

ACTIVITY GUIDE

PIQ: TEST YOUR PALAEO INTELLIGENCE

Over the next few pages are activities associated with the PIQ: Test Your Palaeo Intelligence program. Below is an activities by grade level chart to help you decide which are the best activities for your class.

page	activities by grade	k	1	2
2	Palaeo True or False	●	●	●
3	Amazing Dino Mazes	●	●	●
4	Draw a Sauropod	●	●	●
5	Draw a Stegosaurus	●	●	●
6	Cretaceous Collage	●	●	●
11	Build a Volcano			●

ACTIVITY 1

PALAEO TRUE OR FALSE

RECOMMENDED FOR GRADES K–2

Help dispel some myths and misconceptions about palaeontology through some challenging true and false questions!

STEPS

1. Assign one wall of the room as the “true” side, and the opposite wall the “false” side.
2. Read each statement aloud to your students. If they think the answer to the question is true, they must run over and touch the “true” wall. And if they think the answer is false, they must run over and touch the “false” wall.
3. After everyone has run and chosen a wall, give them the answer including the response, and then have them come back to the middle for the next.

QUESTION	ANSWER	DESCRIPTION
<i>T. rex</i> and <i>Stegosaurus</i> lived at the same time.	FALSE	<i>T. rex</i> lived in the Cretaceous Period millions of years after <i>Stegosaurus</i> lived in the Jurassic Period.
All dinosaurs laid eggs.	TRUE	All dinosaurs were reptiles, and most reptiles lay eggs.
Humans hunted woolly mammoths.	TRUE	Scientists have found mammoth skeletons with human-made arrowheads and spear points in them.
There has only been one Ice Age.	FALSE	There have been many ice ages over millions of years.
Turtles appeared on Earth before dinosaurs.	TRUE	Turtles were around for millions of years before the first dinosaurs.
Dinosaurs used to live in Antarctica.	TRUE	Antarctica used to be warm and full of trees at the time of the dinosaurs.
Some dinosaurs lived in big herds.	TRUE	Scientists have found whole herds of dinosaurs all died and fossilized together.
<i>T. rex</i> was the biggest dinosaur.	FALSE	<i>T. rex</i> was the biggest North American predator, but Sauropods (long-necked dinosaurs) were much larger.
The first life on Earth was in the ocean.	TRUE	Scientists have found 3.5 billion year old fossils of ancient sea life.
Sabre-tooth cats were as big as horses.	FALSE	Sabre-tooth cats were about the size of a big dog.

ACTIVITY 2

AMAZING DINO MAZES

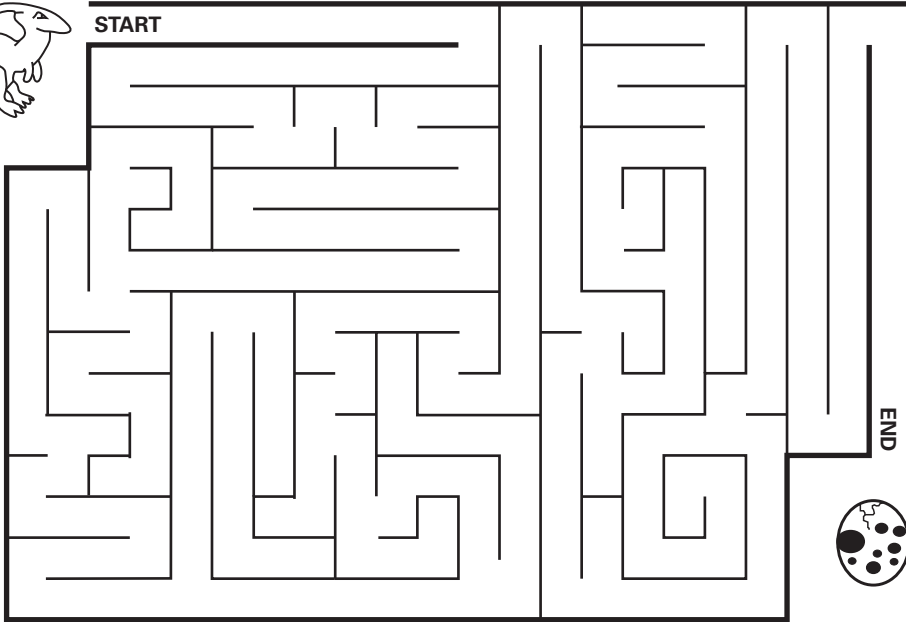
RECOMMENDED FOR GRADES K TO 2

Can you help Dipsy Doodle find her egg?

