

Triceratops Toolkit

Kindergarten &
Early Years



**MUSEUMS
VICTORIA**

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Triceratops Toolkit – Post Visit Resource

How to use this resource

This post visit resource has been developed exclusively for educational purposes by Museum Victoria's Outreach Education Team.

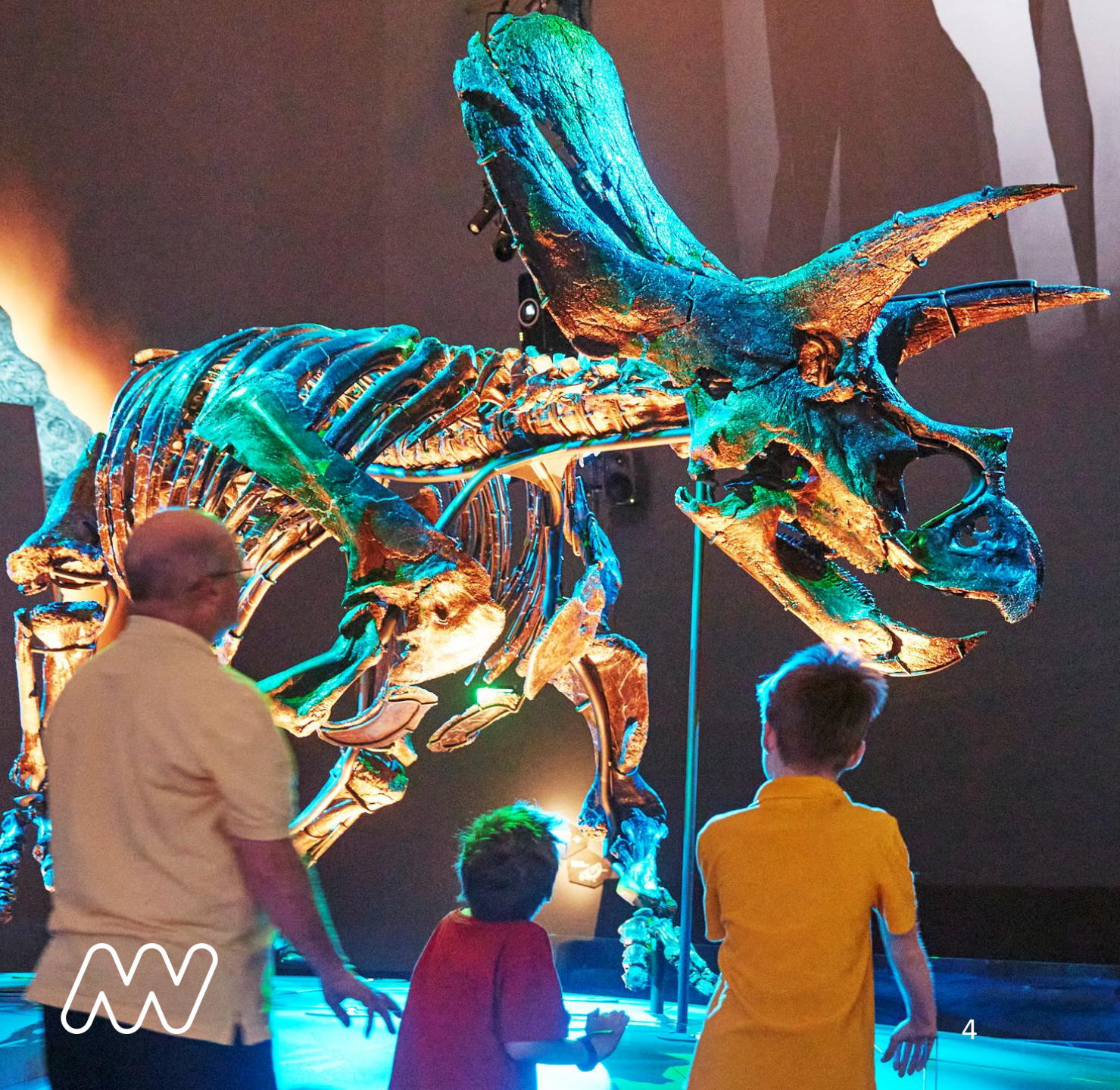
Teachers are encouraged to:

- Download and use this resource to engage and inform learners
- Differentiate and make any adjustments to the learning resource for the needs of your students
- Use this resource as a unit of learning or to compliment an existing unit of learning
- Print out and distribute any activities and slides for your colleagues and students
- Facilitate further learning and explore resources via the links provided

Note:

- Curriculum links to the VEYLDF can be found on page 15 and suggest some ways this content can be aligned to your environment.





