

Diplodocus



Allosaurus

Dinosaur definitions

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Andrea Deininger, Braunsbach (Bilder); Thomas Helmle, Mainhardt (Bildbearbeitung);
Rebecca Wiedner, Flein (Übersetzung) 2017

Dinosaur definitions



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Diplodocus



Allosaurus

Diplodocus

The name Diplodocus means: „double beam“.

Diplodocus was a **herbivore**.

It grew to a length of about 27 m (87 feet) and a height of 6 m (20 feet).

It weighed about 12 tonnes.

It lived about 152 to 145 million years ago.

Diplodocus lived in North America  .

Diplodocus

Characteristics:

- hollow bones
- large and thin teeth
- long, agile tail to defend enemies
- longest land animal of all time

Saurischia – lizard-hipped dinosaur

Allosaurus





The name Allosaurus means: „different lizard“.

Allosaurus was a **carnivore**.

It grew to a length of about 12 m (39 feet) and a height of 5 m (17 feet).

It weighed about 2 - 3 tonnes.

It lived about 160 to 97 million years ago.

Allosaurus lived in North Amerika , Africa , Australia ,
and Europe .

Allosaurus

Characteristics:

- three fingers on hands and feet
- sturdy fingers with strong claws
- big head with sharp teeth

Saurischia – lizard-hipped dinosaur



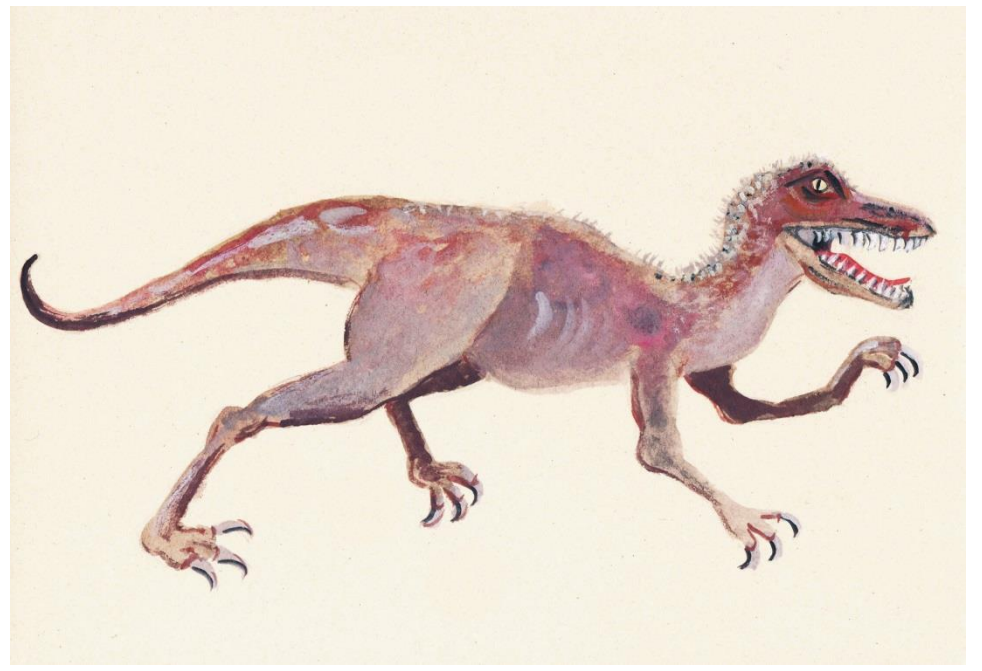
Tyrannosaurus



Velociraptor



Tyrannosaurus



Velociraptor

Tyrannosaurus


The name Tyrannosaurus means: „tyrant lizard“.

Tyrannosaurus was a **carnivore**.

It grew to a length of about 12 m (40 feet) and a height of 6 m (20 feet).

It weighed presumably 7 tonnes.

It lived about 68 to 65 million years ago.

Tyrannosaurus lived in North Amerika  and in Asia .

Tyrannosaurus

Characteristics:

- strong, saw-blade type teeth
- very agile neck
- tiny arms

Saurischia – lizard-hipped dinosaur

Velociraptor

The name Velociraptor means: „swift thief.“

Velociraptor was a **carnivore**.

It grew to a length of about 1.8 m (6 feet) and a height of 1.6 m (6 feet).

It weighed presumably 100 kg (220 pounds).

It lived about 84 to 71 million years ago.

Velociraptor lived in Asia .