Then make your way through the long-necked dinosaur!



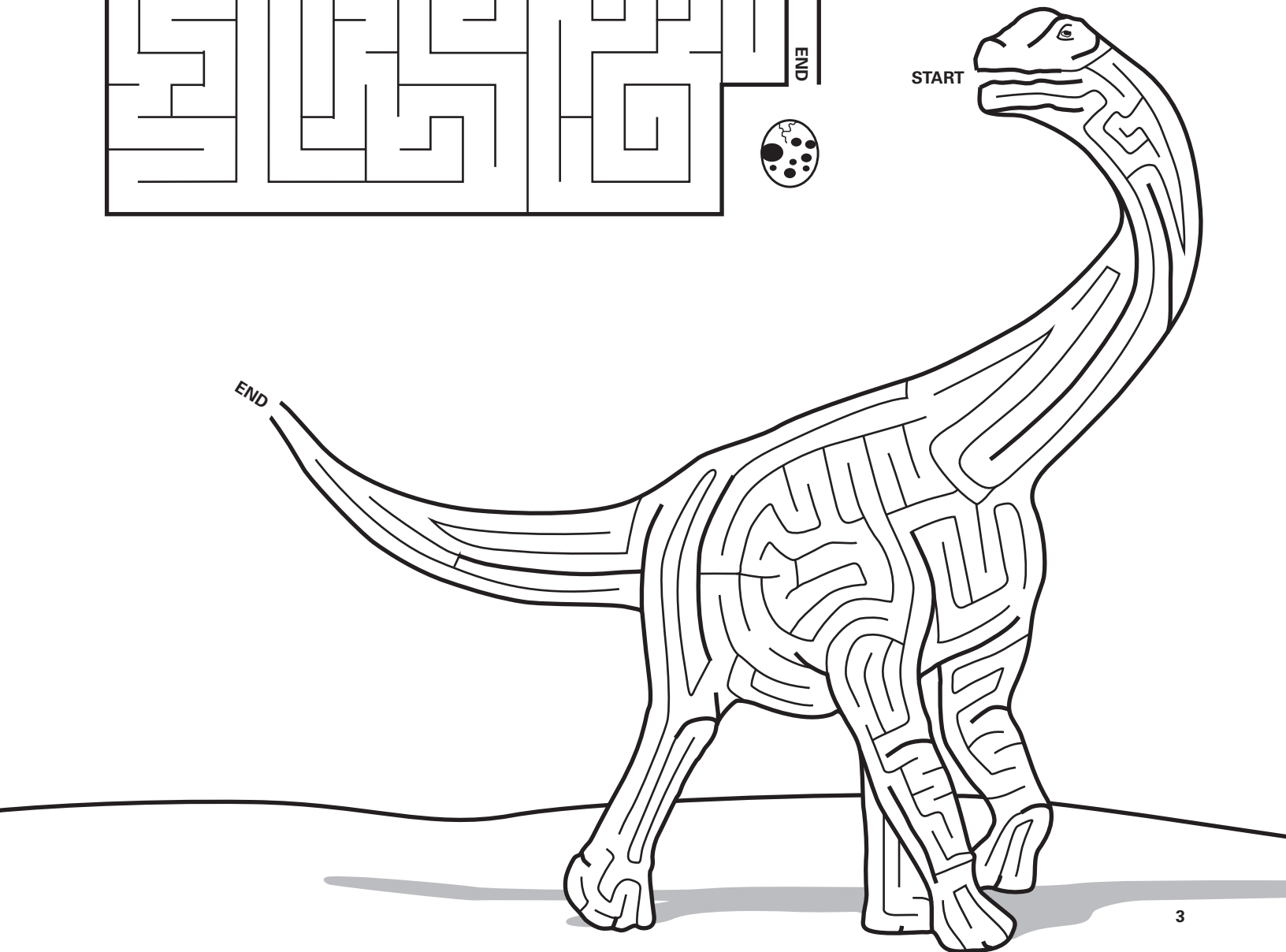
START



END

START

END



ACTIVITY 3

DRAW A SAUROPOD

RECOMMENDED FOR GRADES K TO 2

Follow the instructions and draw your own long-necked dinosaur at the bottom of the page, or on a separate sheet of paper.

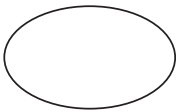
SAUROPOD FACTS

Sauropods are the largest animals to have walked on Earth; some of them were bigger than a jet airplane and weighed more than twelve African elephants!

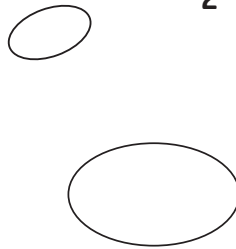
Sauropods swallowed hard stones to help them grind up food in their bellies, like chickens and crocodiles do today. Scientists call these stones ***gastroliths***.

Palaeontologists used to think long-necked dinosaurs lived in the water, but now we know that they were well adapted for walking on land.

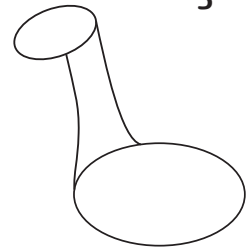