Meet Horridus

Triceratops Facts

Our Triceratops at the Melbourne Museum lived 67 million years ago, was 7 metres long, 2.5 metres tall, and was covered in scales.

- **Diet:** Plants
- **Period:** Cretaceous
- **Found:** Montana, USA
- **Species:** *Triceratops horridus*
- **Bones:** 313 total, 267 found!
- **Nickname:** Horridus



Triceratops Features

Horns

When Triceratops hatched, its horns were tiny stumps that pointed backwards. As it grew the horns straightened and pointed forwards.

Nostrils

We are not sure why its nose was like this. Perhaps it was for for smelling or making loud sounds!

Lower Jaw

Triceratops had a beak AND teeth to cut off plants and grind the food into pieces.

Frill

This part of its body was covered in skin. Perhaps the frill helped Triceratops cool down. Or maybe it was very colourful, like some birds' feathers?

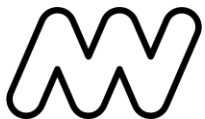


What is a fossil?

A fossil is evidence of ancient life.

Typically, when paleontologists say 'fossil' they are talking about evidence of a living thing that is more than 12,000 years old.

This can include fossilised bones, footprints, teeth, plants and even poo!



How are fossils formed?

1. The *Triceratops* died and its body was left undisturbed. It could have been torn apart by scavengers – but luckily for us something else happened...

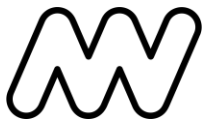


Paleoart by Rebecca Dart

2. A slow and muddy flood covered the body. Because it was quickly buried, it was kept in one piece right where it died.



Paleoart by Rebecca Dart



How are fossils formed?



Paleoart by Rebecca Dart

3. Once deep underground for millions of years, the bones break down and are replaced with the minerals absorbed from the surrounding sediment.

This is how a fossil is formed.

When bones turn into fossils, they change colour.

Here the fossils have turned brown like the rock they were stuck in.

How are fossils formed?

4. After millions of years the Earth changed, and the ground was pushed up from earthquakes. This means Triceratops fossils are close to the top of a mountain.



Paleoart by Rebecca Dart

5. Craig, the paleontologist, went for a walk and noticed something unusual in the mountainside. The fossil of a Triceratops!



How did the dinosaurs become extinct?

There are different theories on exactly how the dinosaurs became extinct, however, most scientists agree that their mass extinction was due to the asteroid that collided with Earth 66 million years ago.

- The asteroid measured over 10km wide and was taller than Mount Everest! Travelling 150 times faster than aeroplane, it slammed with great force into our planet just off the coast of Mexico.
- The asteroid punched a hole in the Earth's crust and left a crater 180km wide and over 20km deep! The blast from the impact shook the entire planet triggering earthquakes, wildfires and a thick dust cloud that enveloped the globe.
- Scientists say that the dust cloud was so thick it blocked out our sun, cooling the Earth's temperature and preventing plants from receiving the sunlight they needed to survive.
- This led to breakdowns in food chains and the death of any non-avian dinosaurs who survived the initial impact. Approximately 75% of all plant and animal species were wiped off the face of the earth.



