



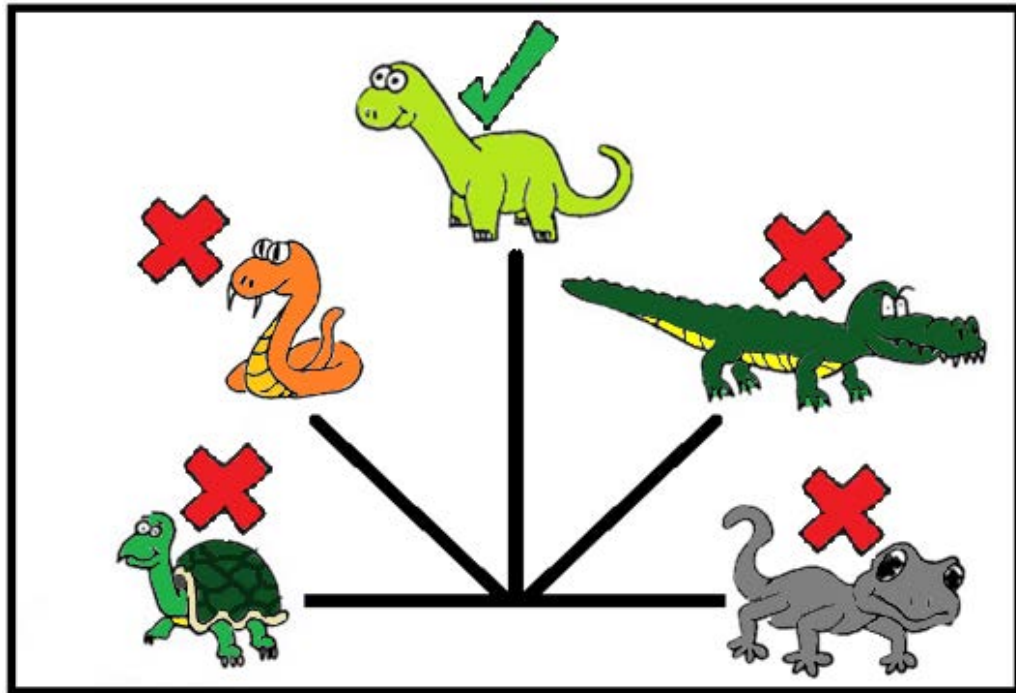
Primary Education Activities

Years 4 and 5

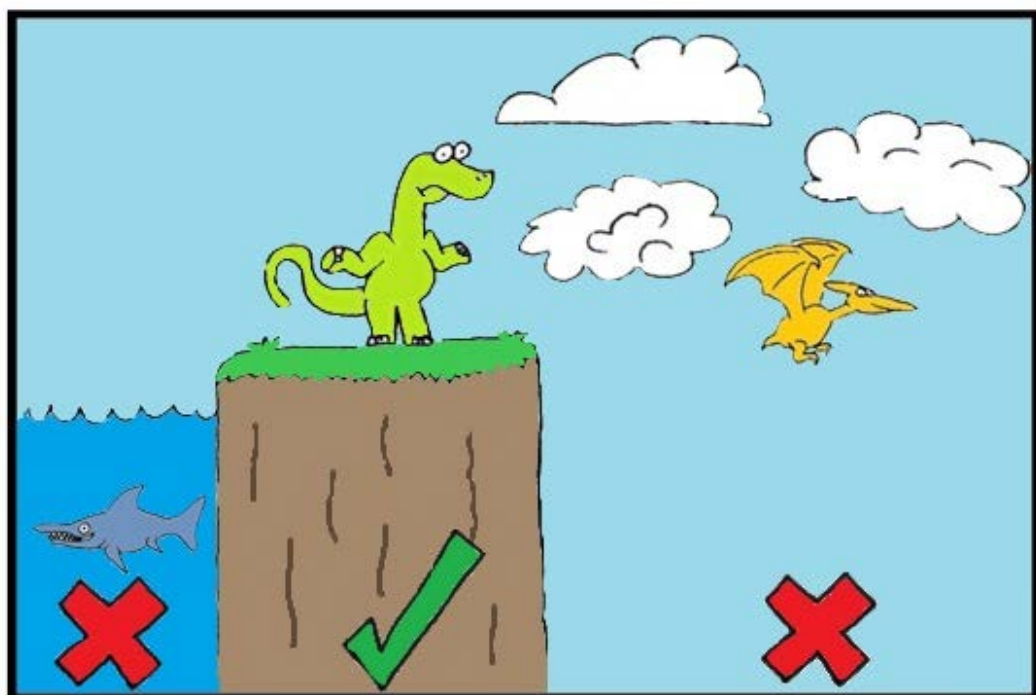
Information Sheet: Think Dinosaur!

If a dinosaur is as **big** as a house or as **small** as a chicken, they still have has four things in common with other dinosaurs.

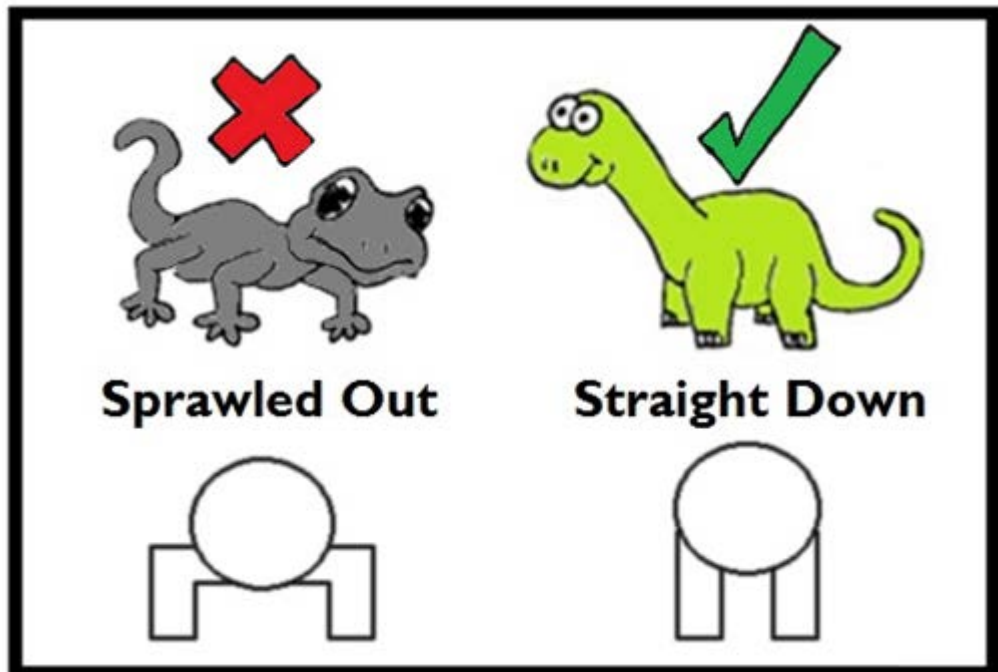
1. Dinosaurs are a specific type of reptile.