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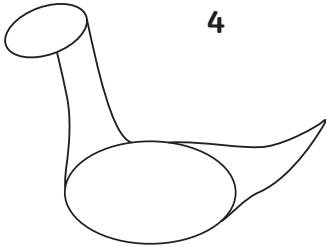
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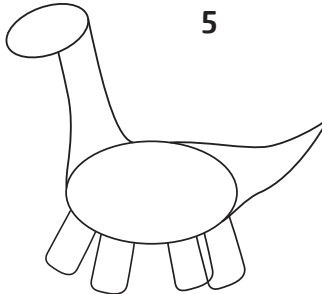
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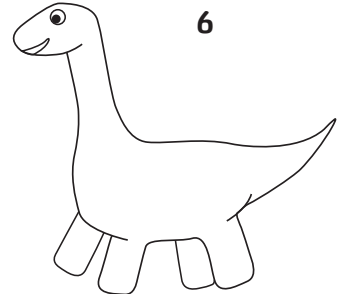
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ACTIVITY 4

DRAW A STEGOSAURUS

RECOMMENDED FOR GRADES K TO 2

Follow the instructions and draw your own *Stegosaurus* at the bottom of the page, or on a separate sheet of paper.

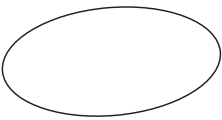
STEGOSAURUS FACTS

The name *Stegosaurus* means "roofed lizard", because the plates on its back look like old fashioned roof tiles.

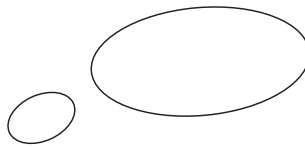
Compared to other dinosaurs, *Stegosaurus* had the smallest brain compared to its body size. Its brain was about the size of a walnut.

Stegosaurus had long spikes on the end of its tail that it could use for defence.

