipedes	arthropods with 2 pair legs on each body section
WORM CLASSES	
flat worms	invertebrate worms with flat bodies - 3 cell layers thick - Some live in bodies of other animals (ex. planarians)
roundworms	invertebrates with thin bodies and pointed ends - live in bodies of other animals (ex. nematodes)
segmented worms	invertebrates with bodies sections - live on land (ex. earthworms)

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VERTEBRATES	ANIMALS WITH BACKBONES
Warm-blooded	vertebrates including birds and mammals whose body temperature does not change much
birds	class of warm blooded vertebrates with feathers, beaks, two legged & clawed feet, strong shelled eggs
mammals	class of warm blooded vertebrates with fur or hair, most have live birth, females produce milk
cold-blooded	vertebrates that cannot control their body temperature (fish, reptiles, amphibians)
cartilaginous fish	skeletons made of rubbery cartilage (ex. sharks and rays)
jawless fish	skeletons made of rubbery cartilage & mouths like suction cups (ex. lampreys)
bony fish	skeletons made of bone. covered in scales (ex. tuna, goldfish)
reptiles	class of coldblooded vertebrates that have leathery eggs They live on land & have dry skin covered with scales or plates
amphibians	class of coldblooded vertebrates that have slick eggs. They begin life in water & live part of life on land. They have moist skin,