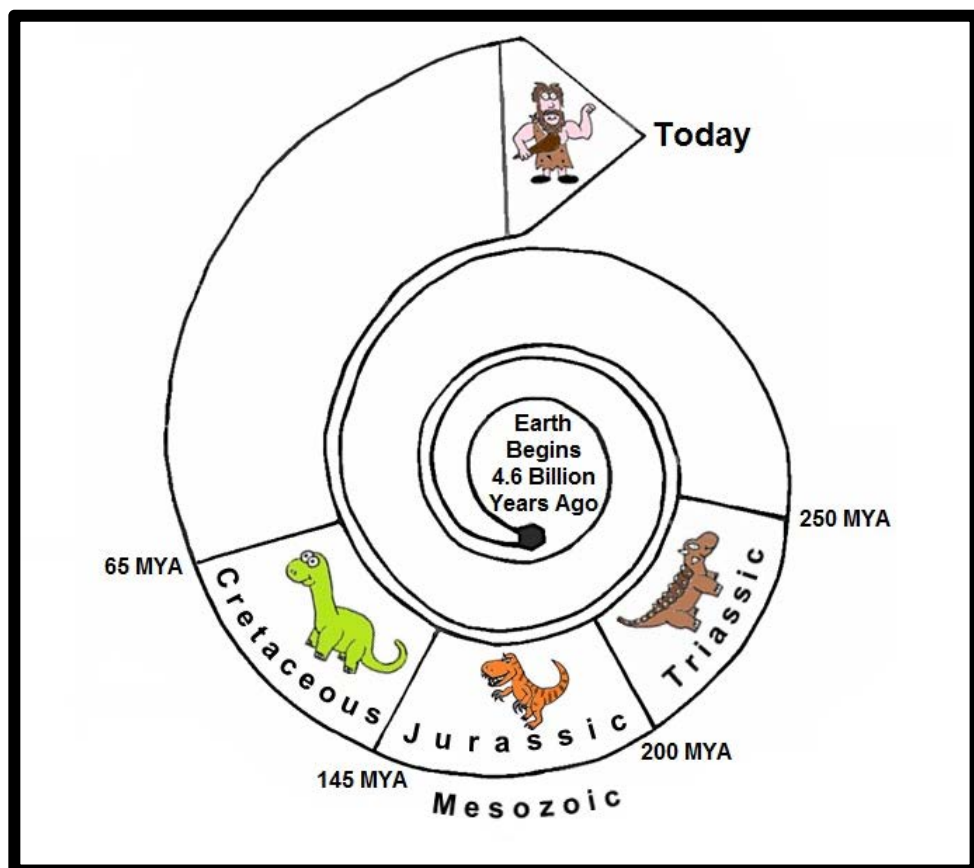
2. Dinosaurs lived on land, not underwater or in the air.



3. Dinosaur legs were always directly below their body, not out to the side like a lizard.



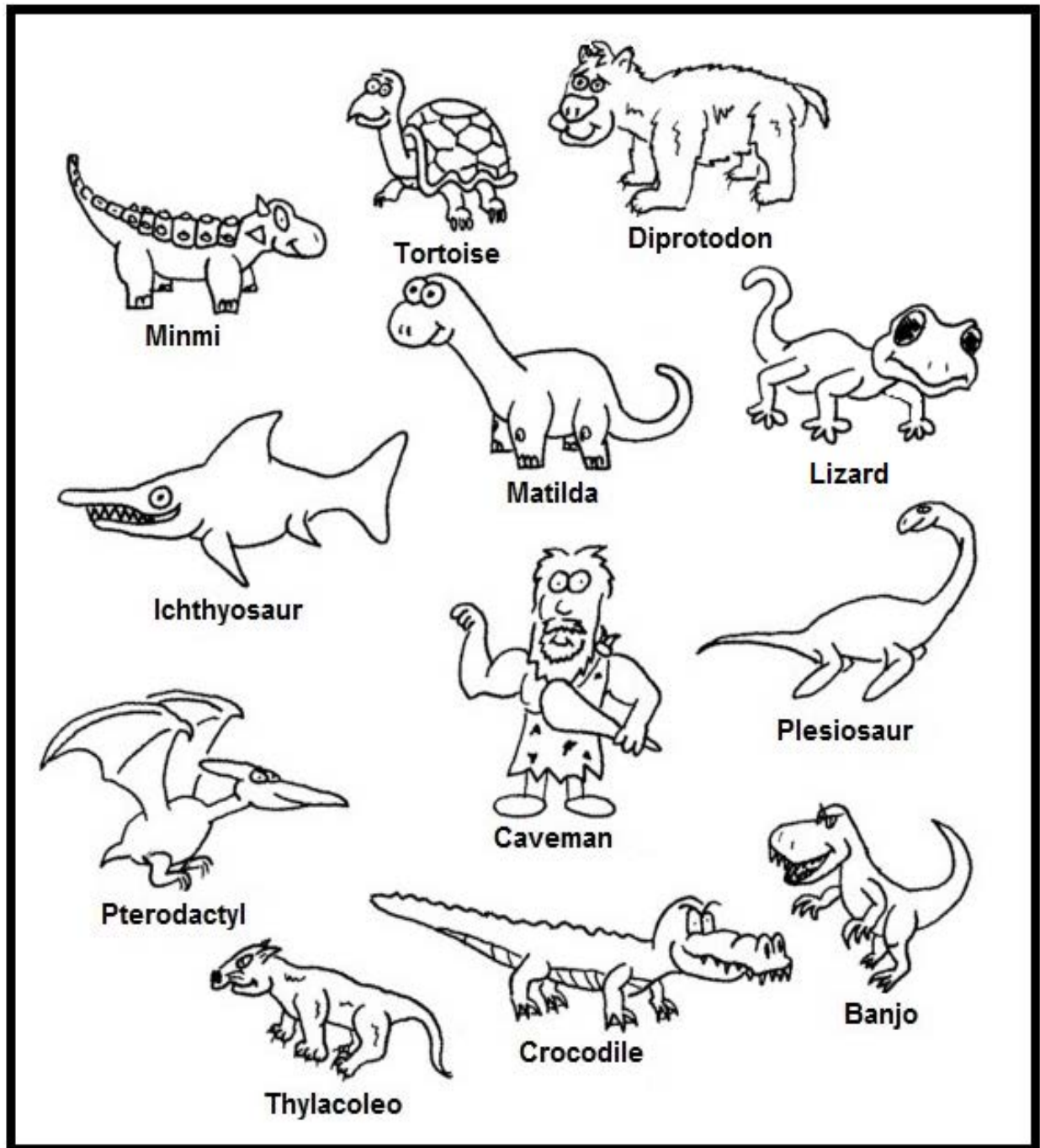
4. Dinosaurs lived during the Mesozoic Era, also called the Age of Reptiles, which is subdivided into three major periods: Triassic, Jurassic and Cretaceous.



