

Biodiversity Trail

Dinosaurs

Self-guided program ***Dinosaurs* exhibition**

Student Activities

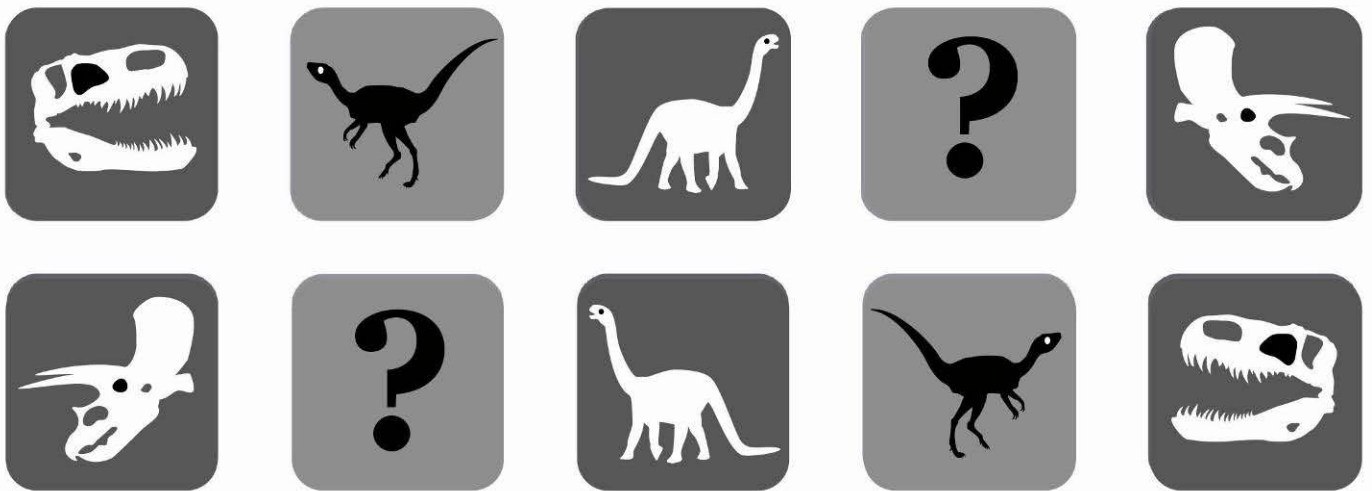


Illustration: Sara Estrada-Arevalo,
Australian Museum.