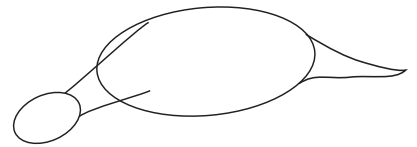
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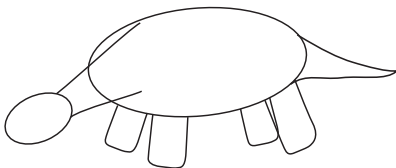
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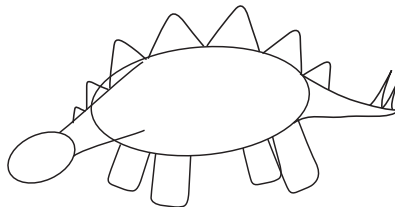
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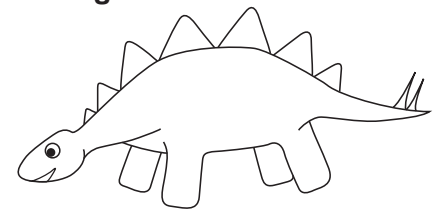
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ACTIVITY 5

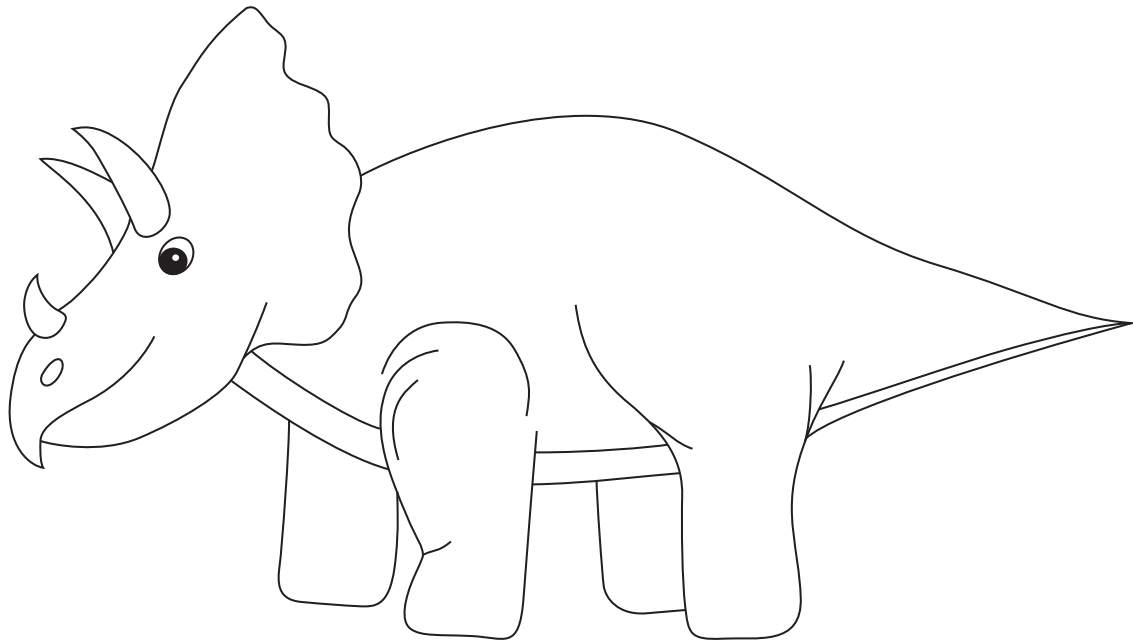
CRETACEOUS COLLAGE

RECOMMENDED FOR GRADES K TO 2

Cut out and colour animals and plants to create your own ancient landscape, then post it on your classroom wall!