Activity 1: Think Dinosaur!

Now it's time to think like a scientist.

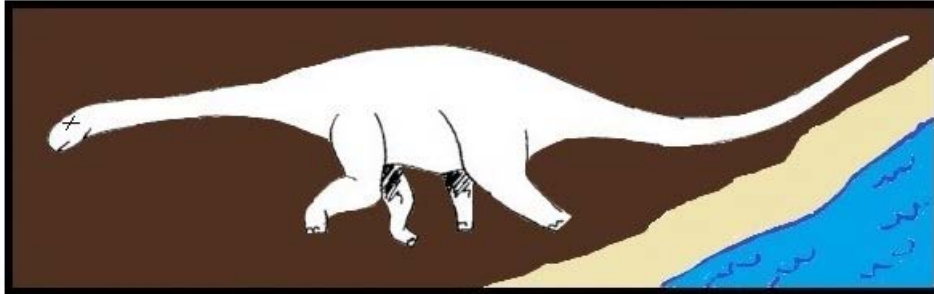
Identify the creatures below that are dinosaurs and colour them in.



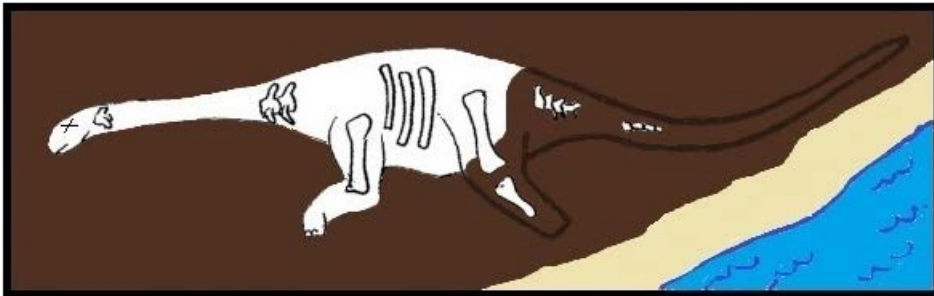
Information Sheet 2: Fossilised Fun

How do dinosaur bones fossilise?

Step 1: The dinosaur dies.



Step 2: The body starts to rot away. Whatever is left gets covered by sand and mud.



Step 3: The bones that are buried slowly turn into rock.



Step 4: Millions of years later someone might find them again.



Activity 2: Fossil Imprint Fun

Make your own fossil imprint

To prepare for this activity you need:

- plasticine or clay
- empty margarine/butter container or paper cups
- shells, leaves or small plastic dinosaur figurines
- toothpicks
- plaster casting
- water
- paint or coloured pencils.

Your safety

You **MUST** wear eye protection and be supervised by an adult at all times. It is recommend that an adult mix the plaster until the power substance is well mixed in.

What to do

1. Put a layer (about 2cm thick) of plasticine or clay in the bottom of a container (old margarine containers are ideal, paper cups are good, even a basic bowl of aluminium foil)
2. Use a range of objects (shells, leaves, small plastic toys etc) to make imprints neatly as you can into the plasticine/clay. You may need a toothpick to help remove the object.
3. Pour plaster into each container, making sure you give each a bit of a shake to help the air bubbles escape.
4. Leave to dry. It should be fine in a few hours but can leave overnight if you want to be sure.
5. Cut open the container to get the plaster and clay out, remove the clay and you will be left with your trace fossil. You can colour or paint the impressions to look like the real thing or leave them as they are.

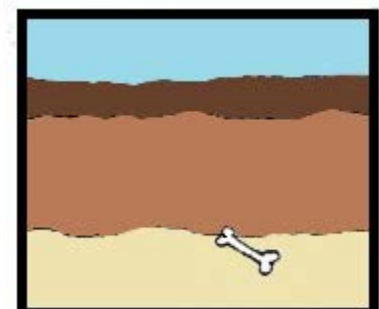
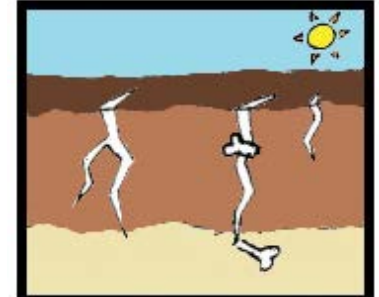
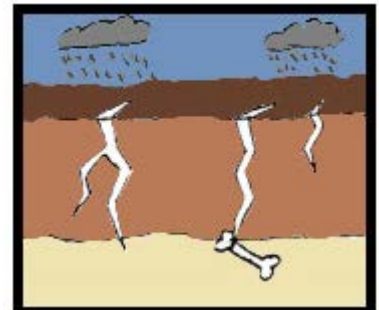
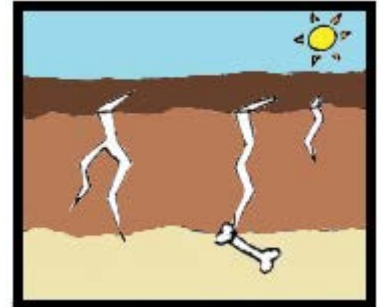


Activity 3: Beautiful Black Soil

Watch the australianageofdinosaurs.com video on how dinosaur bones move through the soil.

In 1999 farmer David Elliott first started to find bones on his Winton property, and it's the characteristics of the area's black soil that brings them to the surface. Draw lines from each sentence to the image that matches the words, showing the steps that a dinosaur bone travels through the soil.

1. The dinosaur bones are trapped in rock below the black soil.
2. When it dries the soil forms big cracks and breaks the bones.
3. The next rainy season washes soil down into the cracks and under the bones.
4. Every year it happens again, for thousands of years, and the bones gets pushed up to the top.
5. Then, hopefully, someone finds a bit of bone on the surface and we start to dig to uncover the rest.



Activity 4: Dinosaur Dig

Make your own dinosaur dig site

To prepare for this activity you need:

- empty margarine/butter container or paper cups
- small plastic dinosaur figurines
- plaster casting
- water
- digging tools (small screwdrivers, paint brushes)
- measuring cups (or use a plastic cup).