Velociraptor

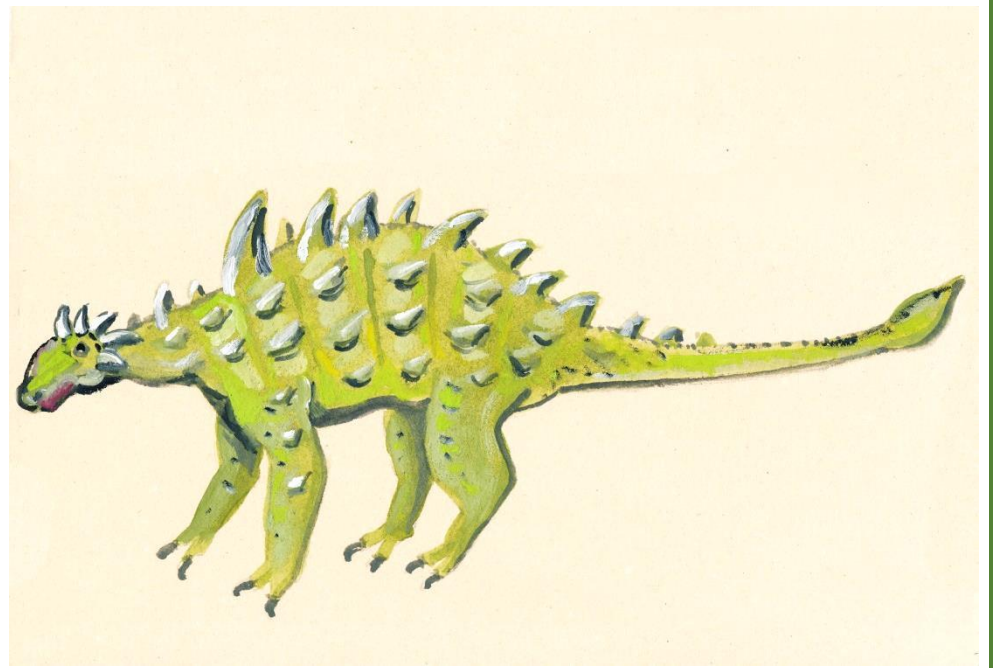
Characteristics:

- sickle-shaped claws,
- three claws on each hand
- pointy teeth
- basic down feathers

Saurischia – lizard-hipped dinosaur



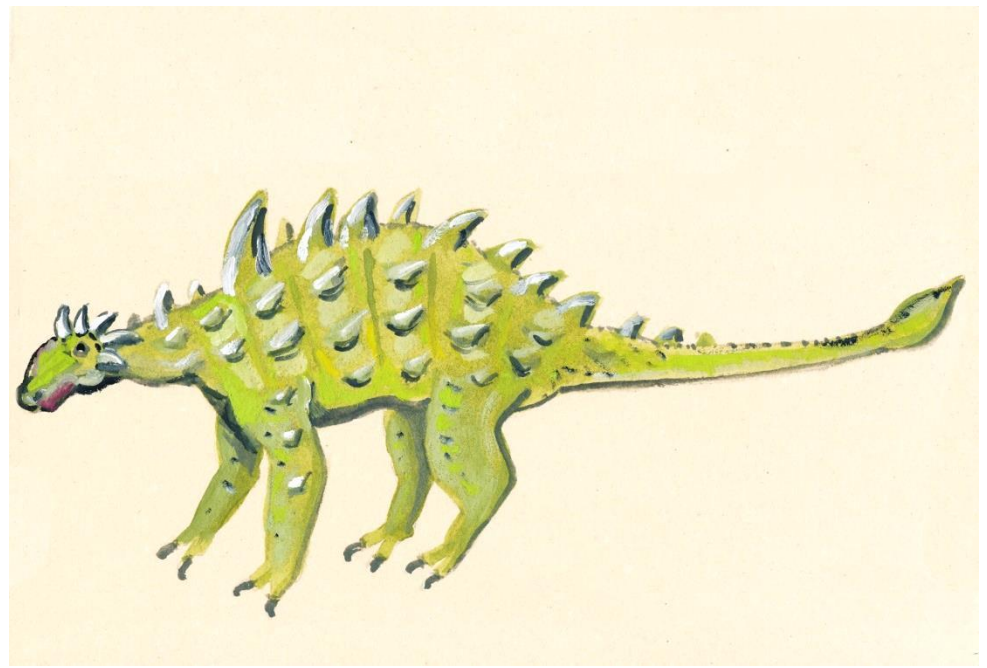
Brachiosaurus



Euoplocephalus



Brachiosaurus



Euoplocephalus

Brachiosaurus

The name Brachiosaurus means: „Arm lizard“.

Brachiosaurus was a **herbivore**.

It grew to a length of about 22-30 m (72- 98 feet) and a height of 13 m (43 feet).

It weighed presumably 80 tonnes (approx. as much as 12 elephants).