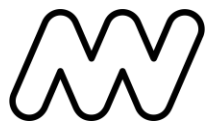
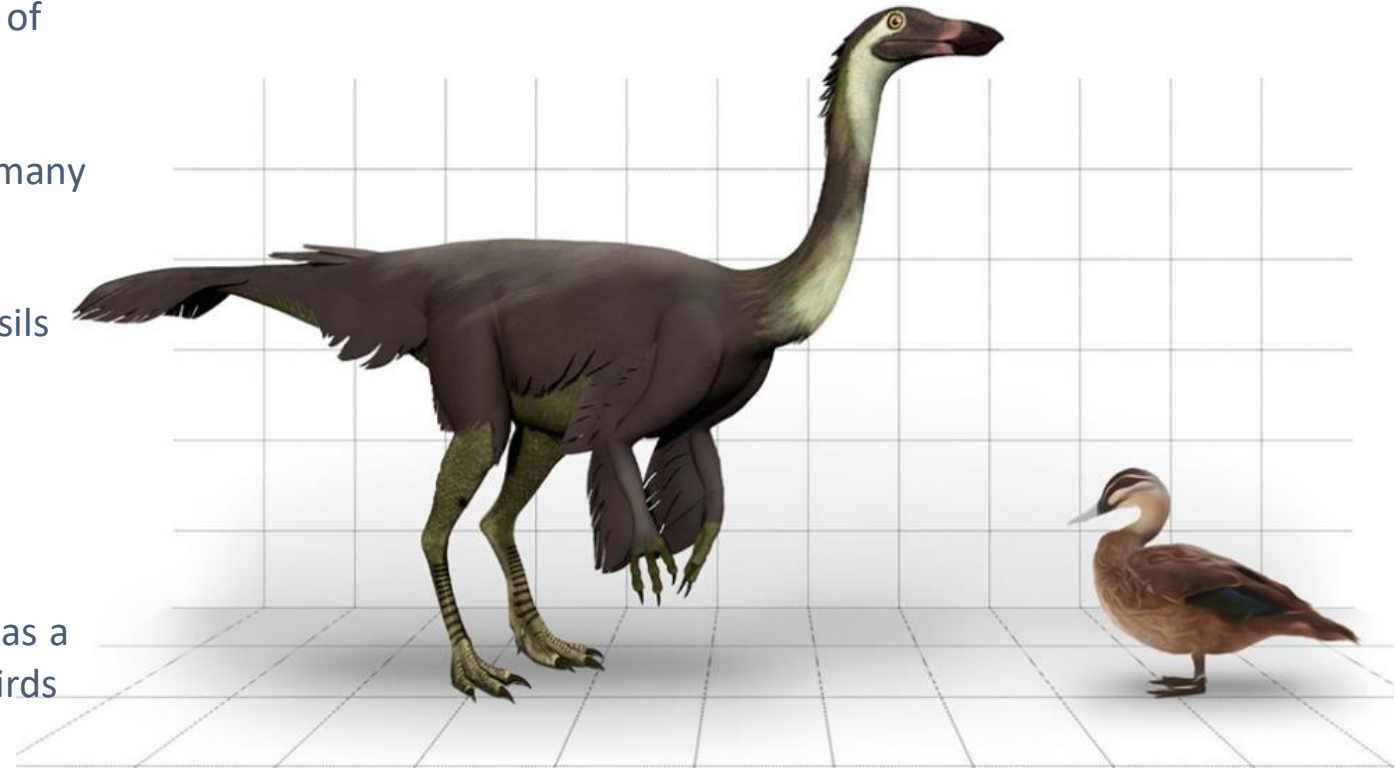
Are birds dinosaurs?

You might have heard that birds are living dinosaurs. But how do we know this is true?

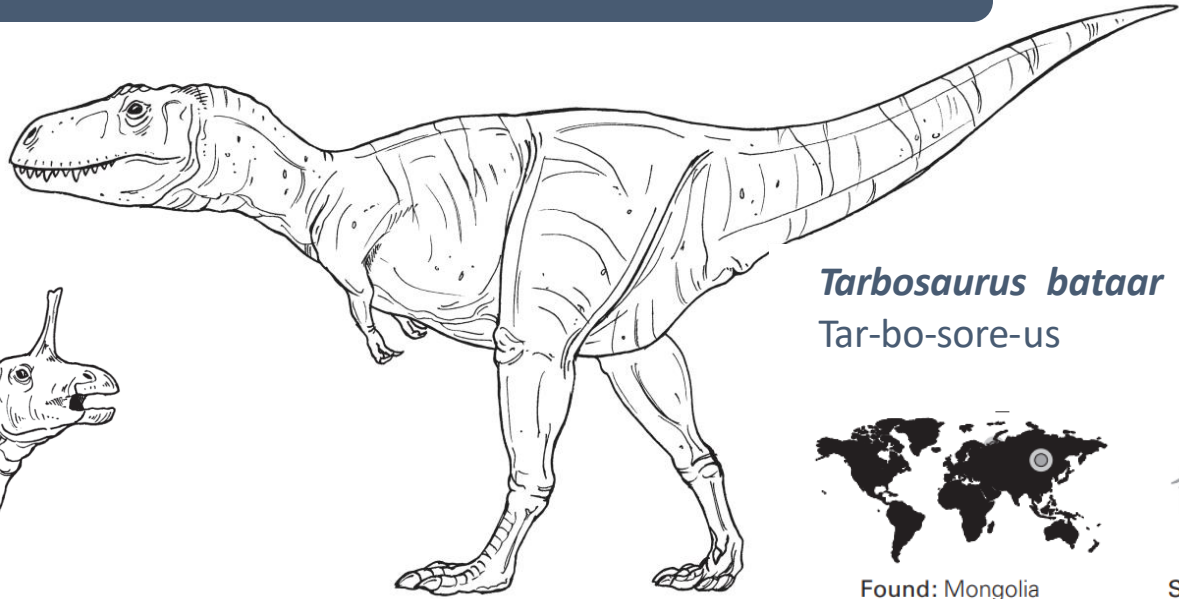
Whether it is a magpie, duck or an emu, all of today's birds evolved from a group known as the Theropod dinosaurs.