Your safety

You must wear eye protection and be supervised by an adult at all times. It is recommend that an adult mix the plaster until the power substance is mixed well.

What to do

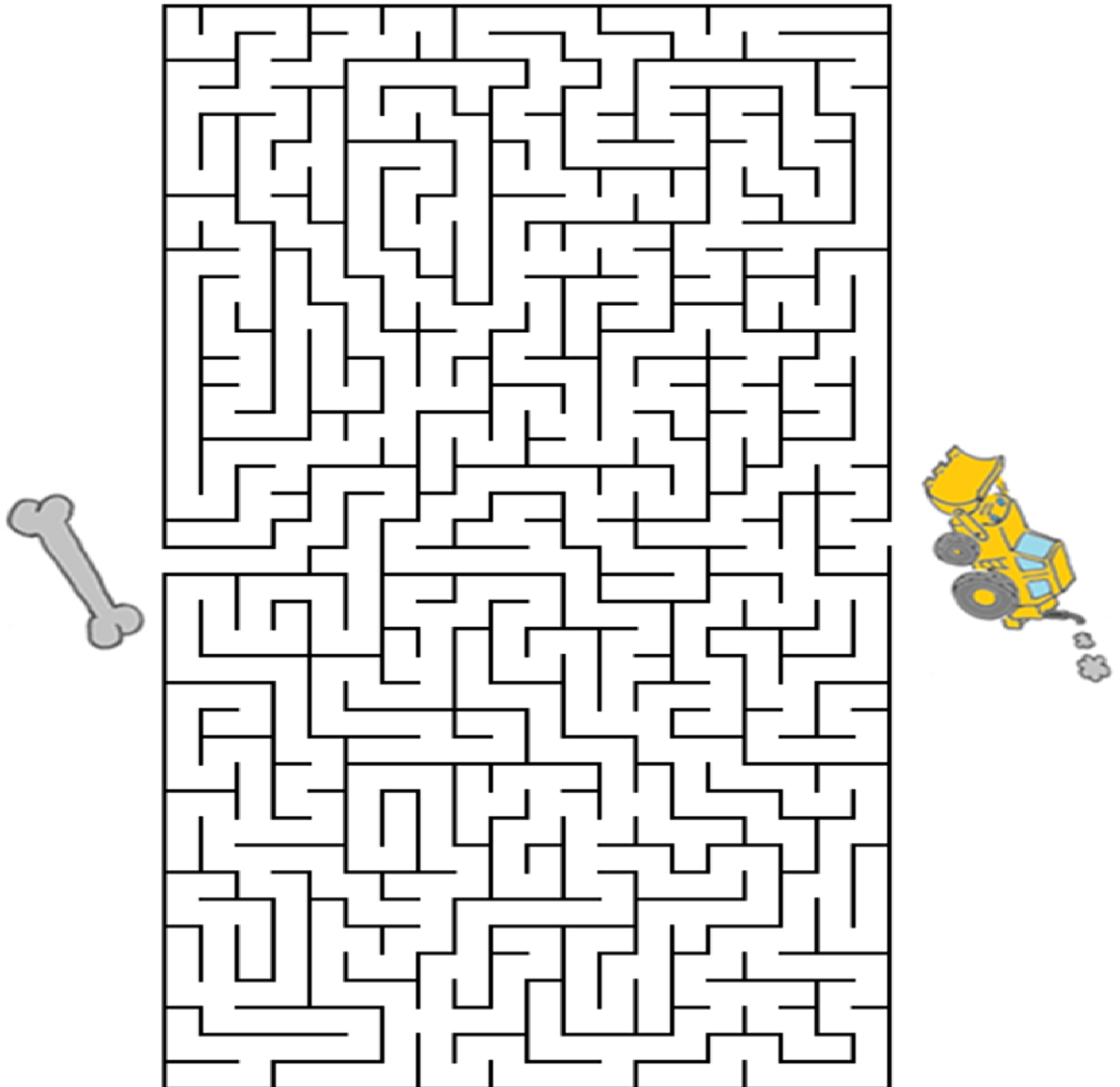
1. Mix 1 cup of sand, 1 cup of plaster and 1 cup of water (if you want a stronger mixture use a ratio of 1 cup of sand, 2 cups of plaster and 1½ cups of water).
2. Pour a layer of the mixture into a tray (ice cream container or baking foil trays are good).
3. Put plastic dinosaur toys into the layer.
4. Use more of the plaster and sand mixture to cover up the toys.
5. Leave to dry, overnight at least.
6. Excavate the dinosaurs with eg screwdrivers, plastic cutlery and brushes. A magnifying glass can help you see the grains of sand and plaster to be removed.



Activity 5: Searching for Bone

The Museum needs help!

David Elliott has lost his way to the fossil site. Can you help him get the loader back to where the fossils are?