It lived about 152 to 145 million years ago.

Brachiosaurus lived in North America  and Africa .

Brachiosaurus

Characteristics:

- big body
- immensely long neck
- small head
- long forelimbs

Saurischia – lizard-hipped dinosaur

Euoplocephalus

The name Euoplocephalus means: „well-armoured head“.

Euoplocephalus was a **herbivore**, that maybe also ate **termites**.

It grew to a length of about 6 m (20 feet) and a hight of 2.5 m (8 feet).

It weighed presumably 2-3 tonnes.

It lived about 68 to 65 million years ago.

Euoplocephalus lived in Asia  and North America  .

Euoplocephalus

Characteristics:

- plated back – with
- heavy humps out of bone
- spikes at the end of the head
- heavy tail club

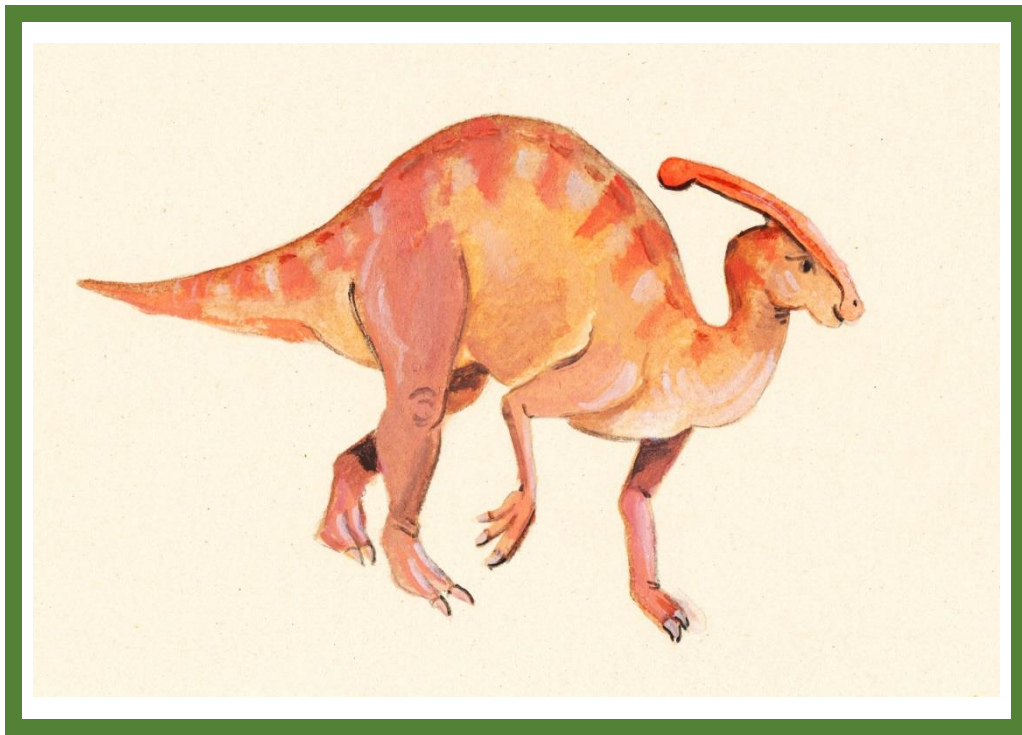
Saurischia – lizard-hipped dinosaur



Parasaurolophus



Stegosaurus



Parasaurolophus



Stegosaurus

Parasaurolophus


The name Parasaurolophus means: „near crested lizard“.

Parasaurolophus was a **herbivore**.

It grew to a length of 10 m (33 feet) and a height of 5 m (16 feet).

It weighed presumably 3.5 tonnes.

It lived about 97 to 65 million years ago.

Parasaurolophus lived in North America and Canada  .

Parasaurolophus

Characteristics:

- duckbeak without teeth
- 1.8 m long, narrow crest on its head

Ornithischia – bird-hipped dinosaur

Stegosaurus




The name Stegosaurus means: „roof lizard“.

Stegosaurus was a **herbivore**.

It grew to a length of 9 m (30 feet) and a height of 3.5 m (11 feet).

It weighed presumably 2 tonnes.

It lived about 170 to 90 million years ago.