STEPS

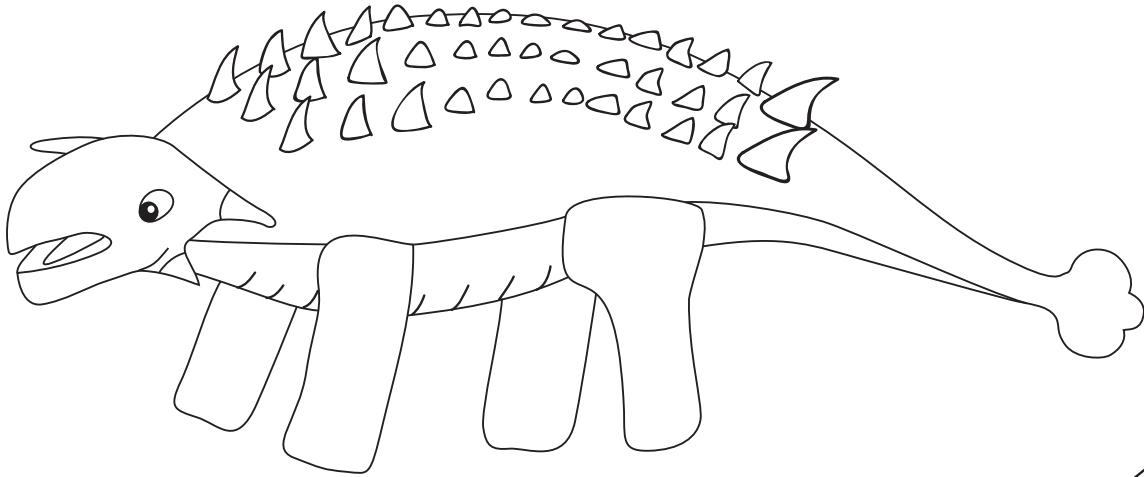
1. Photocopy the following pages so all students have a copy of 1 or 2 sheets with different animals and plants.
2. Have students colour and cut out their pages.
3. Spread a big sheet of paper out on the floor and have students create a background scene with volcanoes, clouds, mountains, streams and forests for the animals to live in. You can also use additional materials like coloured paper, cotton balls, pipe cleaners and glitter. Be creative!
4. Put glue on the backs of the cut outs and place them carefully into the scene.
5. Once the glue has dried, carefully lift and hang the class creation on the wall.
6. Step back and enjoy your magnificent Dino-rama!