Activity 6: Laboratory Fun

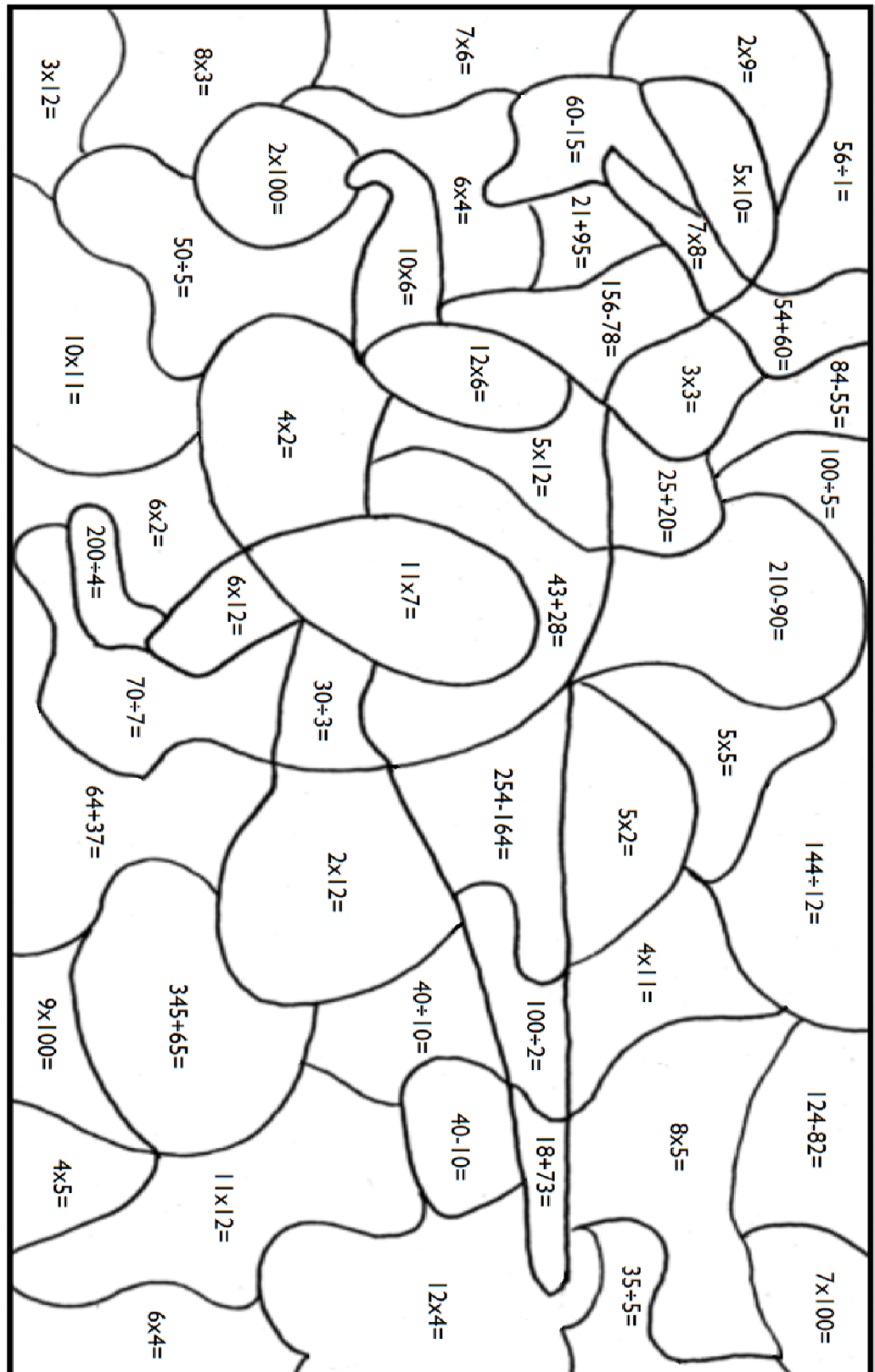
Oh no! Museum staff and volunteers have so many things in the Laboratory that we seem to have lost some of them. Can you help us find them?



Fossil Laboratory Research Palaeontology
Bones Micro-jack Clancy Air chisel
Winton Banjo Discovery Wen-pen
Rocks Dinosaur Matilda

Sometimes it's challenging to find dinosaur bones in the rock.
Can you help us find Banjo?

BANJO



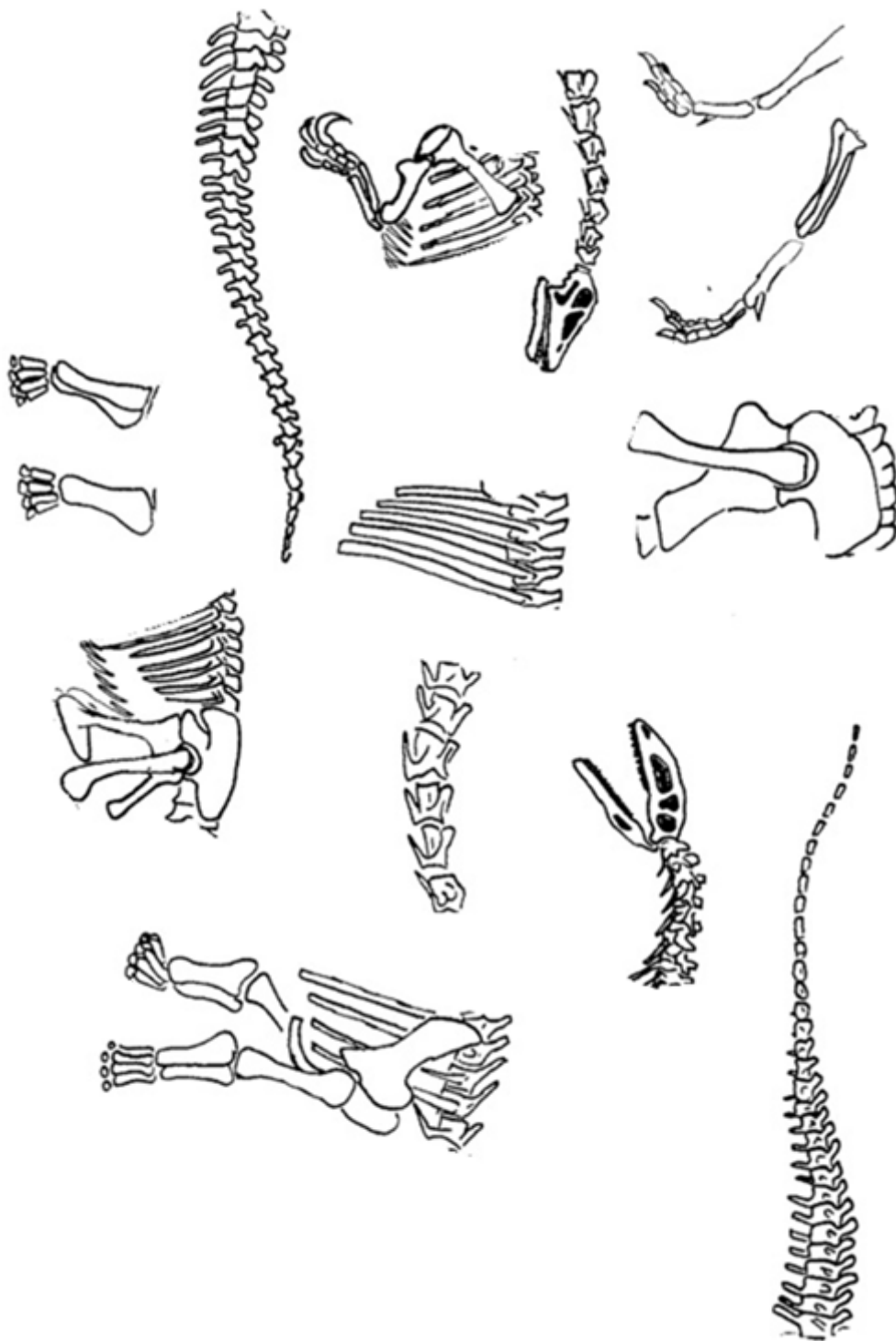
Activity 8: Pieces of the Puzzle

When we finish taking off all the rock from around the fossils, we need to puzzle the pieces of bone back to their original positions. Can you help us? Cut out the pieces of the dinosaur and see if you can puzzle them back together. What do you think you will find?