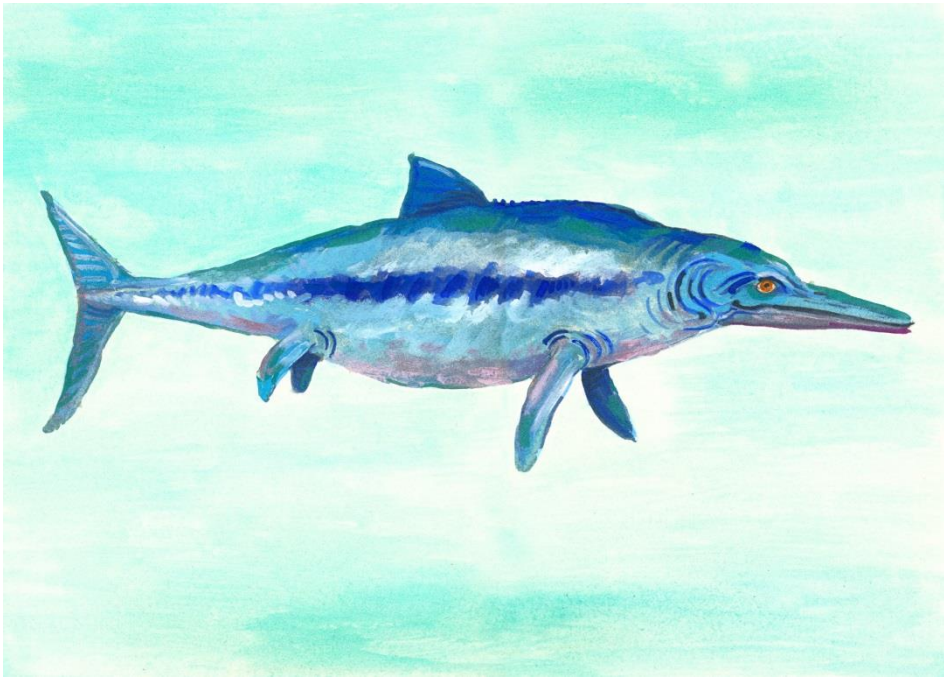
Stegosaurus lived in Africa , North America  and Asia .

Stegosaurus

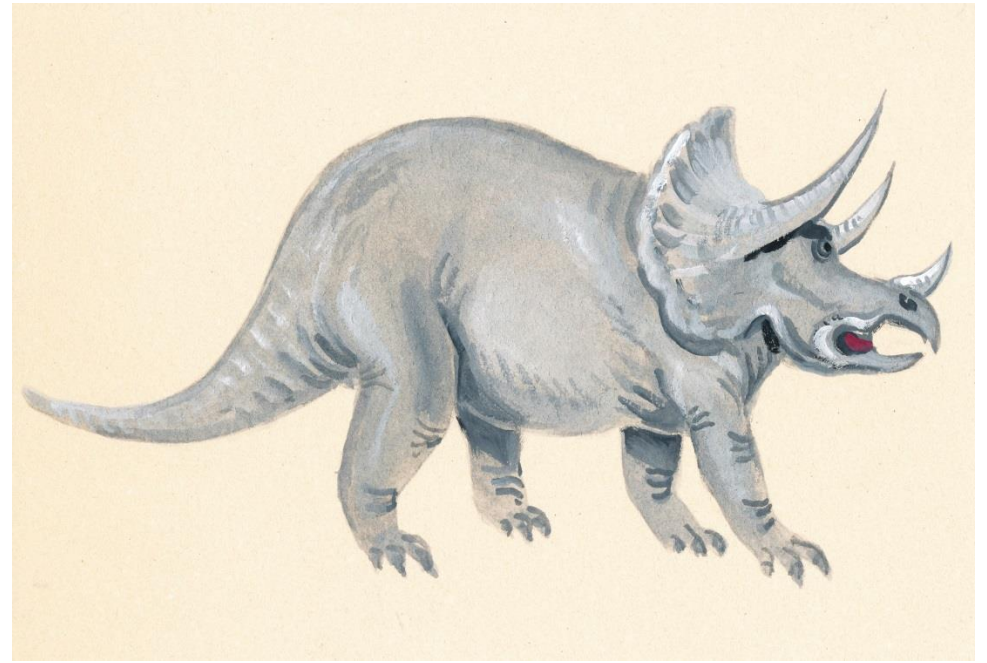
Characteristics:

- flat, kite-shaped plates on its back
- spiky tail

Ornithischia – bird-hipped dinosaur



Ichthyosaurus



Triceratops



Ichthyosaurus



Triceratops

Ichthyosaurus

The name Ichthyosaurus means: „fish lizard“.



Ichthyosaurus was a **carnivore**.

It grew to a length of 18 m (59 feet) and a height of 90 cm (35 inches).

The weight is not found to be classified.

It lived about 250 to 70 million years ago.

Ichthyosaurus lived in Europe , in North America ,

South America  and Asia .

Ichthyosaurus

Characteristics:

- short neck
- pointy head
- similar to todays dolphin
- birthed their babies in water
- could not go on land

Marine reptile

Triceratops

The name Triceratops means: „three-horned face“.

