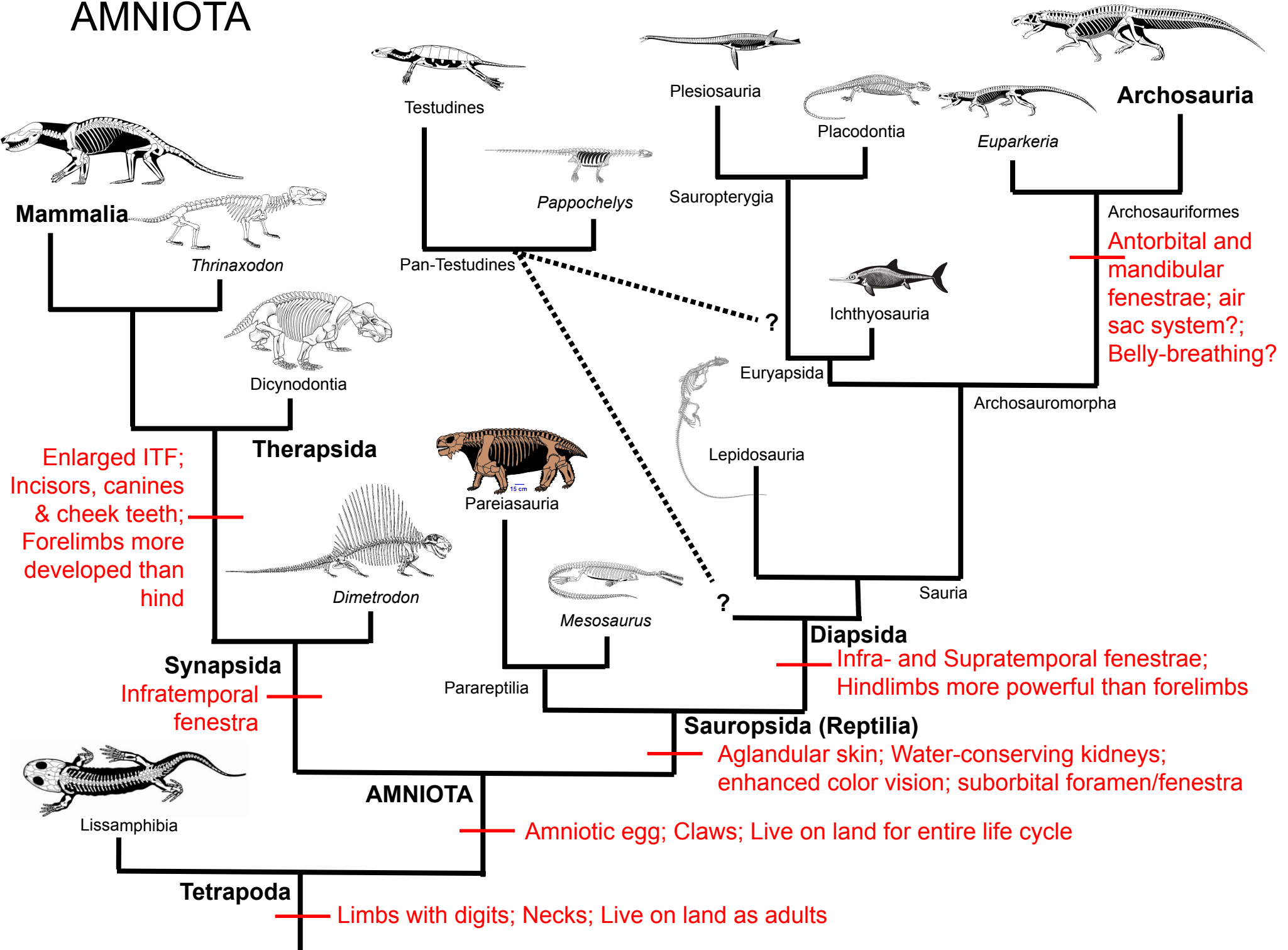


AMNIOTA



Enlarged ITF;
Incisors, canines
& cheek teeth;
Forelimbs more
developed than
hind

Antorbital and
mandibular
fenestrae; air
sac system?;
Belly-breathing?

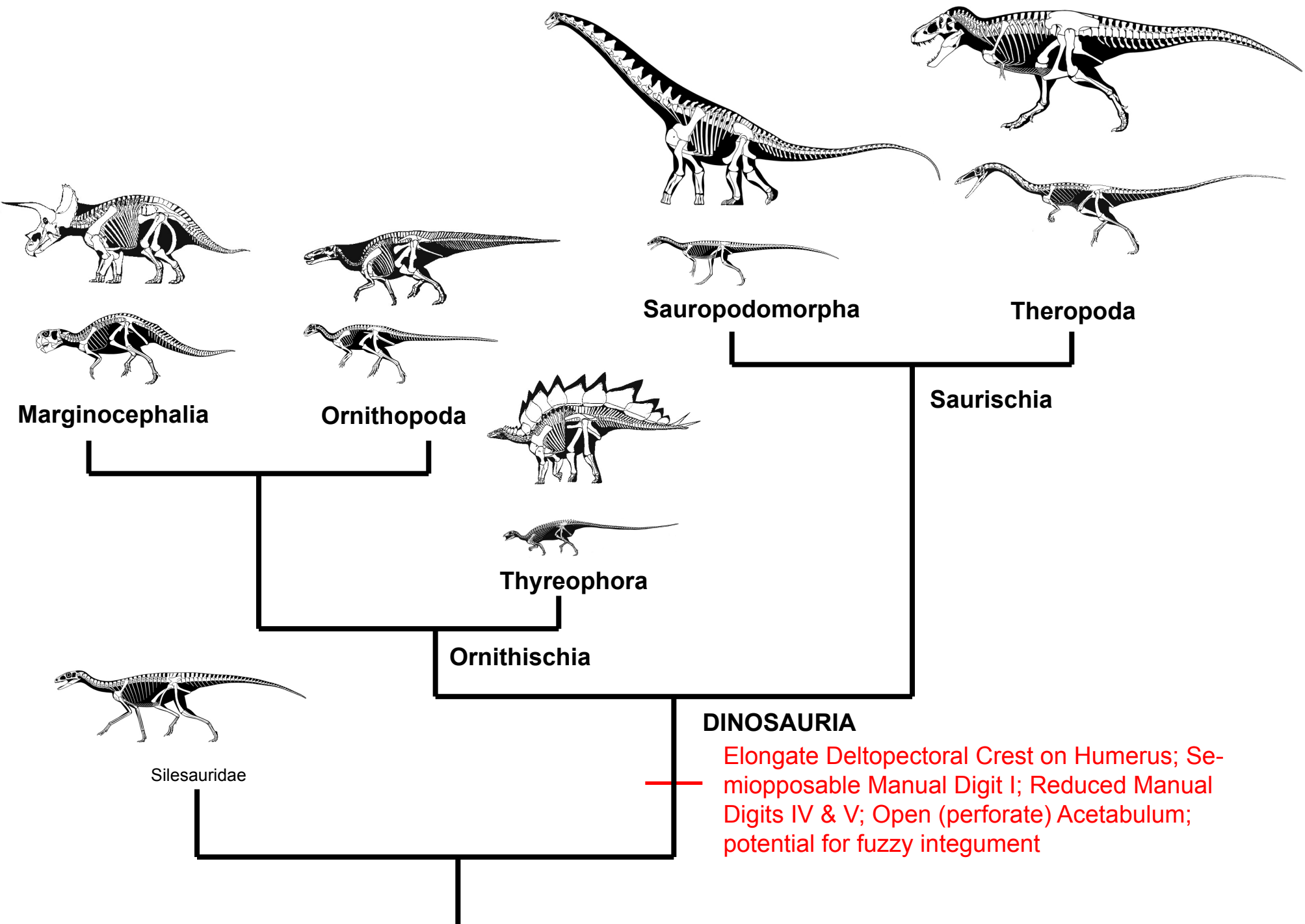
Infra- and Supratemporal fenestrae;
Hindlimbs more powerful than forelimbs