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6 College Street, Sydney, NSW 2010
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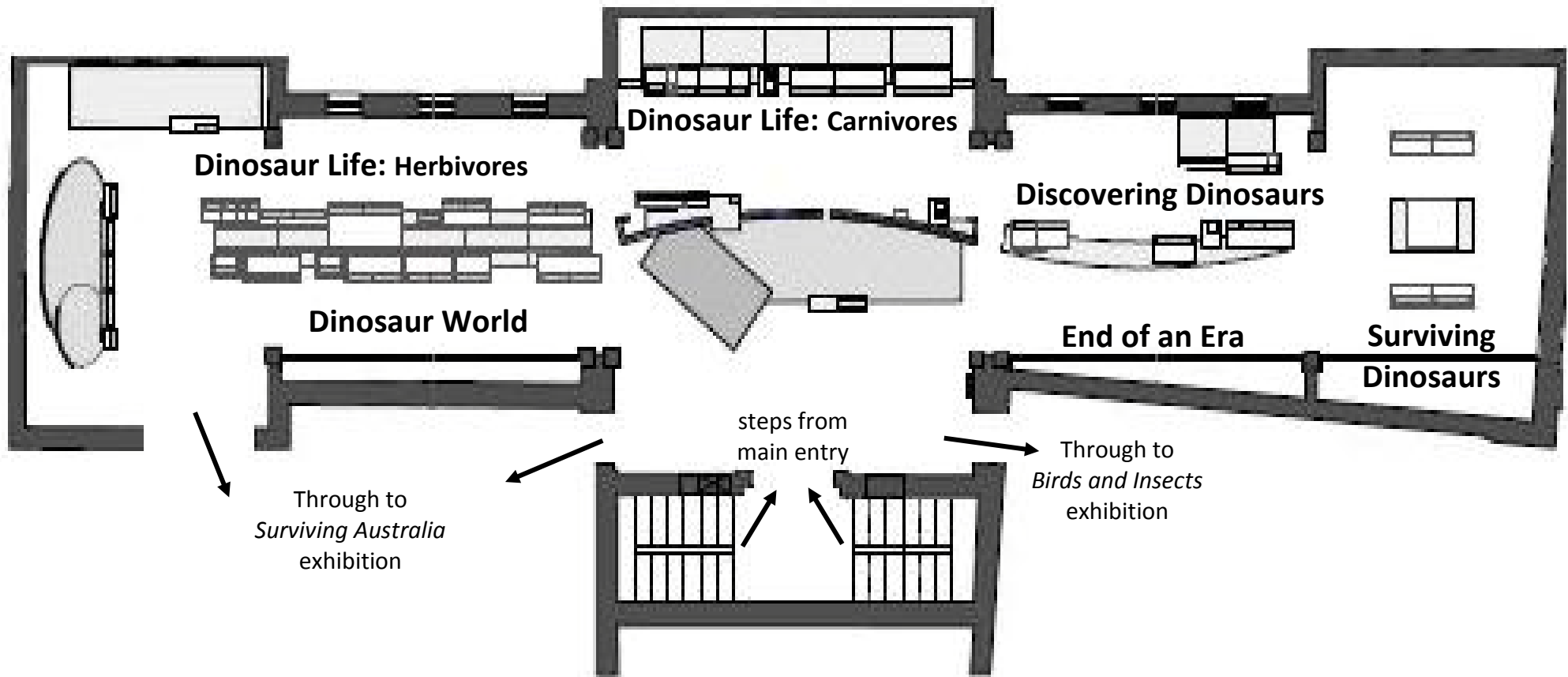


Instructions:

To find the answers to these Clue Cards explore the *Dinosaurs* exhibition located Level 2 of the Australian Museum. Use the *Dinosaurs* exhibition floorplan shown below to find the section you need for each clue.

Discover the names of the dinosaurs and other ancient creatures by matching the Clue Card facts with information in the displays.

Dinosaurs exhibition



**Dinosaurs inhabited the land but other ancient creatures dominated the seas and the sky.
Do you know any of these?**



Use the *Dinosaurs* exhibition floorplan to find the section, **Dinosaur World**, then look for the **Sharing the world** display to find the answer to this clue.

Ancient creature A – a flying creature

- It belonged to the **Pterosaur** group.
- The fossil shown was found in **Germany**.
- It had a **long tail** and a **small body**.
- This group **dominated the skies** in the Triassic and Jurassic.
- Its **tail was stiffened** with thick bony rods and was probably used for steering.

It is _____



Use the *Dinosaurs* exhibition floorplan to find the section, **Dinosaur World**, then look near the **Spotlight on Australia** display to find the answer to this clue.

Ancient creature B – a swimming creature

- It probably lived like a modern seal.
- It used to **swim in shallow waters** and **eat fish**.
- Stomach stones (**gastroliths**) and opalised fish bones were found in its stomach.
- It had a **small body**, a **long neck** and a **small head**.
- It lived in the **early Cretaceous**, 120 – 110 million years ago.
- Its fossil skeleton was found at Coober Pedy, **South Australia**.

It is _____

Like modern animals, there were connections between dinosaurs and the other living things around them. Some dinosaurs were plant-eaters. Others were meat-eaters that preyed on the plant-eaters.



Use the *Dinosaurs* exhibition floorplan to find the section, **Dinosaur Life**, then look for the life-sized reconstruction in the **Herbivores** display to find the answer to this clue.

Dinosaur A – a herbivore

- Fossilised gut contents show it **ate seeds and leaves** of flowering plants.
- It was four-legged, with **longer back legs** than front legs.
- It lacked the tail-club of most ankylosaurids.
- It lived in the **early Cretaceous**, 125 – 110 million years ago.
- Its fossils have been found at Hughenden, Roma and Richmond in **Queensland**.