Triceratops was a **herbivore**.

It grew to a length of 9 m (30 feet) and a height of 3.5 m (12 feet).

It weighed presumably 10 tonnes.

It lived about 71 to 65 million years ago.

Triceratops lived in Canada and North America  .

Triceratops

Characteristics:

- plating on head and neck
- parrot-like beak
- three horns

Ornithischia – bird-hipped dinosaur



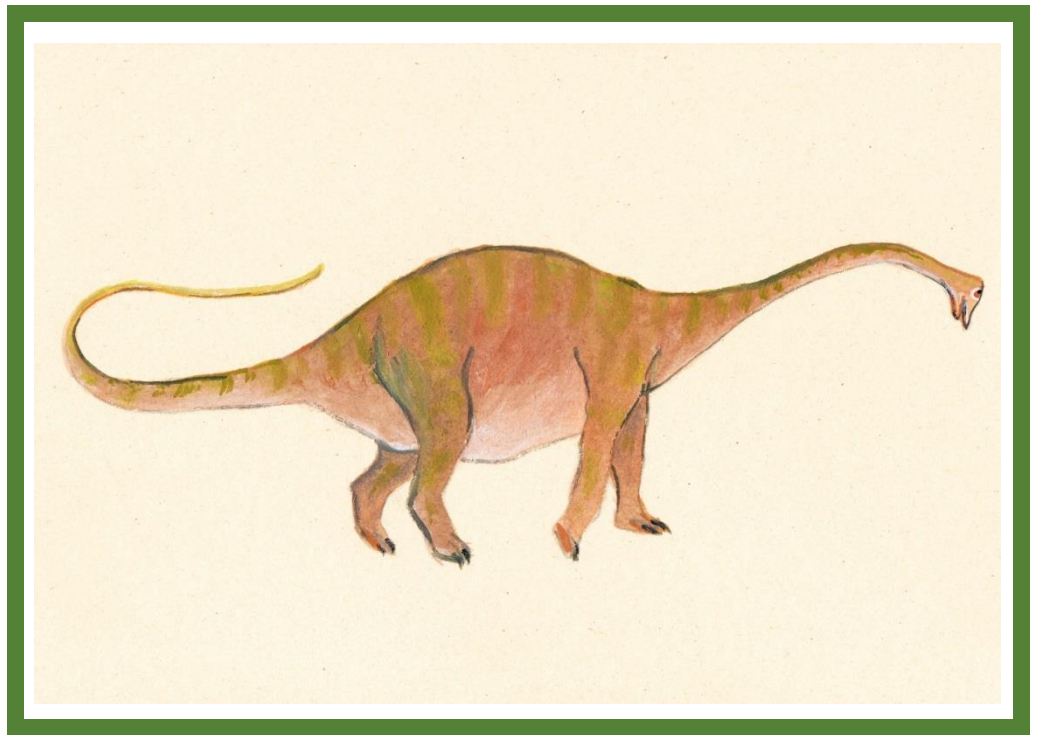
Pteranodon



Apatosaurus



Pteranodon



Apatosaurus

Pteranodon

The name Pteranodon means: „toothless wing“.

Pteranodon was a **carnivore**.

It had a wingspan of 7 m (23 feet).

It weighed presumably 17 kg.

It lived about 85 to 71 million years ago.

Pteranodon lived in Europe , in North America 
and Asia .

Pteranodon

Characteristics:

- flying membrane
- pelican-like beak
- massive crest on its head

Flying reptile

Apatosaurus

The name Apatosaurus means: „deceptive lizard“.

Apatosaurus was a **herbivore**.

It grew to a length of 21 m (68 feet) and a height of 5 m (16 feet).

It weighed presumably 20 - 35 tonnes.

It lived about 154 to 145 million years ago.

Apatosaurus lived in North America  .

Apatosaurus

Characteristics:

