

# Mesozoic

**Mesozoic:  
Triassic, Jurassic and Cretaceous**

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Early Triassic 237 Ma

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**Mass extinctions**

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Late Jurassic 152 Ma

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Late Cretaceous 94 Ma

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**Plesiosaurs**

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**Mollusc - Cephalopods**  
Crypsis Video 1:47




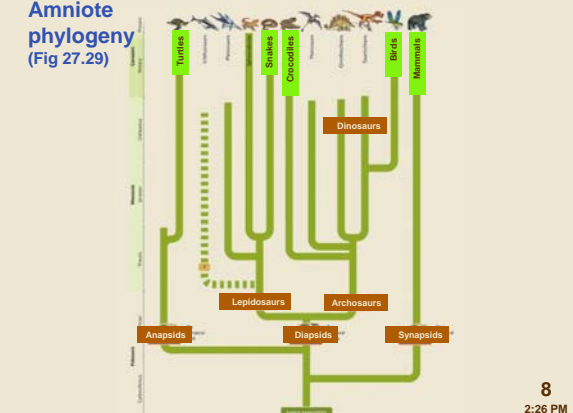
Figure 33-18

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**Amniote phylogeny**  
(Fig 27.29)



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**Oviparous reproduction**

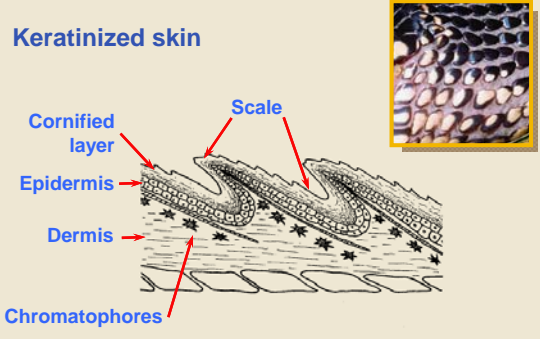


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**Keratinized skin**



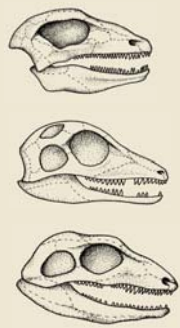
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**Major reptile groups**

- **Anapsids**
- **Diapsids (Anapsids)**
  - Dinosaurs, pterosaurs, birds, snakes and lizards
  - Turtles
- **Synapsids**
  - Modern mammals

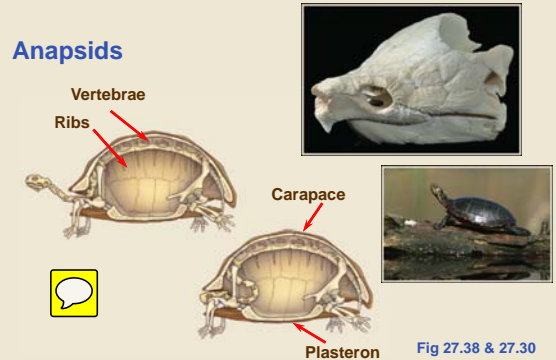


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**Anapsids**



Vertebrae  
Ribs  
Carapace  
Plastron

Fig 27.38 & 27.30

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**Major diapsid groups**

- **Extinct**
  - Dinosaurs and pterosaurs,
- **Extant**
  - Snakes, crocodiles and lizards





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**Extinct diapsids**

- Saurischia
- Ornithischia
- Pterosaurs




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**Extinct Diapsids**  
**Saurischian dinosaurs**





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**Extinct diapsids**  
**Ornithischian dinosaurs**



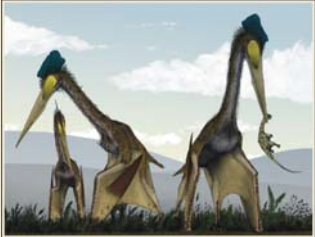
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**Extinct diapsids**  
**Pterosaurs**

Video 6:00


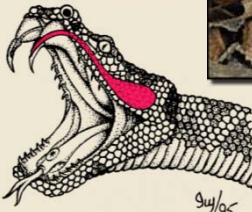


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**Extant diapsids**  
**Snakes - venom**




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Extant diapsids  
**Snake's jaw**



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Extant diapsids  
**Crocodiles crushing jaws**

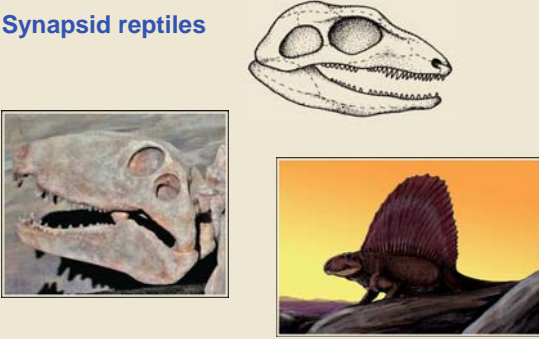



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**Synapsid reptiles**



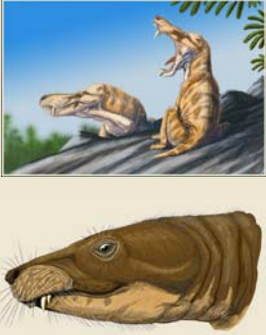
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**Reptiles - Therapsids**

- Warm-blooded
- Noturnal
- Glandular skin
- Specialized teeth and chewed their food



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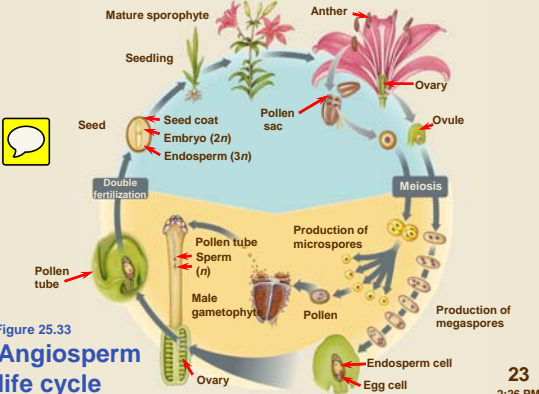


Figure 25.33  
**Angiosperm life cycle**

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**Pollination strategies**



Figure 25-34

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Bee orchid video  
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### Insect plant coevolution

- Bees
- Butterflies

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### Seed dispersal

Wind

Water

Animals

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Figure 30-20b

### K/T Boundary 66 Ma

Chicxulub Impact Site

East Pacific Rise

Greater Isthmus

ANCIENT LANDMASS

MODERN LANDMASS

Subduction Zone (triangles point in the direction of subduction)

Sea Floor Spreading Ridge

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### Mass extinctions

Extinction intensity

Millions of years ago

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Figure 27-14

### Cretaceous extinction

(a) Iridium

Position (meters)

K-P

Iridium concentration (ppb)

(b) Minerals

(c) Location

500 miles

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