It is _____



Use the *Dinosaurs* exhibition floorplan to find the section, **Dinosaur Life**, then look in the **Carnivores** display to find the answer to this clue.

Dinosaur B – a carnivore

- It was a meat-eating dinosaur.
- It may have lived in **family groups**.
- It may have **hunted sauropods** using a 'bite and slice' technique.
- It had **three fingers** on each hand.
- It was bigger than *Tyrannosaurus rex*.
- It lived in the Cretaceous, 112 – 89 million years ago.
- Its fossils have been found in Argentina, **South America**.

It is _____

Birds evolved from a dinosaur ancestor. So the dinosaurs' legacy to us includes birds and the things that birds provide us, including food.



Use the *Dinosaurs* exhibition floorplan to find the section, **Surviving Dinosaurs**, then look for **The Living Dinosaurs: Bird or dinosaur?** display to find the answer to this clue.

Early bird A

- It was discovered in the **1860s**.
- It is the first fossil evidence **linking birds and dinosaurs**.
- It had **feathers** like modern birds.
- It had a skeleton like a small dinosaur.
- It is the **earliest known bird**.
- It lived in the **late Jurassic**, 155 – 150 million years ago.

It is _____



Use the *Dinosaurs* exhibition floorplan to find the section, **Surviving Dinosaurs**, then look for **The Living Dinosaurs: Bird-like dinosaurs** display, showing a life-sized reconstruction and a fossil, to find the answer to this clue.

Early bird B

- Its name means 'tail wing', referring to its **tail plume**.
- Its body was covered in **short primitive feathers**.
- It had **longer feathers** on its arms and tail.
- Its fossils have been found in **China**.
- It lived in the **early Cretaceous**, 130 – 125 million years ago.

It is _____

Dinosaurs amaze us with their extraordinary features. One amazing feature of many dinosaurs is their enormous size.



Use the *Dinosaurs* exhibition floorplan to find the central entry section to find the answers to these clues.

Dinosaur C– one of the giants

- It was a **giant plant-eater**.
- It probably **lived in herds**.
- Unlike other dinosaurs in its group, it had a relatively **short neck**.
- It had **spoon-shaped teeth**.
- It lived in the **early Cretaceous**, 136 – 125 million years ago.
- Its fossils have been found in Niger, **Africa**.

It is _____

Group of dinosaurs – four-legged giants

- One member of this group is the giant dinosaur above.
- This group of dinosaurs is known for their **large size and long necks**.
- They were **plant-eaters**.

They are _____

Dinosaurs all share a number of common physical features. How would you recognize a dinosaur?



Use the *Dinosaurs* exhibition floorplan to find the section, **Dinosaur World**, then look for the **What is a dinosaur?** display to find the answers to these clues.

Dinosaur D– a two-legged 'mini' saur

- It was an agile two-legged dinosaur.
- It may have eaten meat, plants and insects.
- Its **relatively small size** was typical of early dinosaurs.
- It was **one of the first dinosaurs** to appear in the fossil record.
- The first dinosaur may have had a very similar appearance.
- It lived in the **late Triassic**, 228 – 216 million years ago.
- Its fossils have been found in Argentina, **South America**.

It is _____

What are the six main physical features that all dinosaurs share?

1. Hole in the skull _____ socket and _____.
2. Two holes in the skull _____ socket.
3. Ankle that bends in a single plane like a _____.
4. _____ socket with a hole in the centre.
5. _____ held directly _____ the body.
6. Backbone with three or more sacral vertebrae (located near the _____).

Mass extinction events, like the one in which dinosaurs perished could occur again. Understanding these events may help us protect our planet's biodiversity in the future.

Card 6



Use the *Dinosaurs* exhibition floorplan to find the section, **End of an Era** to find the answers to these clues.

Dinosaur extinction facts

1. Dinosaurs became extinct _____ million years ago.
2. 'Catastrophists' believe the mass extinction happened suddenly due to a:

3. 'Gradualists' believe the mass extinction was prolonged and caused by:
_____ or _____
4. There are a number of meteorite crater sites around the world. Where is the most likely site of the extinction meteorite?

5. The name of the material not common on Earth that was found as evidence for an impact is the metal called