- long neck
- long tail
- little head

Saurischia – lizard-hipped dinosaur



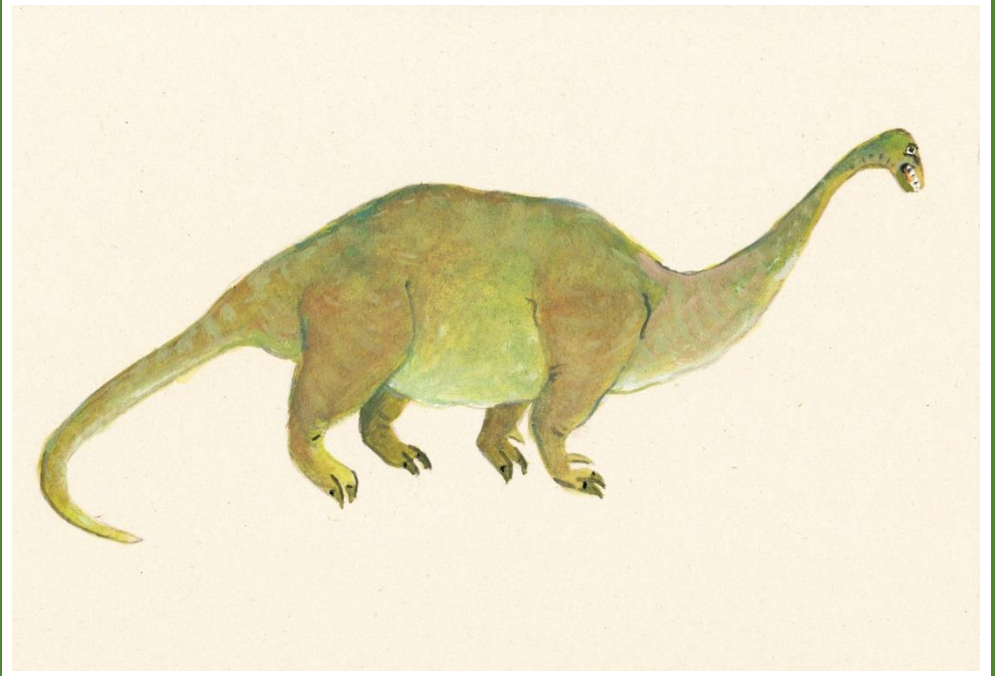
Archaeopteryx



Plateosaurus



Archaeopteryx



Plateosaurus

Archaeopteryx

The name Archaeopteryx means: „old wing“.

Archaeopteryx was a **carnivore**.

It grew to a length of 61 cm (24 inches) and a height of 20 cm (8 inches).

It weighed presumably 300g.

It lived about 152 to 145 million years ago.

Archaeopteryx lived in Europe, in Germany .

Archaeopteryx

Characteristics:

- presumably oldest bird
- crow-sized
- teeth
- feathers
- wings with claws

Saurischia – lizard-hipped dinosaur and bird

Plateosaurus

The name Plateosaurus means: „flat lizard“.

Plateosaurus was a **herbivore** or **carnivore**.

It grew to a length of 6-8 m (19-26 feet).

It weighed presumably 1000 – 4000 kg.

It lived 217 to 201 million years ago.

Plateosaurus lived in Western Europe .

Plateosaurus

Characteristics:

- four-legged
- may have sometimes reared
- big toes
- grasping hands with large thumb claw

Saurischia – lizard-hipped dinosaur



Dimetrodon



Pachycephalosaurus



Dimetrodon



Pachycephalosaurus

Dimetrodon

The name Dimetrodon means: „two measures of teeth“.

Dimetrodon was a **carnivore**.

It grew to a length of 3.4 m (11 feet).

It weighed presumably 100 – 150 kg.

It lived 290 to 260 million years ago.

Dimetrodon lived in Europe  and in North America .

Dimetrodon

Characteristics:

- large „sail“ on its back that may have been useful in temperature regulation

Mammal-like reptile

Pachycephalosaurus


The name Pachycephalosaurus means: „thick-headed lizard“.

Pachycephalosaurus was a **herbivore**.

It grew to a length of 8 m (26 feet).

It weighed presumably 1.5 – 2 tonnes.

It lived about 70 to 65 million years ago.

Pachycephalosaurus lived in North America  and Asia  .