By studying dinosaur fossils, scientists have found plenty of evidence that birds are a modern relative of dinosaurs.

- Everyone knows birds have beaks. But did you know many dinosaurs had them as well?
- Not all dinosaurs had feathers. But we know from fossils that most of the theropod dinosaurs did.
- You might know that birds have a bone known as the wishbone. Scientists call it the furcula.
- The discovery of a wishbone in theropod dinosaurs was a big step in understanding the relationship between birds and dinosaurs.



Which dinosaur did you learn about?



Tarbosaurus bataar
Tar-bo-sore-us



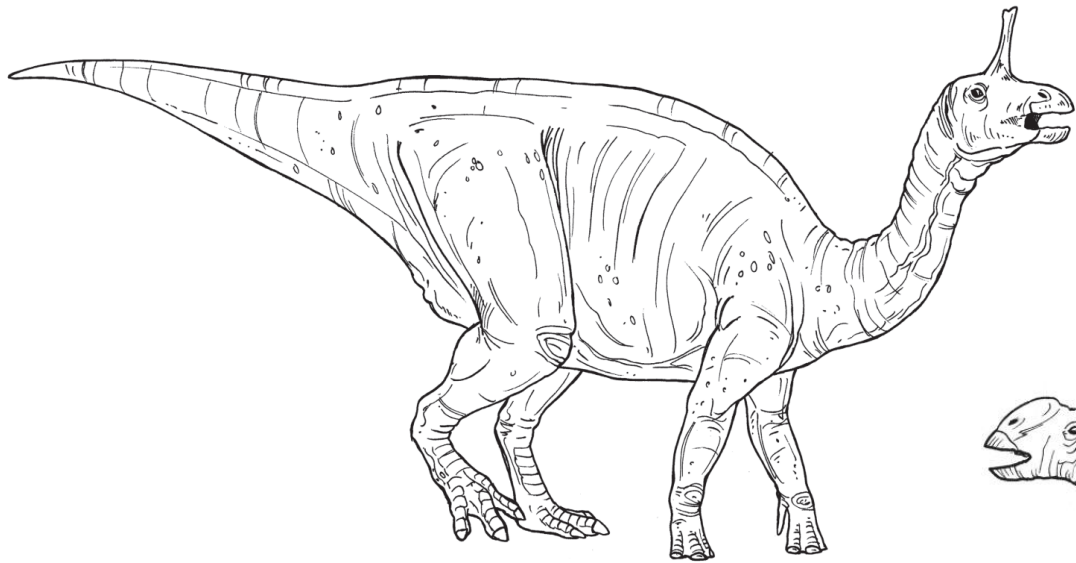
Found: Mongolia



Size: 8 metres long



Diet: Carnivore



Tsintaosaurus spinorhinus
Sin-tow-saw-rus



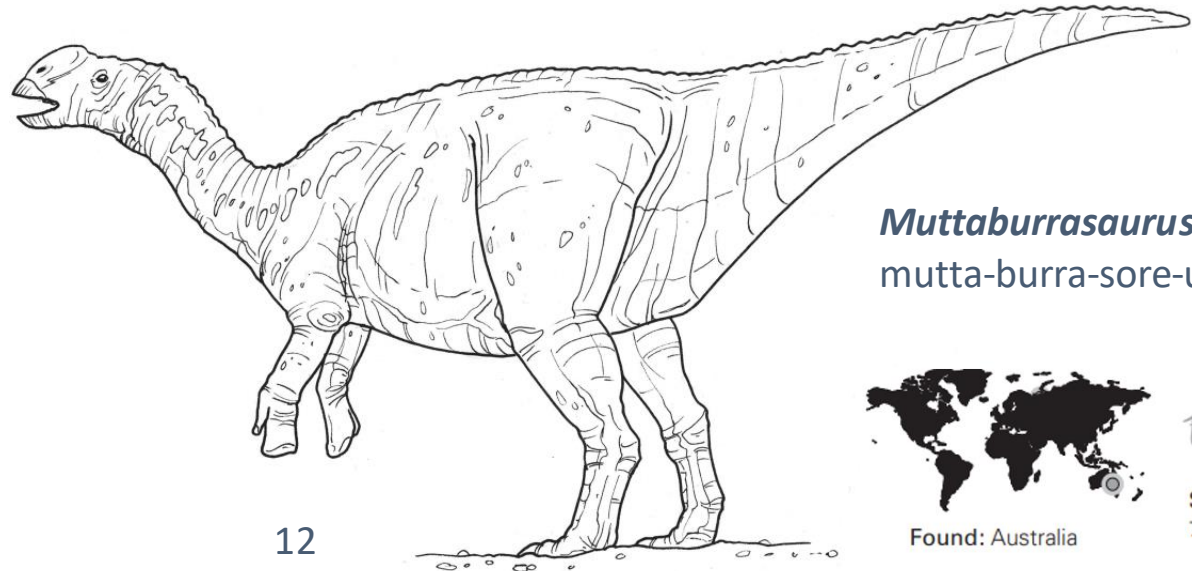
Found: China



Size: 10 metres long



Diet: Herbivore



Muttaburrasaurus
mutta-burra-sore-us



Found: Australia



Size: 7 metres long



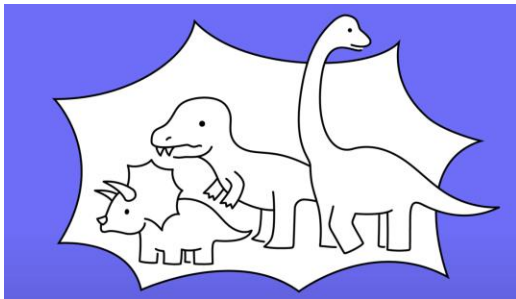
Diet: Herbivore

Continue your Museum journey...

PLAY

[Play - Melbourne Museum](#)

Explore our collection of fun and interactive activities for curious kids (and dino-loving grown ups).



WATCH

[Triceratops TV for kids](#)

Explore the secrets of the *Triceratops* with videos made just for kids.



MEET

[Welcome to the Dino Gang HQ!](#)

Have you met the Dino Gang?

These fun-loving dinosaur friends know all the best games.



VISIT

[What's On](#)

Now that we have visited you why don't you visit us!

Check out what's on at Melbourne Museum.



Useful Links

[1. Ask us - Museums Victoria](#)

We can assist you with general research questions or provide access to museum expertise.

