

Ornithischian Synapomorphies

Dinosauria

1. In-turned femoral head
2. Opposable thumb
3. Perforate acetabulum
4. S-shaped neck

Ornithischia

5. Characteristic pelvis with back-turned pubis
6. Predentary bone in lower jaw
7. Ossified tendons along part of vertebral column
8. Teeth inset from margin of jaws (indicating the presence of muscular cheeks)

Genasauria

9. Expanded crown in premaxillary teeth

Cerapoda

10. Asymmetrical distribution of tooth enamel

Marginocephalia

11. Expanded shelf at back of skull

Ceratopsia

12. Rostral bone present on upper jaw to form sharp beak

Heterodontosauridae

13. Large, spike-like caniniform tooth in dentary bone

Thyreophora

14. Armor made of bony scutes that cover back and/or flanks
15. Tibia shorter than femur

Eurypoda

16. The anterior portion of the ilium is much longer than the posterior portion

Ankylosauria

17. Scutes form interlocking mosaic that covers most of body

Stegosauria

18. Scutes enlarged to form two rows of large plates extending along vertebral column

Ornithopoda

19. Articulation of skull and jaw well below the level of the tooth row

Pachycephalosauria

20. Skull roof greatly thickened to form solid "dome" that is usually surrounded by various bumps and tubercles
21. Occipital plate rotated beneath skull