Pachycephalosaurus

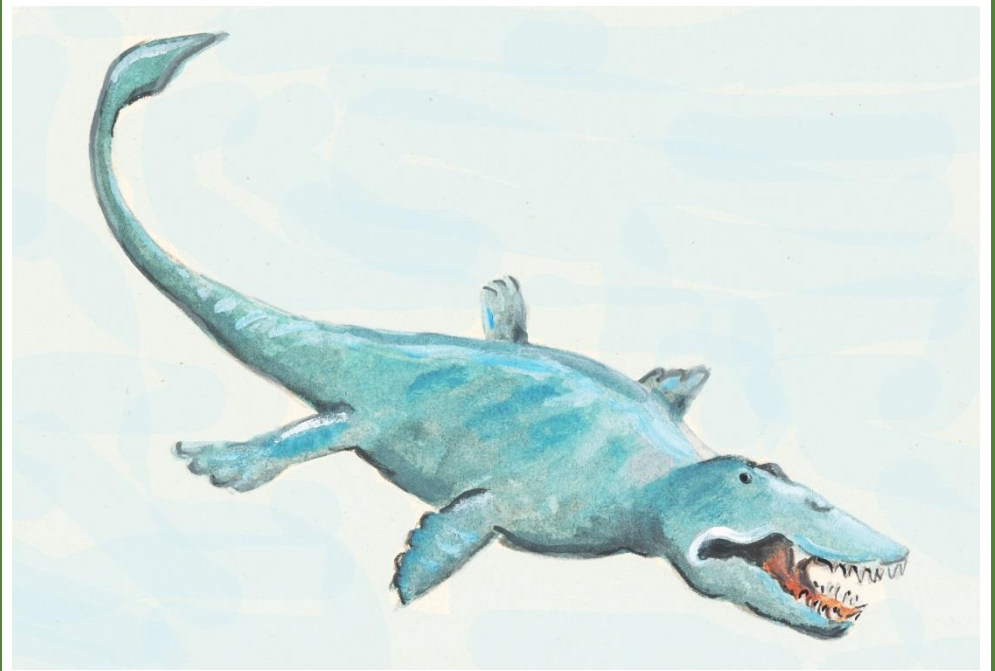
Characteristics:

- biggest of the „dome-headed“ dinosaurs
- high domelike skull of solid bone
- two-legged dinosaur

Ornithischia – bird-hipped dinosaur



Protoceratops



Mosasaurus



Protoceratops



Mosasaurus

Protoceratops

The name Protoceratops means: „First Horned Face“.

Pteranodon was a **herbivore**.

It grew to a length of 1.8 m (5 feet) and height of 75 cm (29 inches).

It weighed presumably 1.4 tonnes.

It lived about 70 to 65 million years ago.

Protoceratops lived in Europe  and in Asia, in Mongolia .

Protoceratops

Characteristics:

- small horned dinosaur
- big head
- parrot-like beak

Ornithischia – bird-hipped dinosaur

Mosasaurus



The name Mosasaurus means: „Meuse lizard“.

Mosasaurus was a **carnivore**.

It grew to a length of 18 m (59 feet).

It weighed presumably 1.8 tonnes.

It lived about 85 to 66 million years ago.

Mosasaurus lived in North America  and in Northern Europe, in the Netherlands .

Mosasaurus

Characteristics:

- water lizard
- flat tail
- limbs were modified into paddles
- snake-like jaw with rows of large and sharp teeth

Squamata: scaled reptile



Maiasaurus



Elasmosaurus



Maiasaurus



Elasmosaurus

Maiasaurus


The name Maiasaurus means: „good mother“.

Maiasaurus was a **herbivore**.

It grew to a length of 9 m (29 feet) and a height of 4 m (13 feet).

It weighed presumably 2 - 3 tonnes.

It lived about 83 to 71 million years ago.

Maiasaurus lived in North America  .

Maiasaurus

Characteristics:

- duckbeak
- nesting behaviour

Ornithischia – bird-hipped dinosaur

Elasmosaurus


The name Elasmosaurus means: „thin-plate reptile“.

Elasmosaurus was a **carnivore**.

It grew to a length of 14 m (45 feet).

It weighed presumably 2.3 tonnes.

It lived about 83 to 71 million years ago.

Elasmosaurus lived in North America  .

Elasmosaurus

Characteristics:

- extremely long neck (5 m/ 16 feet)
- small head, pointy teeth
- four paddle-like limbs

Aquatic dinosaur

Prehistoric landscape

- low growing ferns with large fan-shaped leaves
- forests of tall coniferous
- oceans

Eggs and nests

- Dinosaurs layed eggs such as most reptiles.
- Young animals hatched from the eggs.
- Most dinosaurs laid their eggs in the sand, piled sand over them, and let the warmth of the ground incubate them.
- Some species of dinosaurs built nests. They then placed leaves and other parts of plants on the eggs to keep them warm.
- Only a few dinosaurs hatched their eggs. Fossilized dinosaur eggs have been found.

Bird-hipped dinosaur

- One group of dinosaurs had a hip that looked like the backward-facing pelvic of a modern-day bird.
- These dinosaurs are therefore called bird-hipped dinosaurs or Ornithischia.
- They were herbivores and almost all among them had a small beak made of horn.
- These dinosaurs walked on long hind legs and were therefore able to run quickly when threatened.

Lizard-hipped dinosaur

- One group of dinosaurs had a hip that looked similar to the pelvic of today`s lizards, turtles or crocodiles.
- These dinosaurs are therefore called lizard-hipped dinosaurs or Saurischia.
- They usually had long necks and long hands with outwardly curved thumb claws.
- Strangely enough, birds descended from these dinosaurs.