Hints

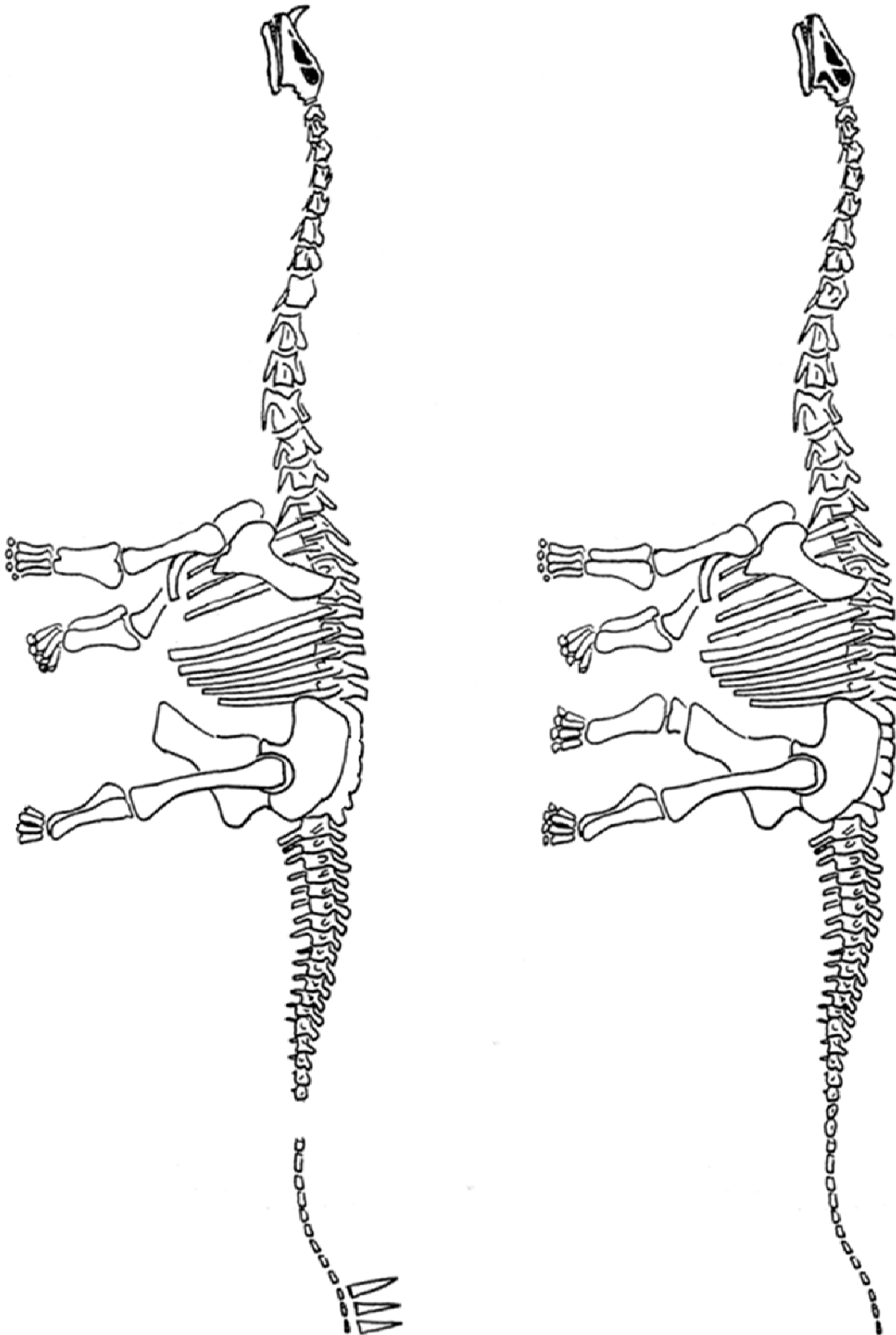
Use sticky tape

Maybe there's be double trouble



Activity 9: Researching the Bones

When palaeontologists study a dinosaur skeleton they need to look for differences in the bones. See if you can find all **10** differences in this Sauropod skeleton.



Information Sheet: How are Dinosaurs Different?

When all the preparation work on the fossilised dinosaur bones is finished, a palaeontologist (pay-lee-on-toll-o-gest) visits the Museum and to research all the fossils. They compare our fossils with all the other dinosaur fossils found around the world. This is done to see if our dinosaurs are different from, or similar to, what has been found already.

The Australian Age of Dinosaurs, along with other organisations and people in the region, is really fortunate to have found some pretty amazing dinosaurs.

Check out five of the newest dinosaur species found in the Winton, Hughenden and Richmond areas.

Matilda

Nickname: Matilda
Scientific name: *Diamantinasaurus matildae*
Pronunciation: Di-man-tina-sore-us mah-til-day
Meaning: Matilda's Diamantina [river]
Lizard
Location: Winton Qld
Type: Sauropod
Diet: Herbivore
Size: 15–18m long, 2.5–3m high, 15–20 tonnes



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Clancy

Nickname: Clancy
Scientific name: *Wintonotitan wattsi*
Pronunciation: Win-ton-o-tie-ton wots-i
Meaning: Watt's Winton Titan
Location: Winton Qld
Type: Sauropod
Diet: Herbivore
Size: 15–16m long, 3m high, 15–20 tonnes



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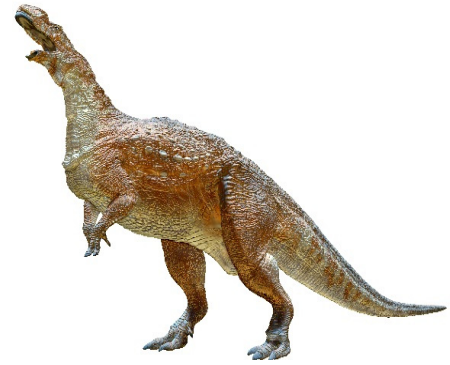
Banjo

Nickname: Banjo
Scientific name: *Australovenator wintonensis*
Pronunciation: Oss-tra-low-ven-a-tor win-ton-ensis
Meaning: Winton's Southern Hunter
Location: Winton Qld
Type: Theropod
Diet: Carnivore
Size: 5m long, 1.6m high, ½ tonne



Molly

Nickname: Molly
Scientific name: *Muttaburrasaurus langdoni*
Pronunciation: *Mutt-ah-burra-sore-us + lang-don-ii*
Meaning: Langdon's Muttaburra Lizard
Location: Muttaburra Qld
Type: Ornithomimid
Diet: Herbivore
Size: 7–8m long, 2.5m high, 4 tonnes