Aglandular skin; Water-conserving kidneys;
enhanced color vision; suborbital foramen/fenestra

Amniotic egg; Claws; Live on land for entire life cycle

Limbs with digits; Necks; Live on land as adults

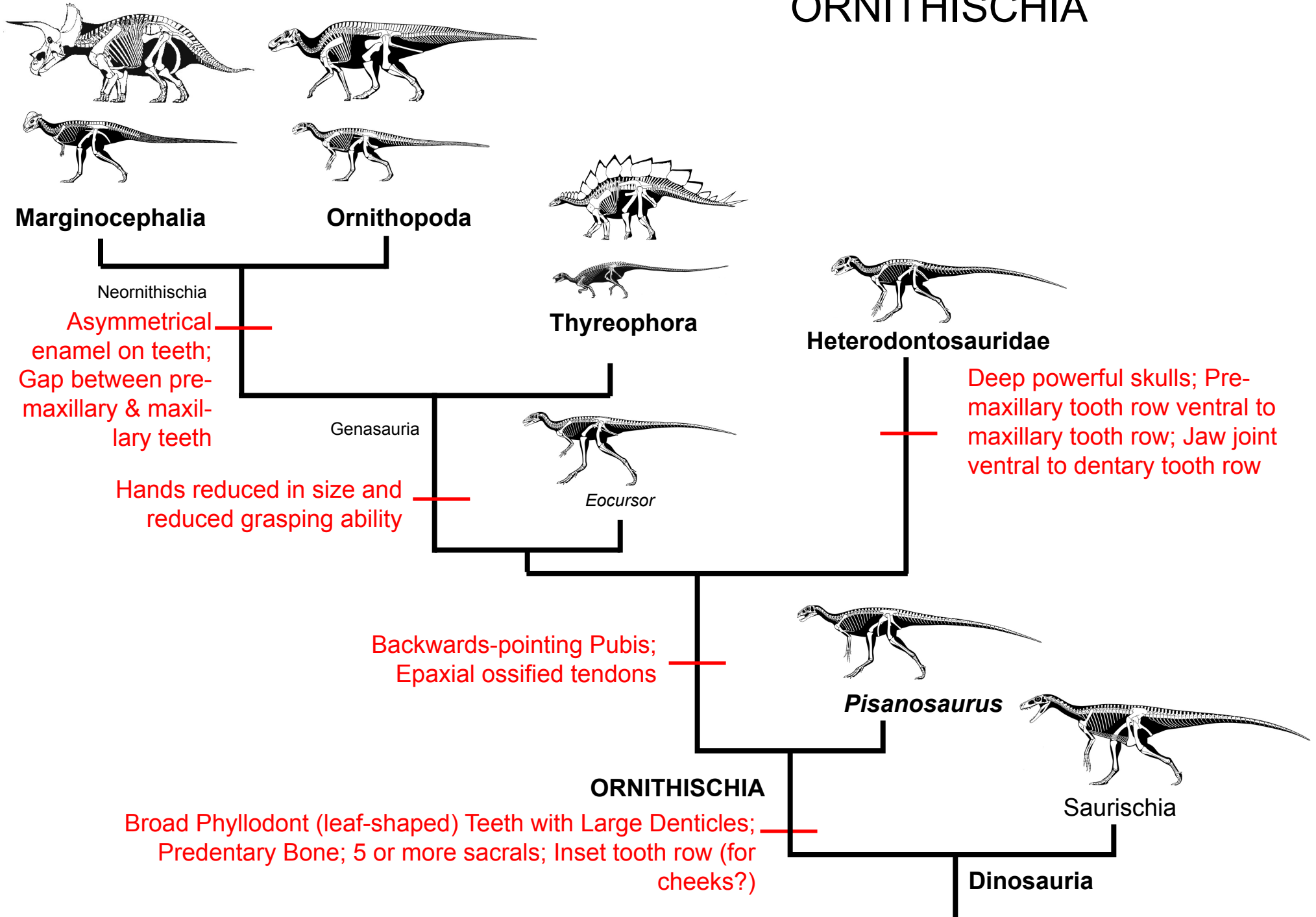
DINOSAURIA



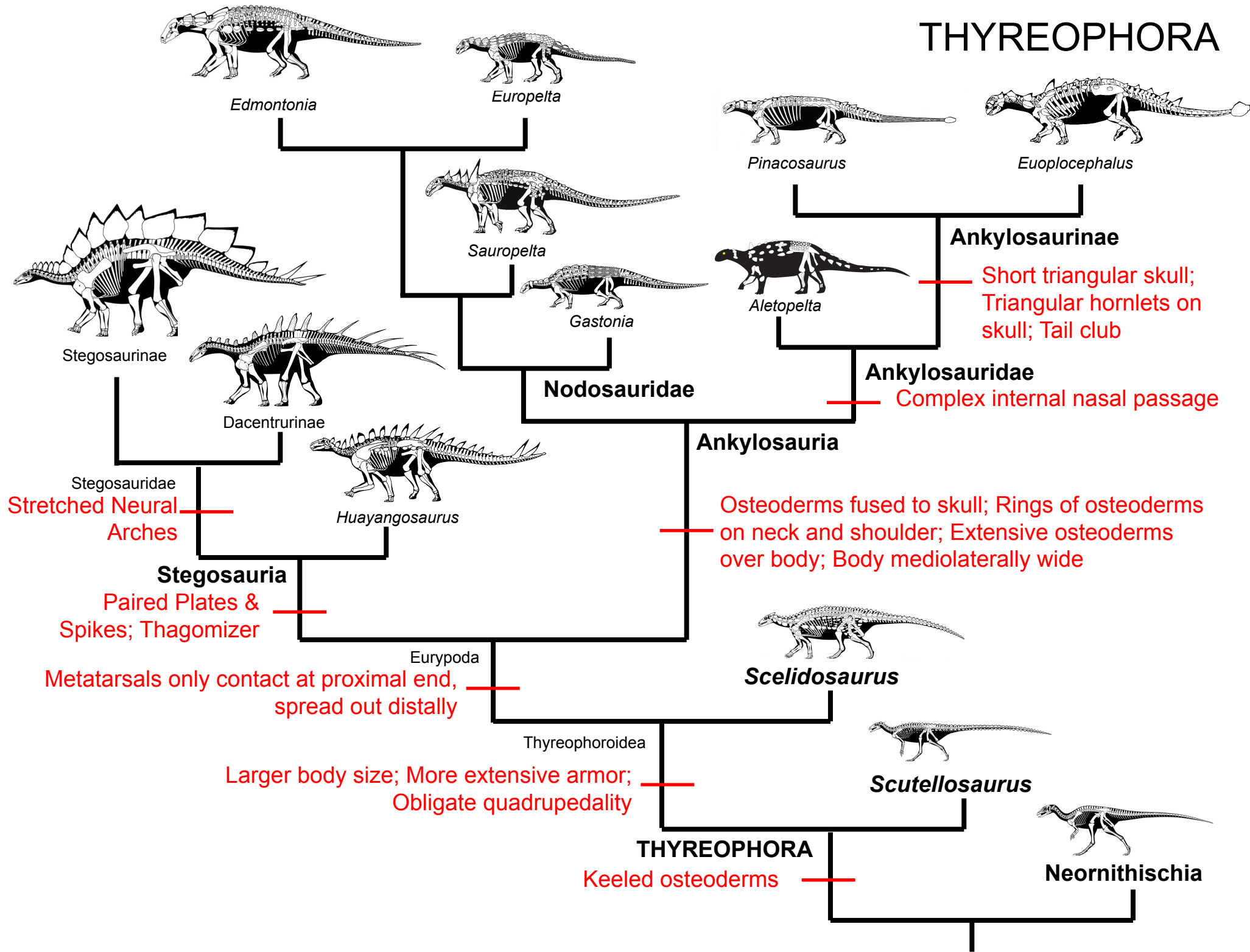
DINOSAURIA

Elongate Deltopectoral Crest on Humerus; Semiopposable Manual Digit I; Reduced Manual Digits IV & V; Open (perforate) Acetabulum; potential for fuzzy integument