[2. Professional learning for early childhood teachers - Museums Victoria](#)

Museums Victoria offers free professional learning programs for educators and teachers using the VEYLDF within their service.

[3. Museum Teachers - Museums Victoria](#)

Museum Teachers is open to all Victorian teachers and educators to create the best learning outcomes through our museums.



VEYLDF Links

- ✓ 4.3 Children transfer and adapt
- ✓ 4.4 Children resource their own learning
- ✓ 5.1 Children interact verbally and non-verbally with others
- ✓ 5.2 Children engage with a range of texts and gain meaning
- ✓ 5.4 Children begin to understand how symbols and pattern systems work



What colour was *Triceratops*?

We know what shape *Triceratops* was because we have found fossils of the hard bones it had in its body, but the colour of their skin is something we will never know.

When we draw or colour a dinosaur like *Triceratops*, we should think about the important things in its life:

- **Habitat** – *Triceratops* lived in dry forests and plains, where there were lots of trees, shrubs, and bushes.
- **Diet** – *Triceratops* ate plants. This means it would spend its days looking for branches, leaves, nuts, roots, and fruit.
- **Predators** – The only dinosaur big enough to scare *Triceratops* was *Tyrannosaurus Rex*! Could *Triceratops* use its colours to stay safe?



Maybe it was green or brown to help it hide (camouflage)?



Maybe it was red to scare off things that want to eat it (aposematism)?



Maybe it was a bright colour to show off to its friends?



Maybe it had patterns, like spots or stripes?