Fish lizard

- They looked like fish and lived like fish.
- They couldn't breathe under water, so they had to swim to the surface to breathe.
- They developed from reptiles. Their arms and legs changed into fins because of the life in water.
- They moved their tail fin back and forth to move forward.
- They had big eyes. With these they could see better than a cat at night.

Aquatic dinosaur

The following belonged to the aquatic dinosaurs:

- fish lizards
- Plesiosaurs (Elasmosaurus)
- Nothosaurs
- Placodontia (dinosaurs that lived in the ocean and looked like turtles)

Dinosaurs

- All dinosaurs only lived during the Mesozoic Era, around 225 to 65 million years ago.
- All dinosaurs were reptiles.
- All dinosaurs lived on land.
- All dinosaurs had their legs placed under their bodies – like mammals- and not placed on the side of their bodies like crocodiles.

Flying reptiles

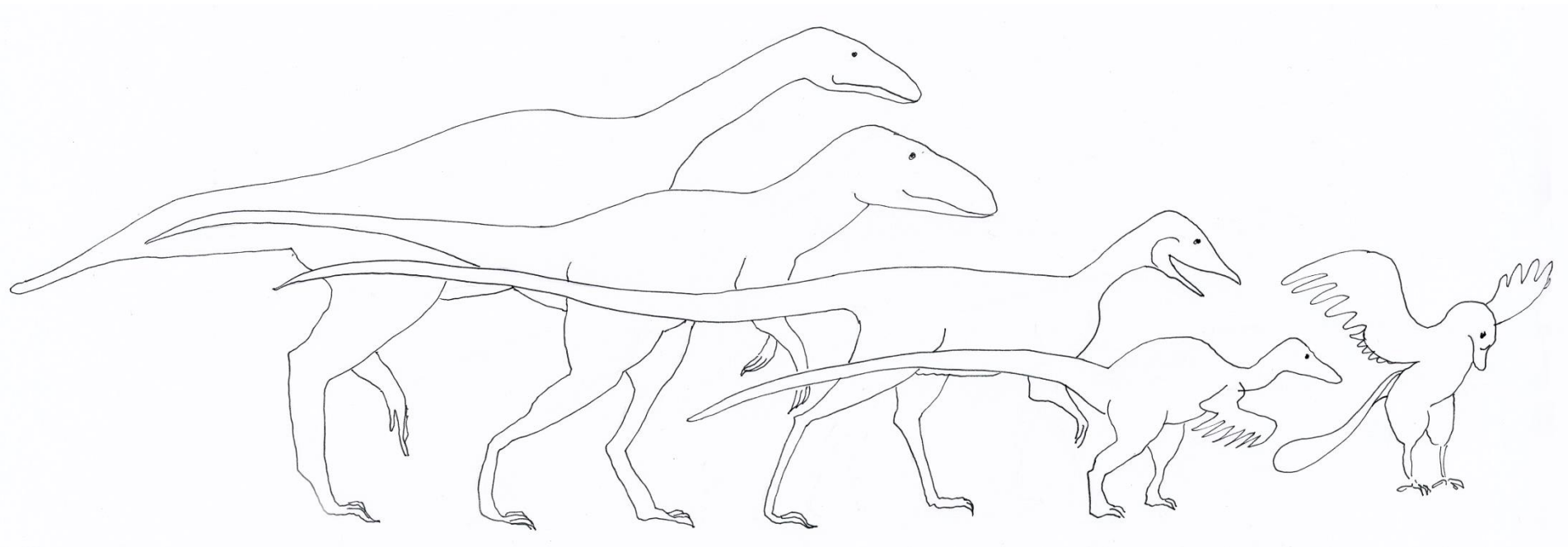
- They were the first flying vertebrates.
- They lived similar to the way seagles live today.
- They hunted along the coast.
- Flying reptiles ate fish.
- They raised their young at the beach.
- Flying reptiles had similarities with today's bats.

Scaled reptiles

- Scaled reptiles are also called scaled lizards.
- Scaled reptiles are one of the four major groups of reptiles.
- The other three groups are: turtles, crocodiles and archosaurs.
- Lizards, snakes and worm-lizards belong to the scaled reptiles.
- They all have a split tongue.
- They shed their skin.

Dinosaurs and birds

- For a very long time scientists were sure of the fact, that birds descended from the lizard-hipped dinosaurs. They have not agreed yet:
 - Did birds descend from carnivorous dinosaurs, that climbed on trees and could sail downward in a gliding flight...
 - Or were the little carnivorous dinosaurs able to start their flight from the ground?
- Other scientists have the opinion that crocodiles and not the dinosaurs are the nearest ancestor of the birds.



How the dinosaurs shrank – became feathered little predatory dinosaurs and eventually birds.