DINOSAURS TO BIRDS

- **Dinobird**: is a dinosaur with feathers.
- **Coelurosaurs:** are a type of therapod most closely related to birds.
- **Sternum:** is the breast bone.
- **Furcula:** is a wishbone, an adaptation in birds for laying eggs.

EVOLUTION OF BIRDS

The theories explaining the evolution of birds have poor evidence. The most accepted assumes that birds evolved from Therapod dinosaurs in the Jurassic. Therapod dinosaurs are though to be the closest relatives of birds and the first birds had many skeletal similarities to coelurosaurs (a type of Therapod).

1	Hollow thin-walled bones, to make bones lighter but still strong
2	S-shaped curved neck
3	Elongated arms and forelimbs, and clawed hands.
4	The pubis shifted from an anterior (forward position) to a posterior (backward position).
5	Large orbits (eye sockets)
6	Hinged ankles (reduces rotation of the ankle)

GENUS: ARCHAEOPTERYX (SAURISCHIAN, THEROPODA, DINOBIRD)

The first known, bird-like fossil.

It is a genus of early bird that is though to be the transition between **feathered dinosaurs and modern birds** – dinobirds. It was a **semi-arboreal** animal (a creature that **lived in trees**) capable of **gliding** and sustaining flight, although some believe it had poor flight **and simply glided**.

The group of dinosaurs showing characteristics of dinosaurs and birds are called dinobirds.

Bird-like features of the **Archaeopteryx** include:

- ✓ ***Wings for flight***
- ✓ ***Feathers***
- ✓ ***Hollow bones***
- ✓ ***Furcula (wish bone)***
- ✓ ***Reversed big toe (for gripping onto branches)***

Reptilian/dinosaur features of **Compsognathus:**

- ✓ **Long, bony lizard-like tail**
- ✓ **Three digits** (fingers) on the wings, each digit had **a claw**.
- ✓ **Snout** developed **reptilian teeth**
- ✓ **Reptilian skull** and **brain**
- ✓ The **Sternum** (breast bone) was **not bony or keeled**.
- ✓ **Gastralia** (belly ribs) were present
- ✓ **S-shaped curved neck**

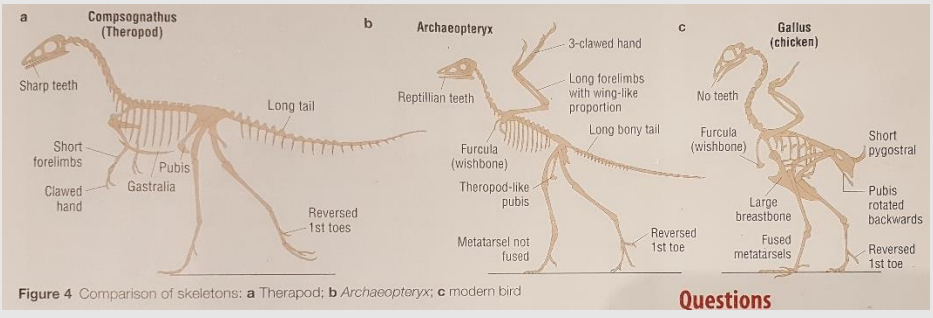

Figure 4 Comparison of skeletons: **a** Therapod; **b** *Archaeopteryx*; **c** modern bird

Questions