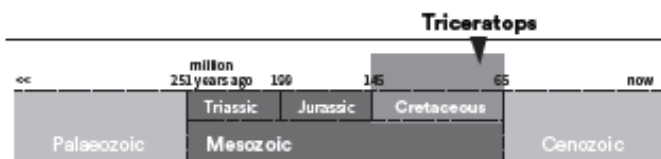
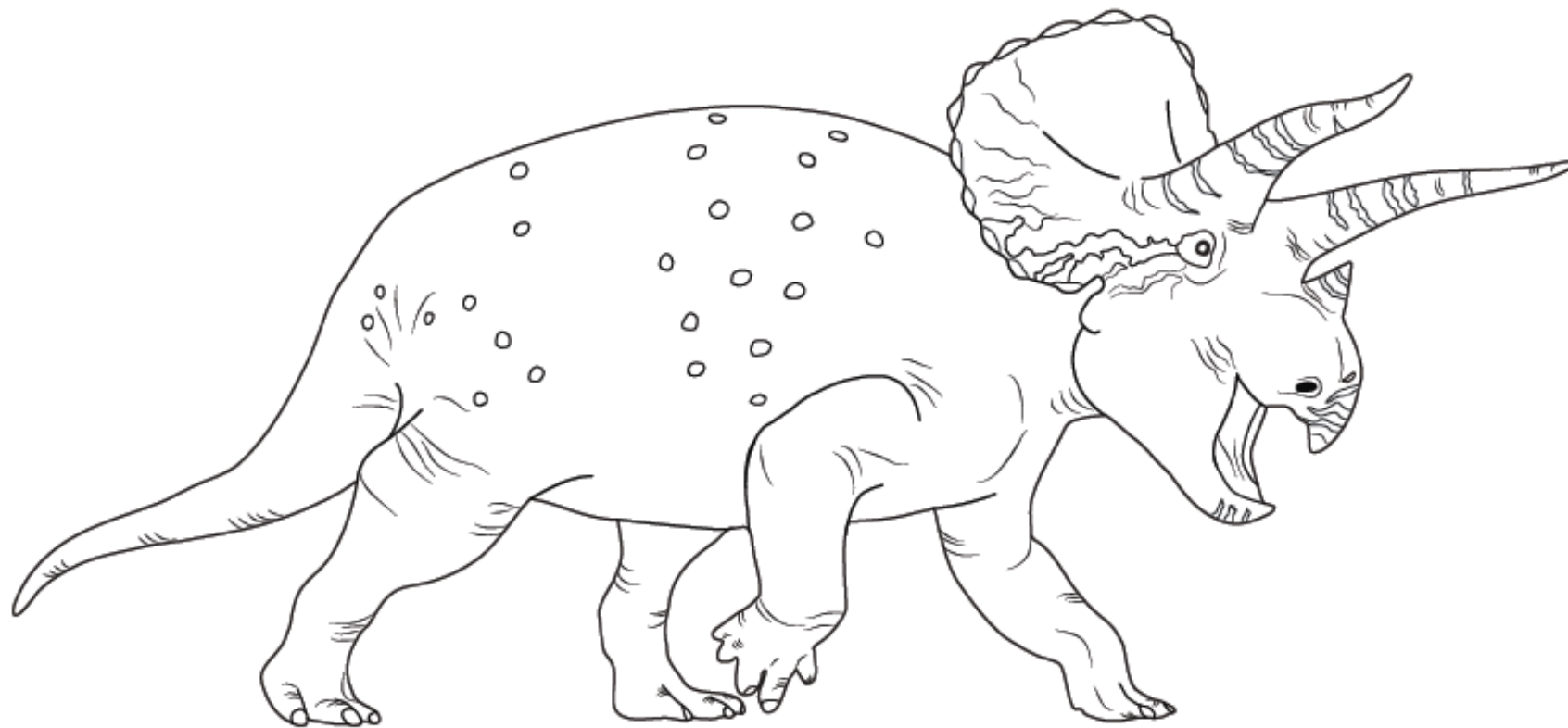
TRICERATOPS