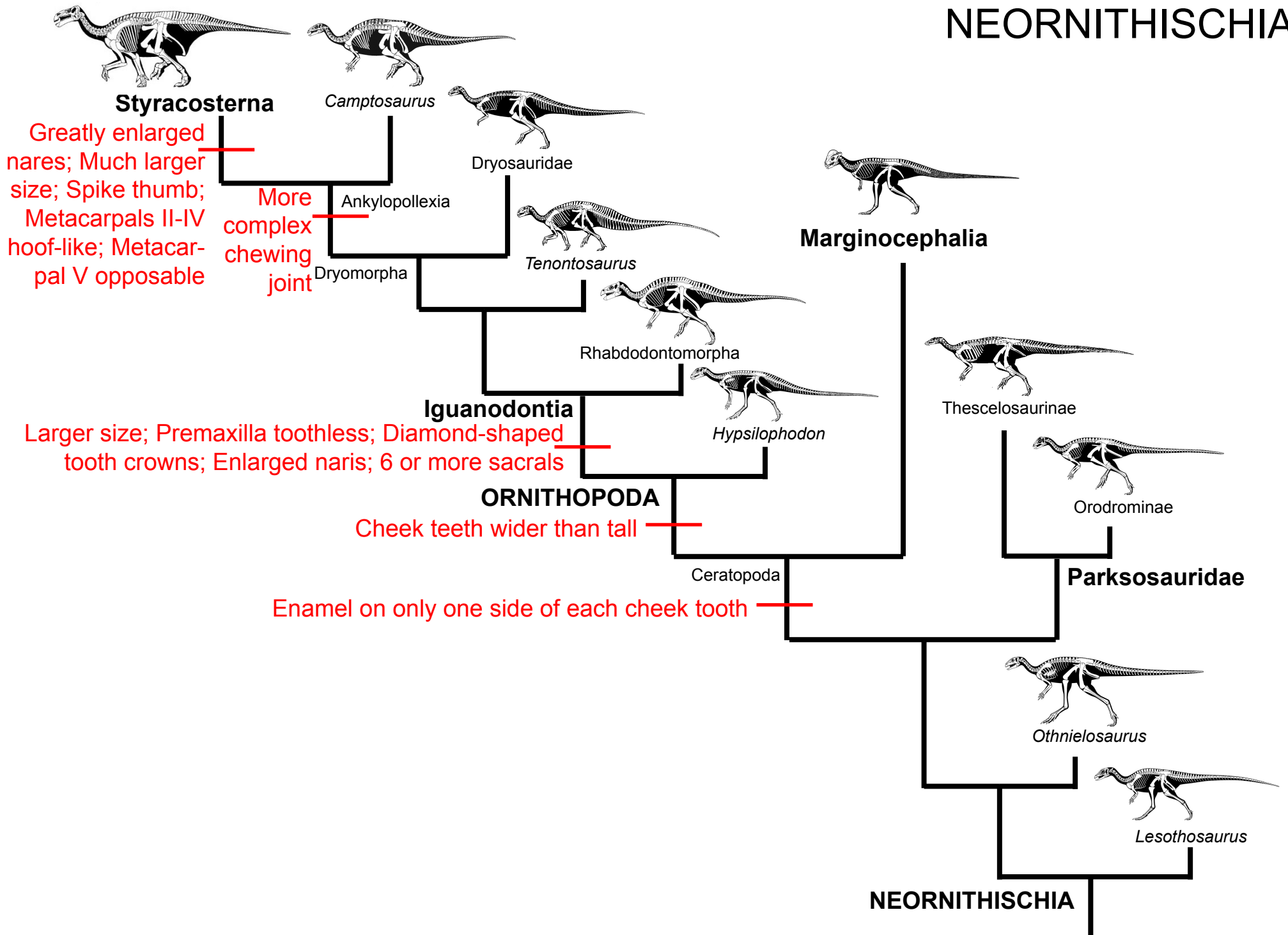
ORNITHISCHIA



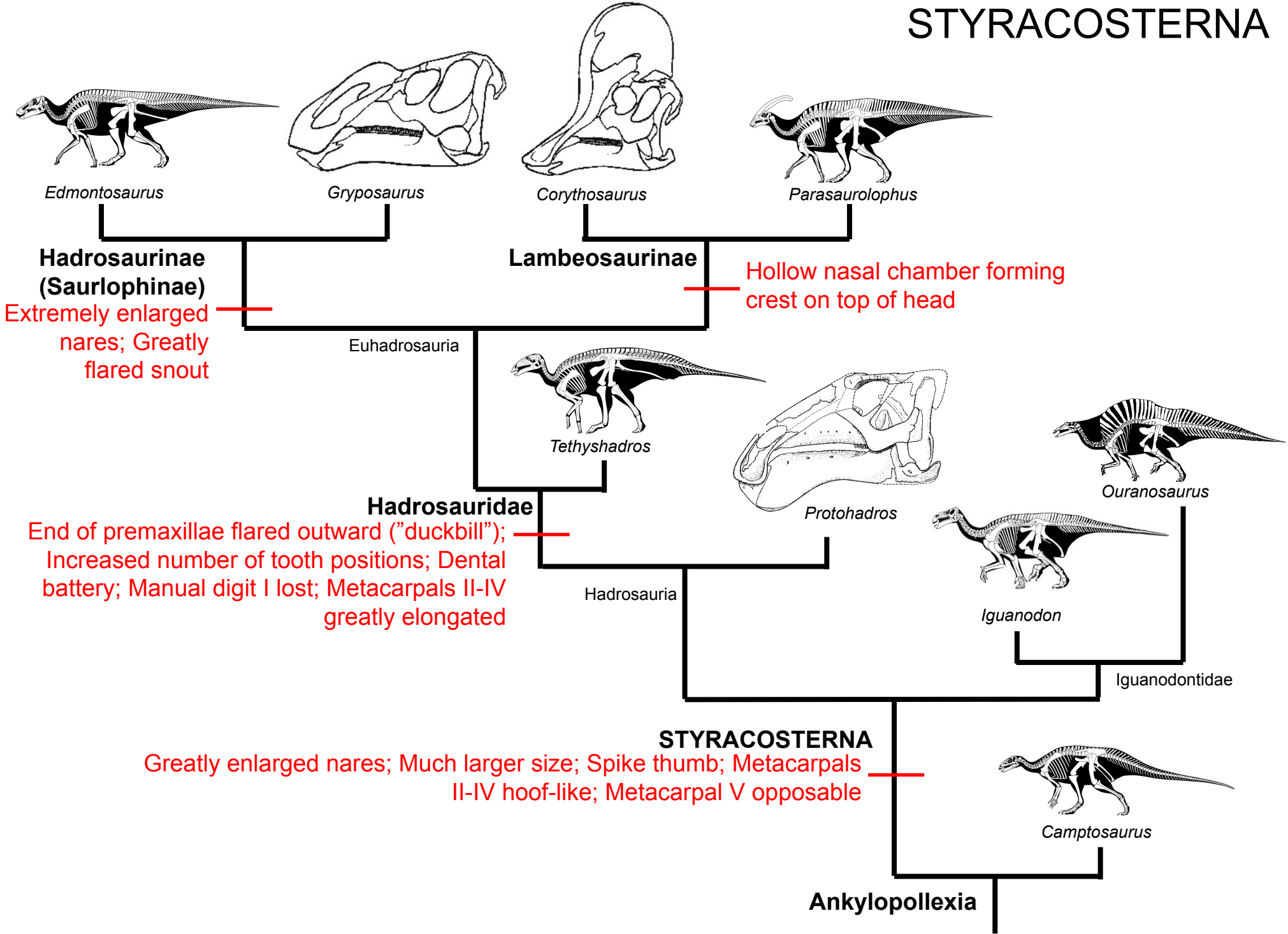
THYREOPHORA



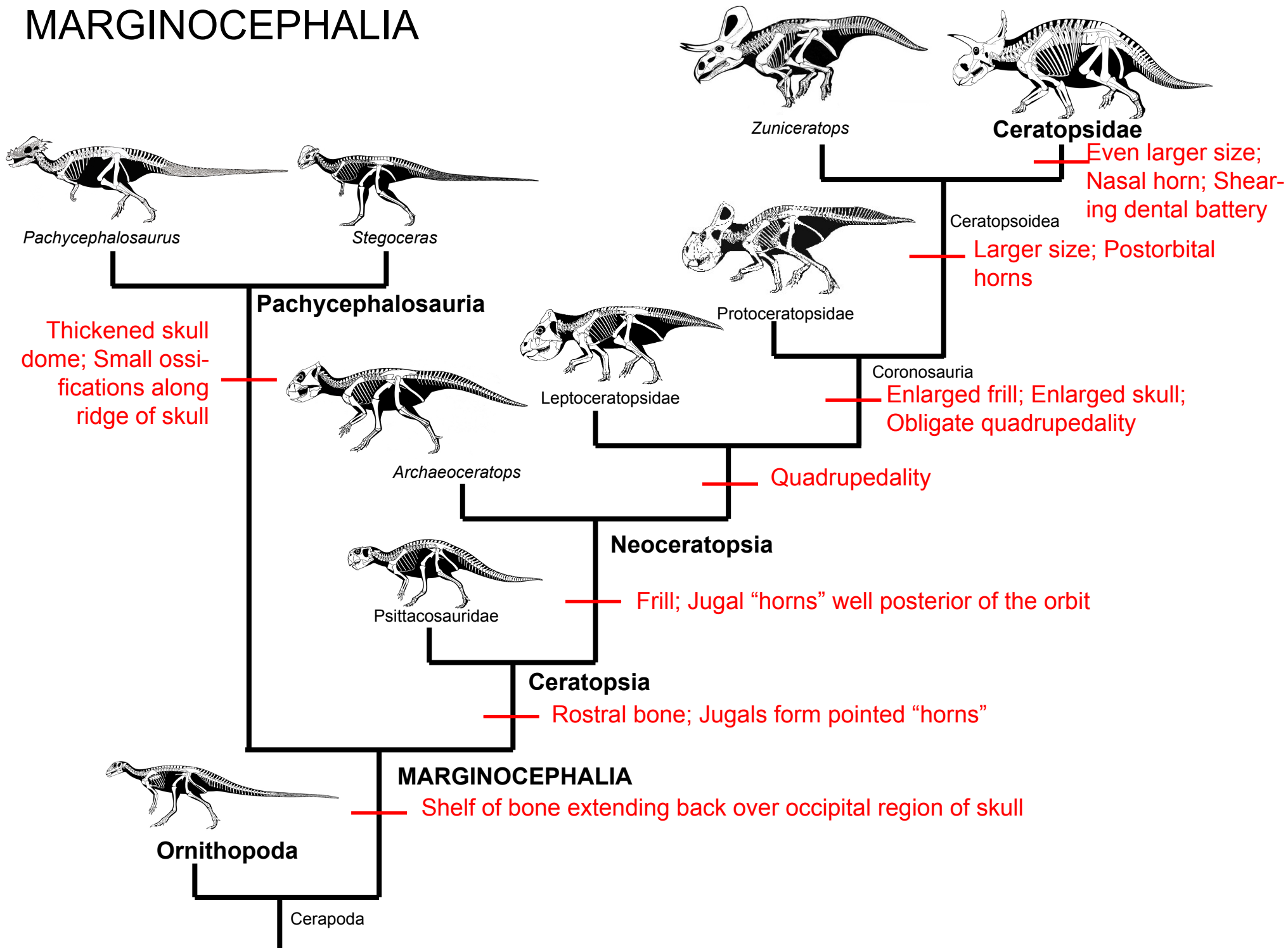
NEORNITHISCHIA



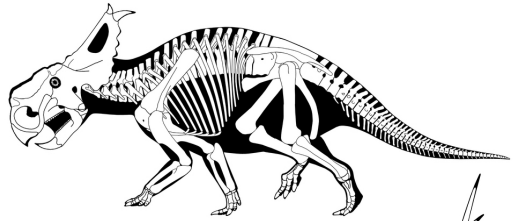
STYRACOSTERNA



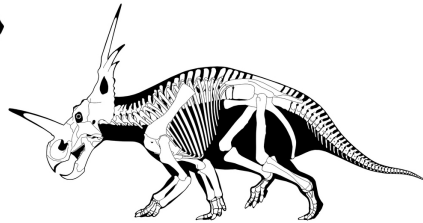
MARGINOCEPHALIA



CERATOPSIDAE



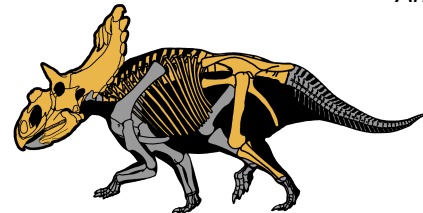
Pachyrhinosaurus