Buster

Nickname: Buster
Scientific name: *Minmi paravertebra*
Pronunciation: *min-mee+ para-vert-ee-bra*
Meaning: Having paravertebrae, from Minmi Crossing (where it was found)
Location: Roma Qld
Type: Thyreophoran (primitive ankylosaur)
Diet: Herbivore
Size: 2–3m long, 1m tall, 500kg

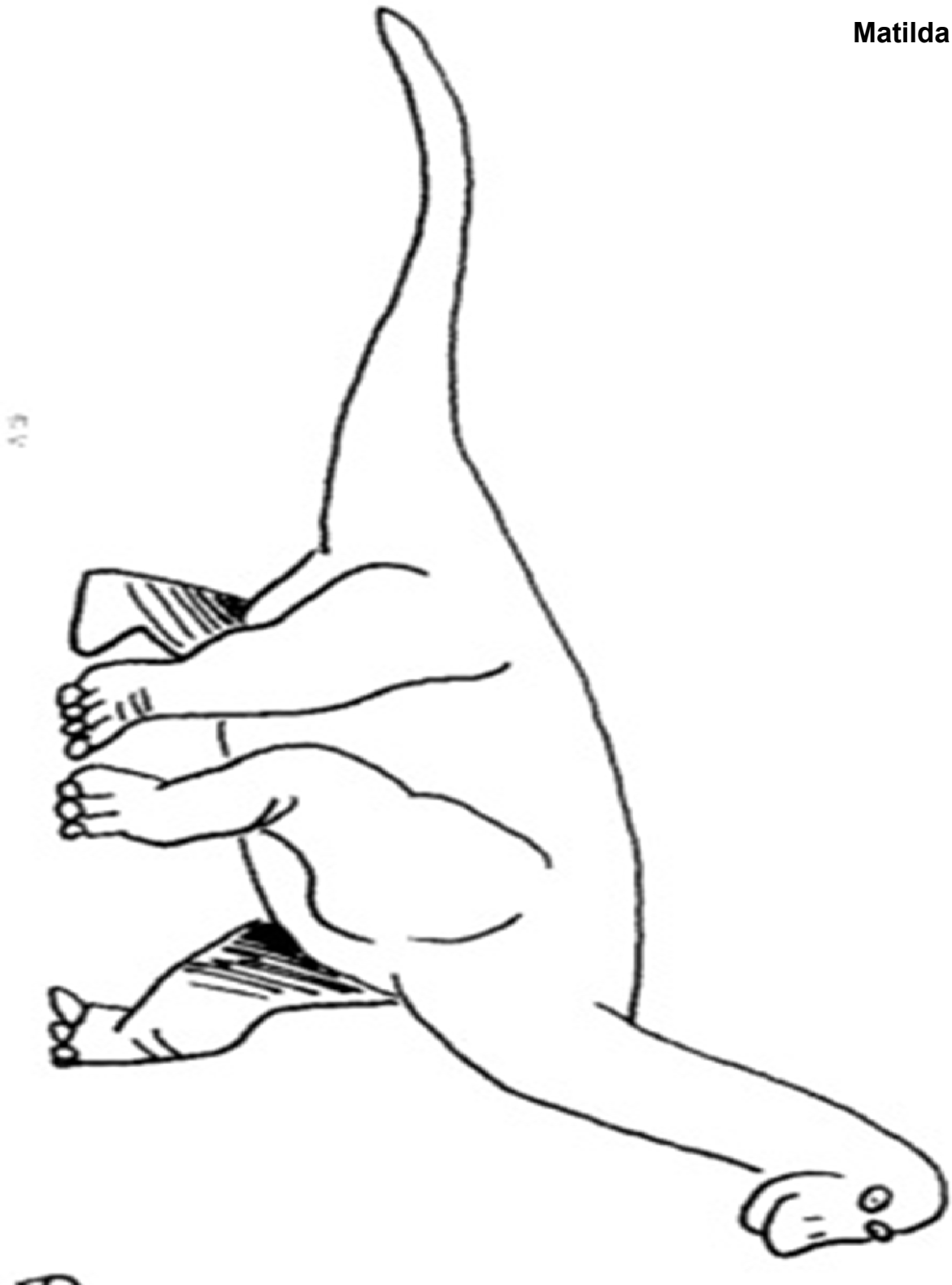


Extra Activity A: Dinosaur Skin

Imagine what dinosaurs might have looked like and try to give these dinosaur some skin. Did they have feathers or scales? Was the skin pink with purple stripes?