FATE OF THE DINOSAURS



Triceratops horridus
try-sera-tops

Meaning of name Three horn face
Animal group Ceratopsid dinosaur



Lived Late Cretaceous, 68 million years ago



Diet Herbivore



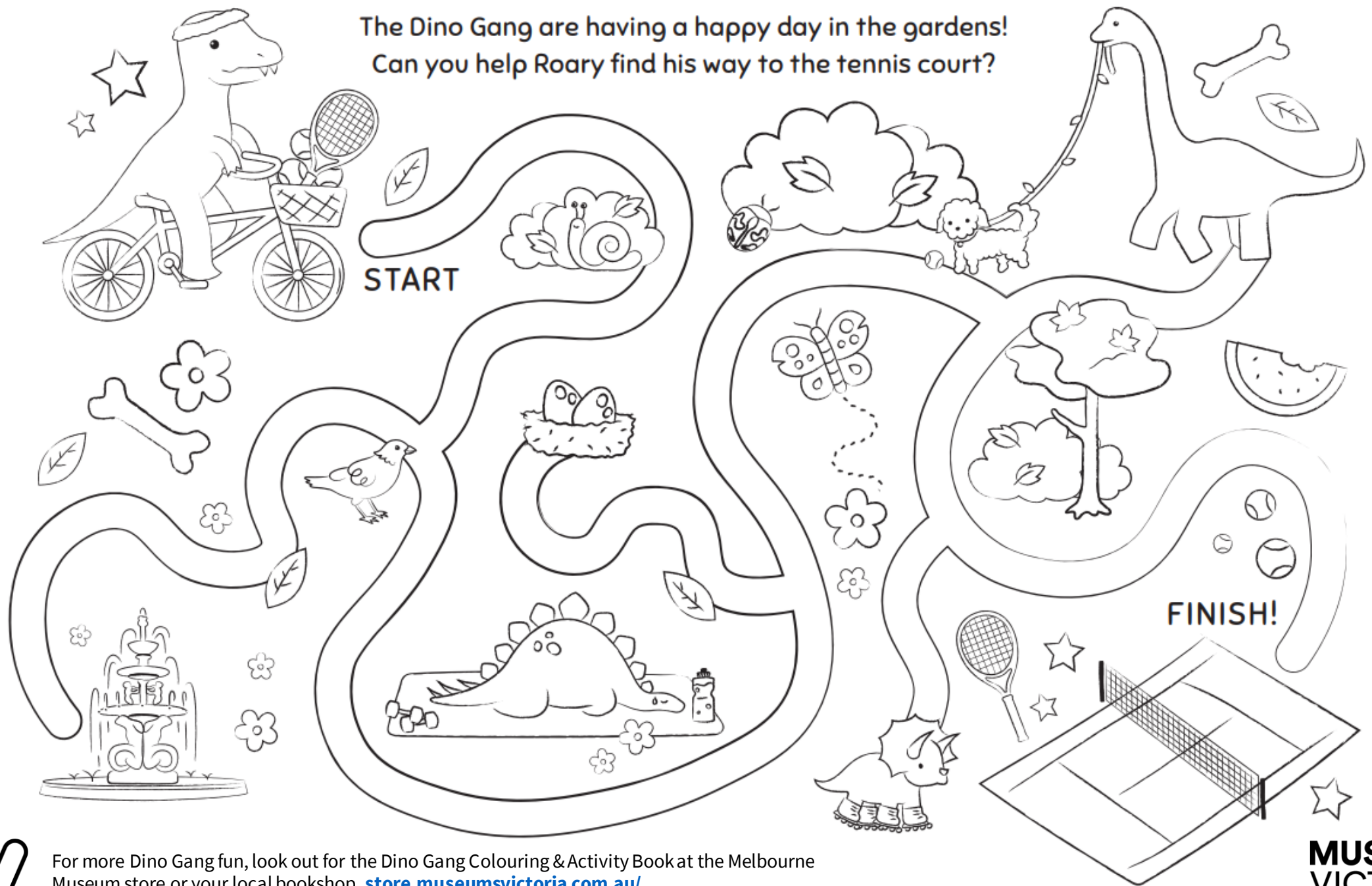
Found North America



Size 8 meters long

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The Dino Gang are having a happy day in the gardens!
Can you help Roary find his way to the tennis court?



For more Dino Gang fun, look out for the Dino Gang Colouring & Activity Book at the Melbourne Museum store or your local bookshop. store.museumsvictoria.com.au/

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The Dino Gang are serving up some *delicious* treats!
Colour the scene and count the items on the shopping list.



For more Dino Gang fun, look out for the Dino Gang Colouring & Activity Book at the Melbourne Museum store or your local bookshop. store.museumsvictoria.com.au/

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