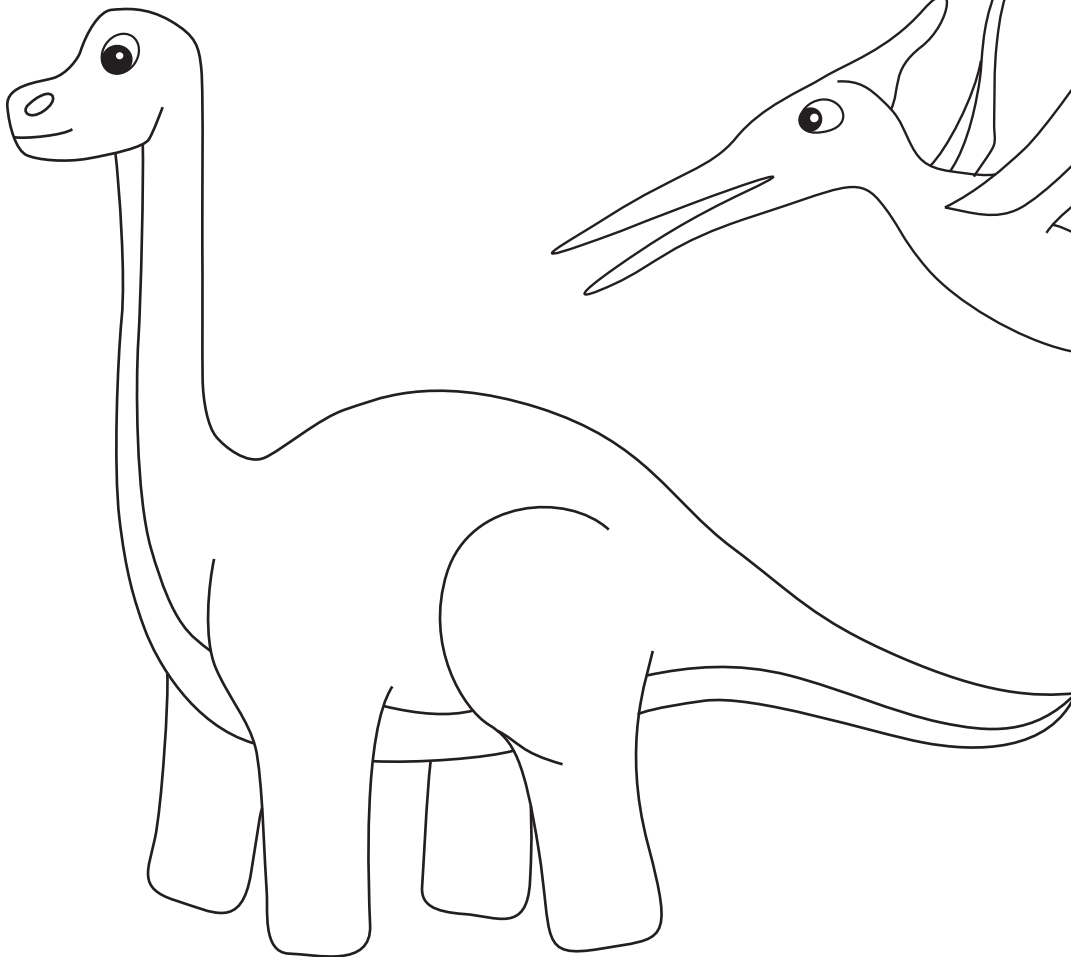
Triceratops

ACTIVITY 5

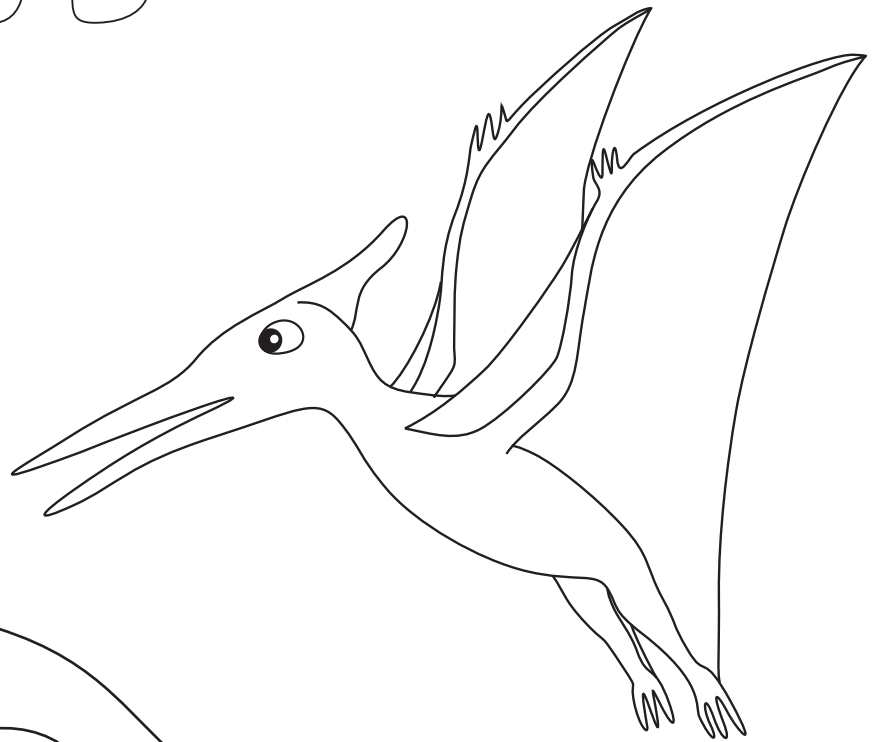
CRETACEOUS COLLAGE



Euoplocephalus



Sauropod