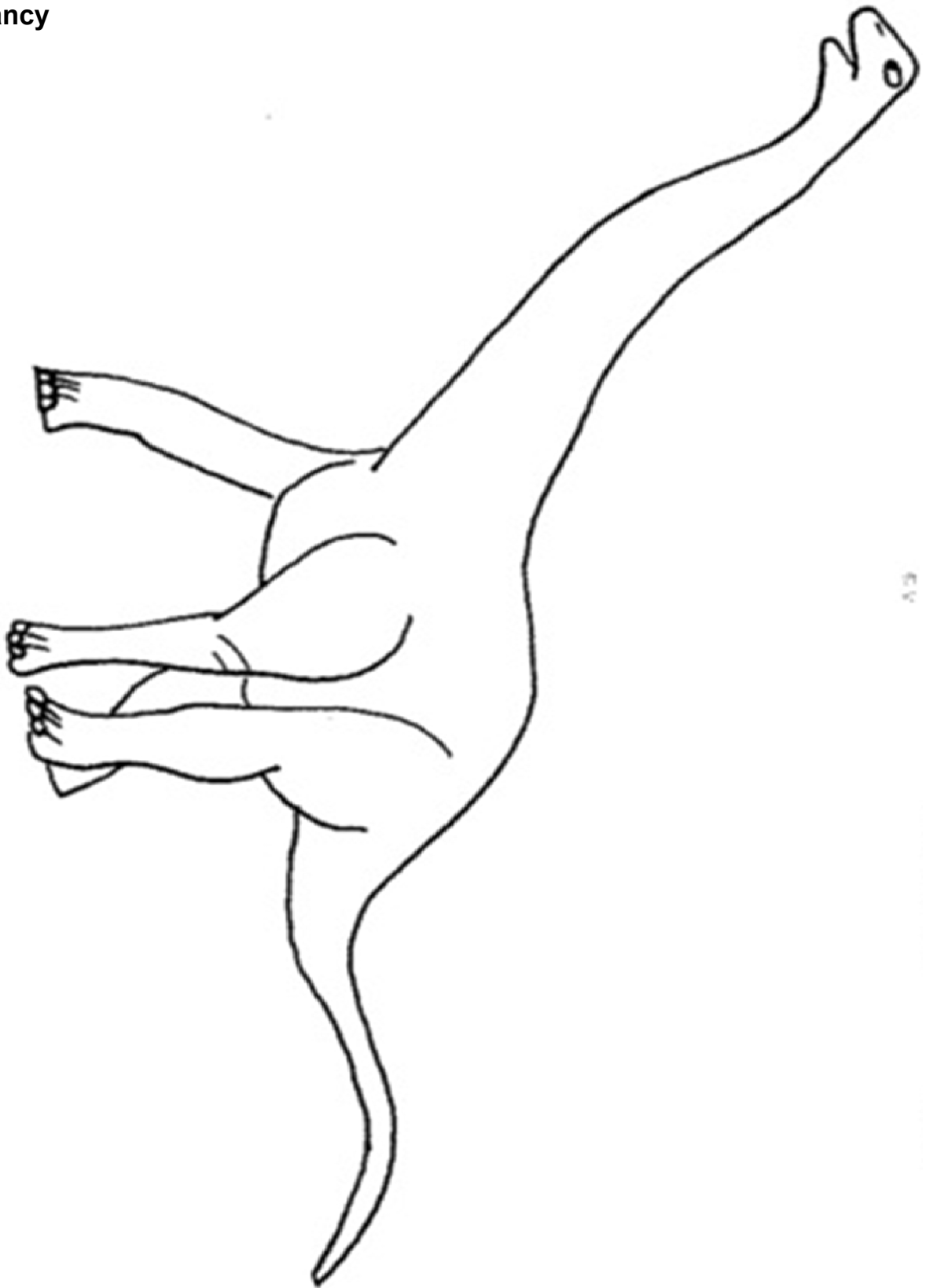
Diamantinasaurus
matildae

Matilda



Wintonotitan watsii

Clancy



Australovenator
wintonensis

Banjo



Extra Activity B: Design a Dinosaur

Imagine that you find your very own dinosaur. What would it look like? What would you call it? Fill in the details of your dinosaur and draw it below.

Dinosaur nick name _____

Dinosaur scientific name _____

Discovery location _____

Diet _____

Weight _____

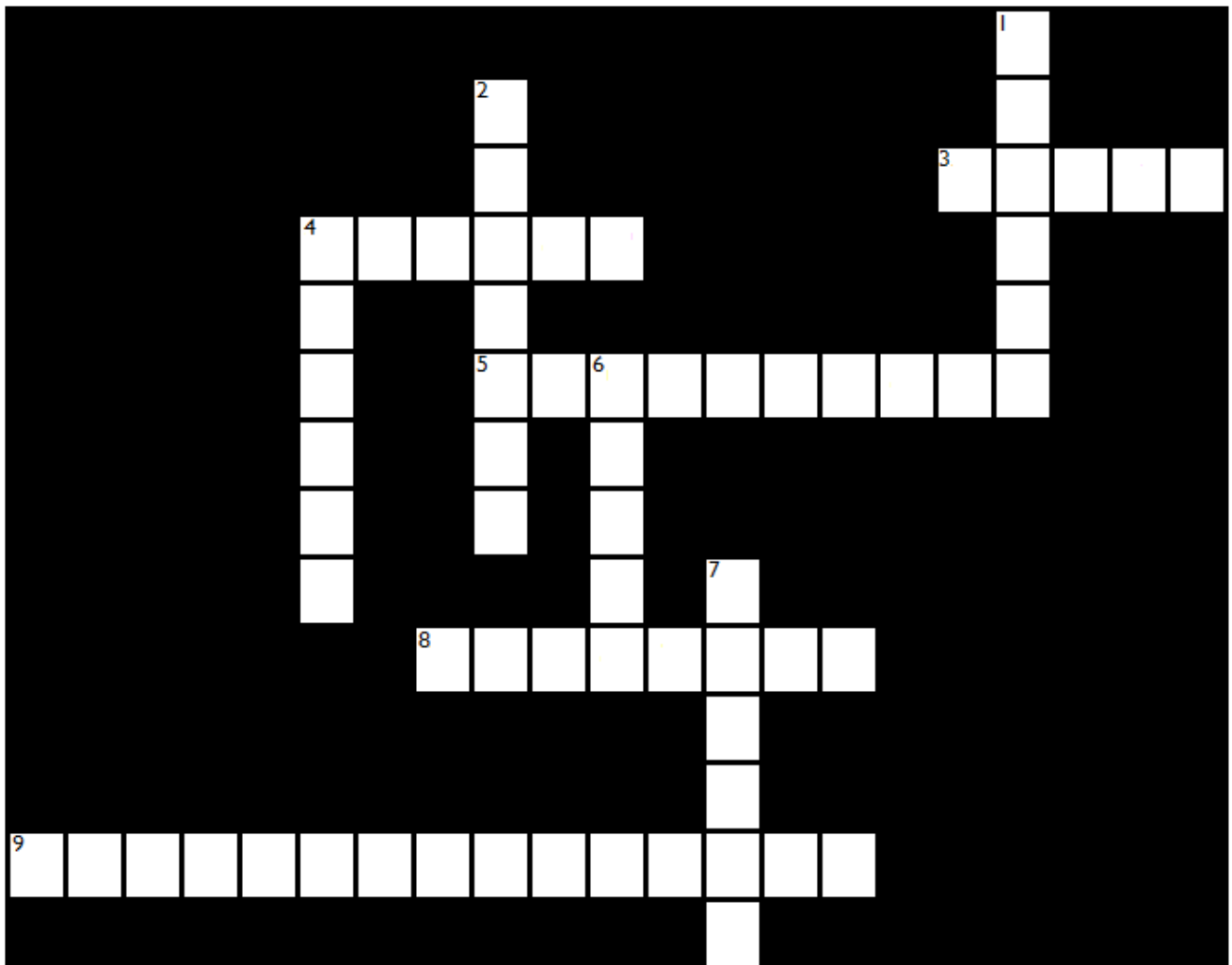
Size (length, height) _____

Special features _____



Extra Activity C: Dino-crossword

Test your new dinosaur knowledge and fill out this crossword.



ACROSS

3. In 1999 D_____ Elliott found dinosaurs on his property in Winton Qld
4. Our favourite dinosaurs are found in _____ Qld
5. Dinosaur bones are prepared in a _____
8. The Triassic, Jurassic and Cretaceous were part of the M_____ Era
9. A person who studies dinosaurs is a P_____

DOWN

1. What is the nickname of *Wintonotitan wattsi*?
2. What is the nickname of *Diamantinasaurus matildae*?
4. The most common tool in the Laboratory is the W_____
6. What is the nickname of *Australovenator wintonensis*?
7. When a bone turns into rock it becomes a F_____