Styracosaurus



Albertaceratops



Kosmoceratops



Anchiceratops



Triceratops

Nasal horn enlarged;
postorbital horns
reduced

Centrosaurinae

Short, deep snout; Pair of
spike-like epoccipitals projecting
from back of frill



Zuniceratops

**Chasmosaurinae
(Ceratopsinae)**

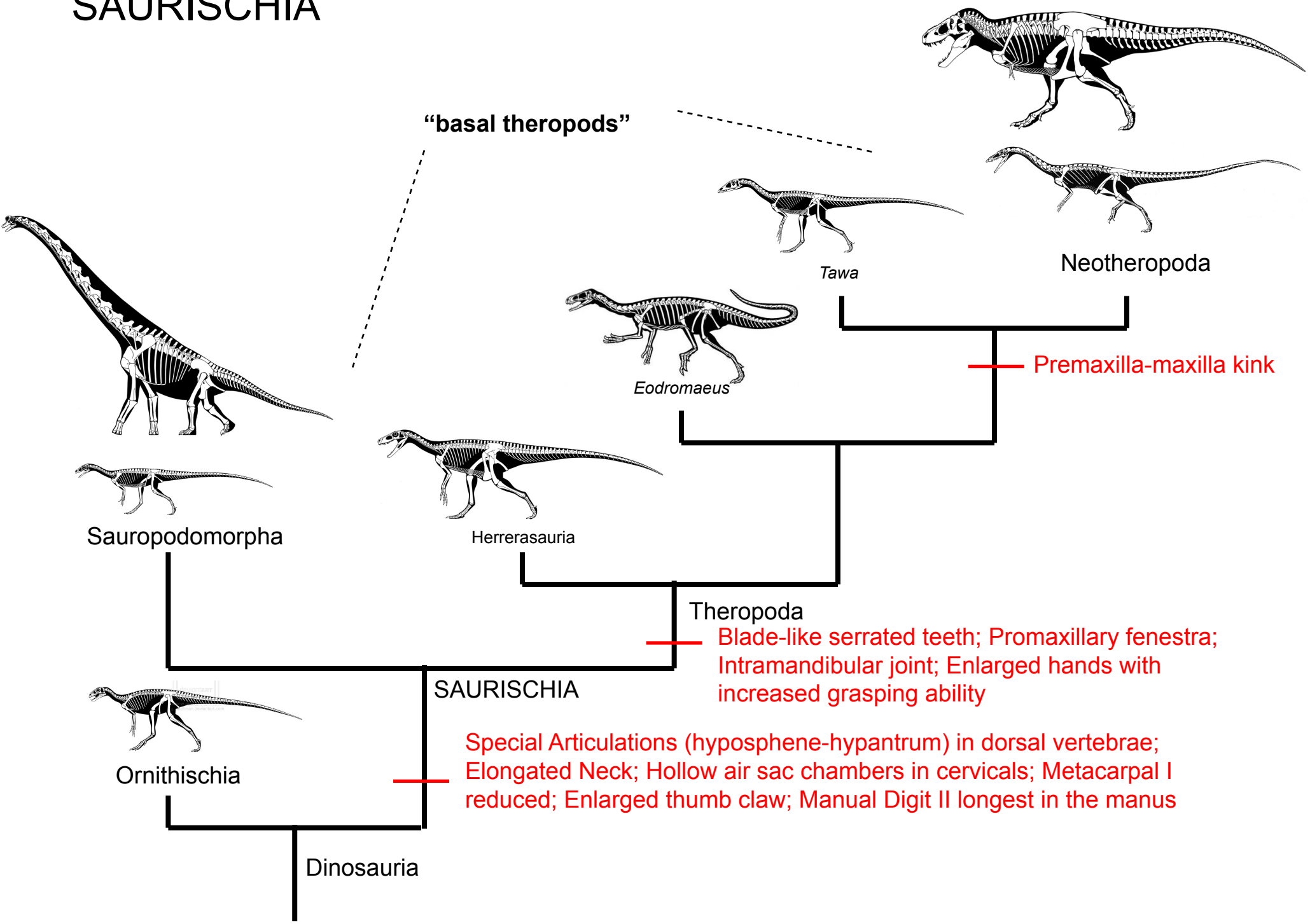
Longer, shallower snouts;
Elongated rostral; Long frill

