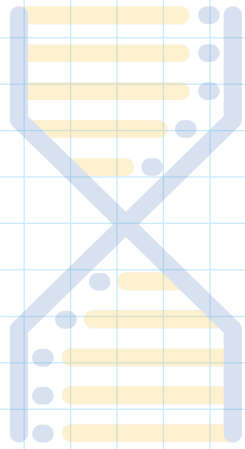


VERTEBRATES

FEATURES	PISCES	AMPHIBIA	REPTILES (copulatory organ)	AVES	MAMMALIA
INTRODUCTION & HABITAT	Palaeozoic Era Aquatic	Palaeozoic Era 1 st Vertebrate land	Mesozoic Era Land environm.	Jurassic Period Archaeopteryx	Cenozoic Era Varanope
RESPIRATION	Gills (Pharyngeal region)	Larva → Gills Adult → lungs	Lungs (Spongy)	Lungs (Parabronchi)	Lungs (Alveoli)
CIRCULATORY SYSTEM	2 Chamb. Heart Single Circuit	3 Chamb. Heart Double Circuit	4 Chamb. Heart Double Circuit	4 Chamb. Heart Right Aortic Arch	4 Chamb. Heart Left Aortic Arch
LOCOMOTION	Swimming	Claws (Swim + Hop)	Efficient locomotion (claw)	Wings (Fly)	Pentadactyl limbs
TEMPERATURE	Poikilotherm Cold Blood	Poikilotherms Cold Blood	Cold Blood	Homeotherm Warm Blood	Homeotherm Warm Blood
EXOSKELETON	Scales	X	Scaly skin	Feathers	Skin + Nails
DIGESTIVE SYSTEM	Variation in Stomach	Tube like	Tube like	Gizzard (No Teeth)	Holozoic System
EAR	Internal Ear	Internal & middle	"	"	External (Pinna) 3 Bones
BODY	Streamlined (Swim Bladders)	Smooth, Moist Glandular	Dry Scaly skin	Streamlined body	Body with Hairs
TYPES	Cyclostoma, Chondro, Osteo	Tailed, Without Tail	Snake Crocodile	Flying Running	Egg laying, Pouched, Placental
EXAMPLE	Haif Fish Trout, Shark	Frog, Toad Salamanders	Lizard Alligator	Sparrow, Crow Parrot	Rabbit, Rat Human

PROTOTHERIA	METATHERIA	EUTHERIA
Egg laying	Pouched	Placental
Connecting links	Marsupium	Max. mammalian Character
Reptiles & mammals	Mostly primitive mammals	Modern mammals
Spiny Ant Eater	Opposum, Kangaroo	Man, Whale



Physics in Seconds