CERATOPSIDAE

Even larger size; Nasal horn; Shearing dental battery;
Double-rooted teeth; Increase in number of tooth positions;
Epoccipital bones along frill; Anterior cervicals fused into syncervical

Ceratopsioidea

SAURISCHIA



SAUROPODOMORPHA

Neosauropoda

Teeth at front of snout; Nares dorsally placed

Further size increase; Rounded snout; tooth-to-tooth occlusion; wide gape (loss of cheeks?); 12 or more cervicals; Modified manus and pedes

Eusauropoda

Sauropoda

Shortened snout; Obligate quadrupedality; Metatarsal V weight-bearing

Further size increase; some quadrupedality

"basal sauropodomorphs"

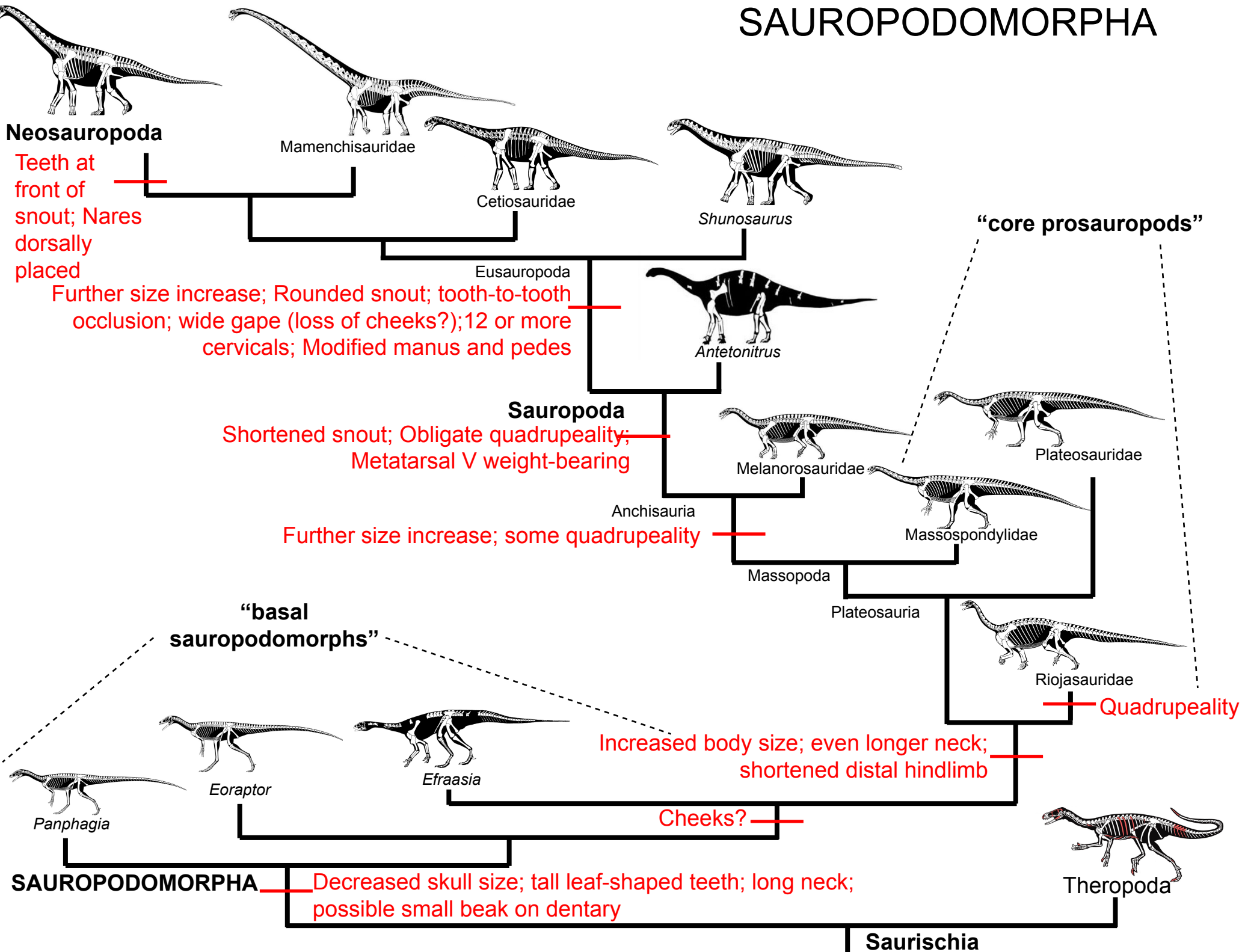
Increased body size; even longer neck; shortened distal hindlimb

Cheeks?

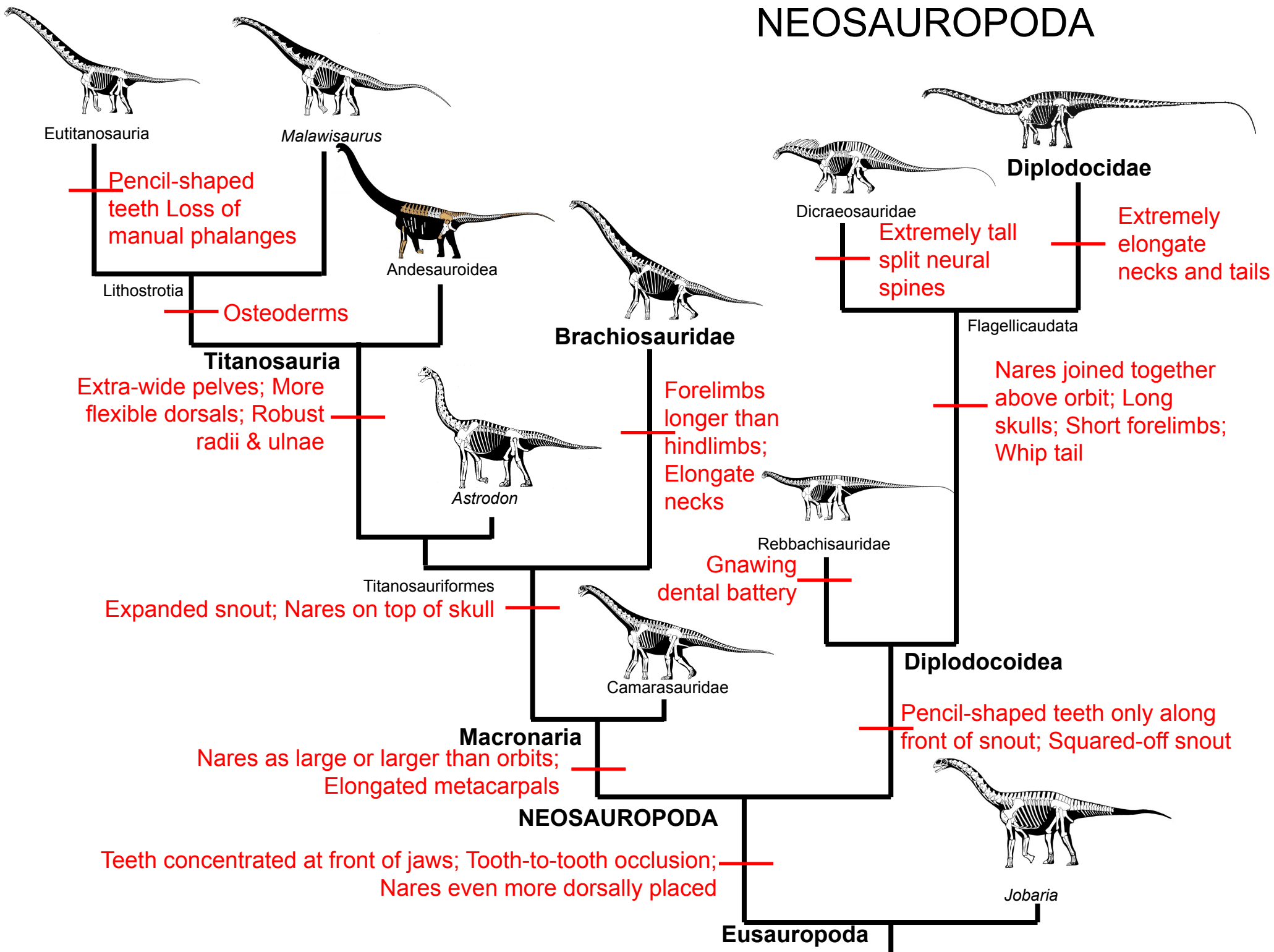
SAUROPODOMORPHA

Decreased skull size; tall leaf-shaped teeth; long neck; possible small beak on dentary

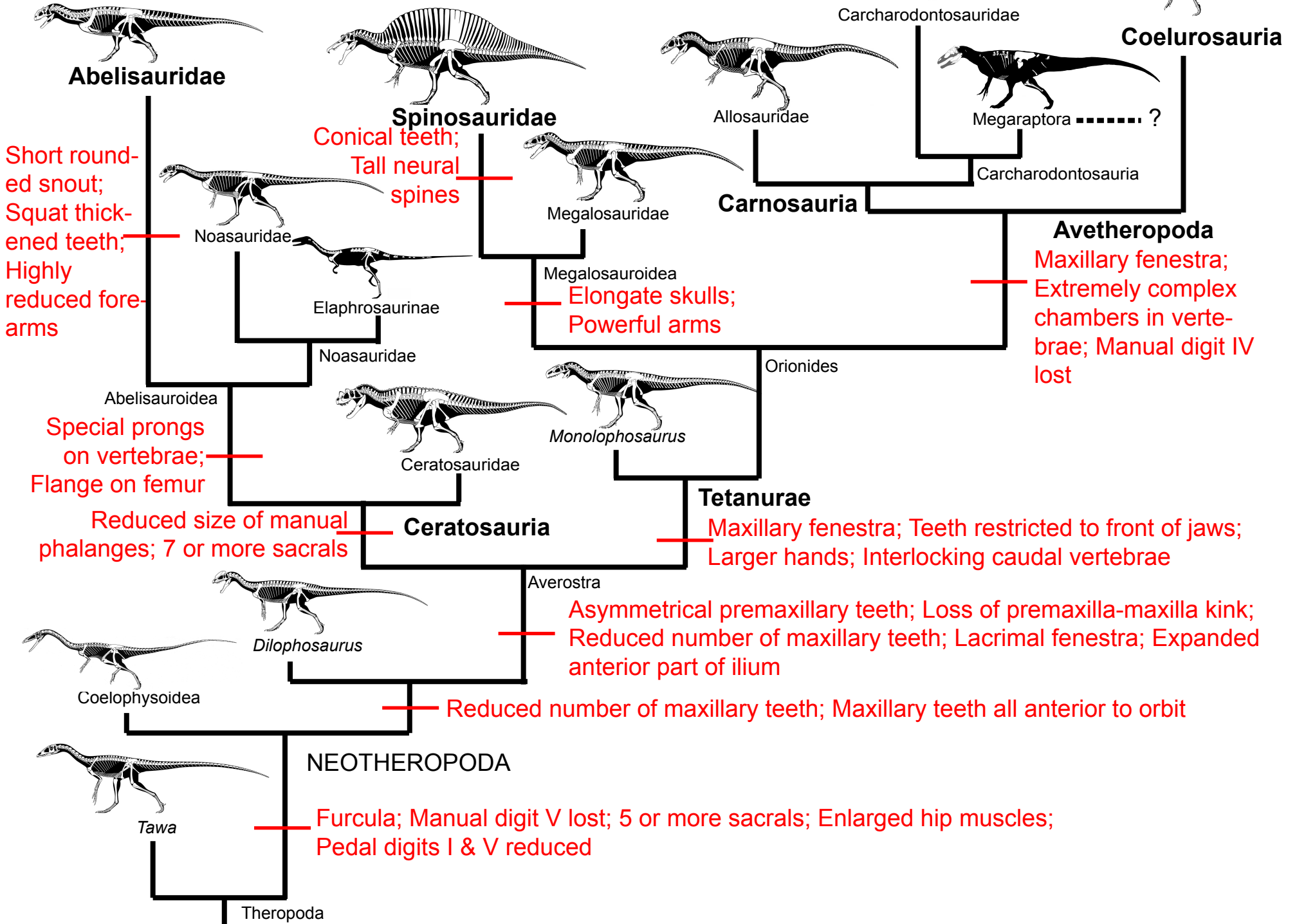
Saurischia



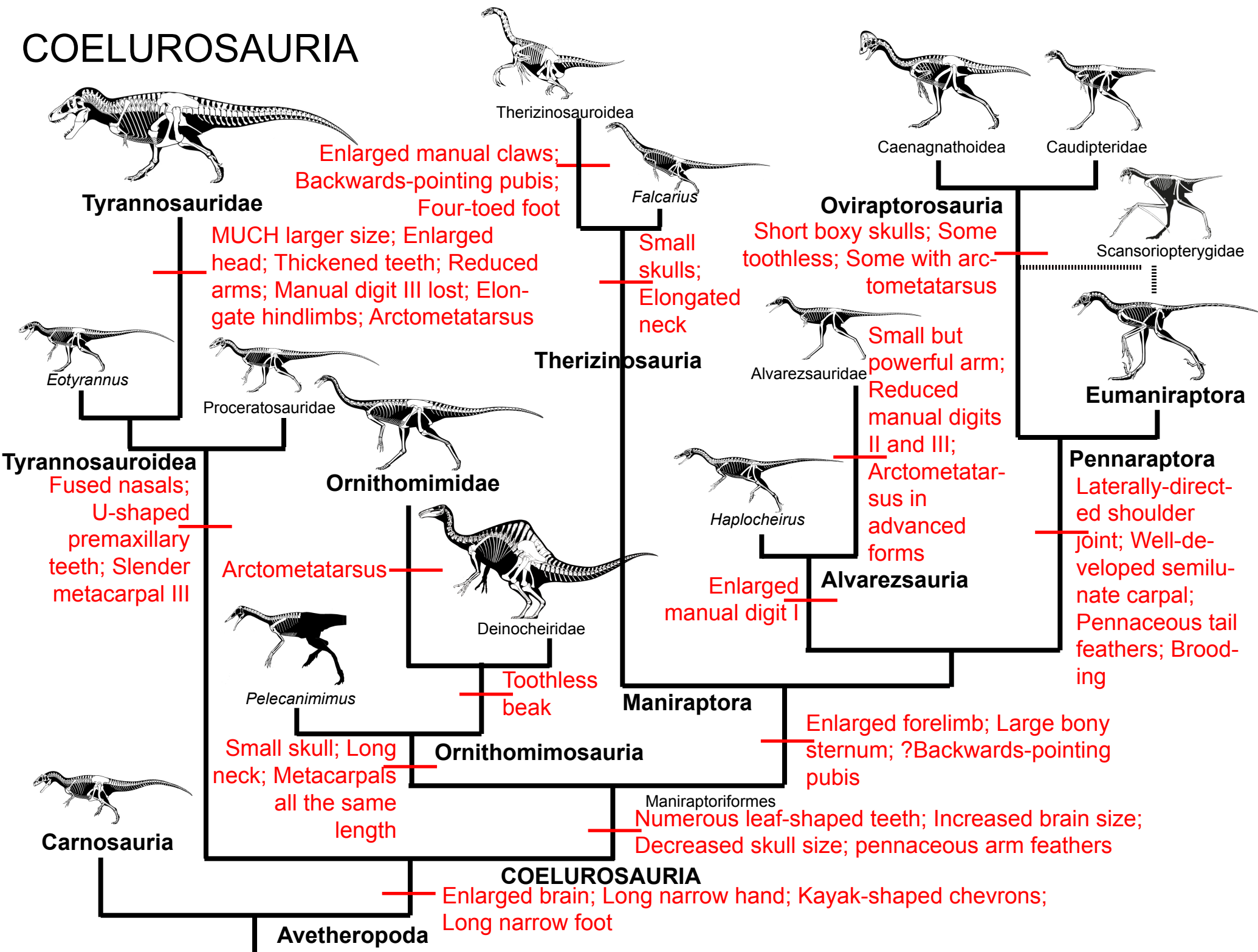
NEOSAUROPODA



NEOTHEROPODA



COELUROSAURIA



EUMANIRAPTORA