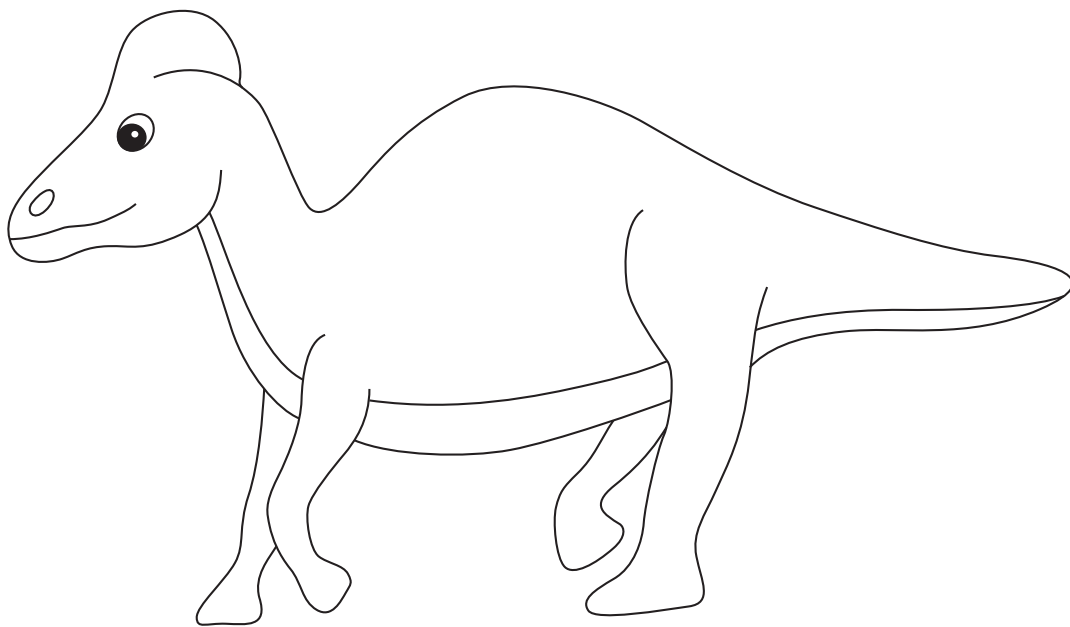
Pterosaur

ACTIVITY 5

CRETACEOUS COLLAGE



Tyrannosaurus rex



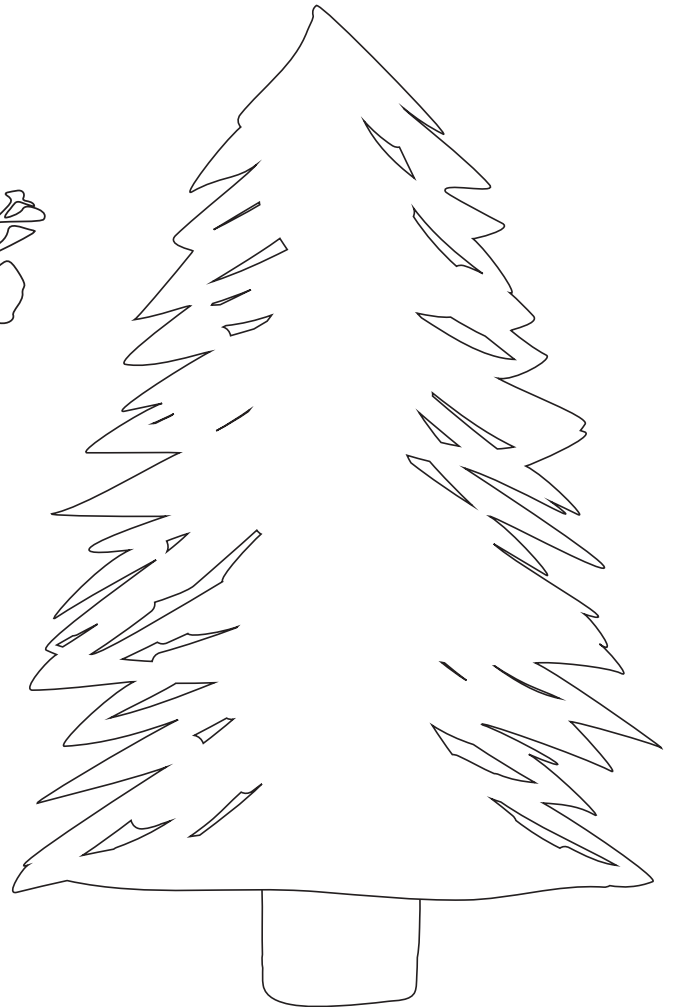
Hadrosaur

ACTIVITY 5

CRETACEOUS COLLAGE



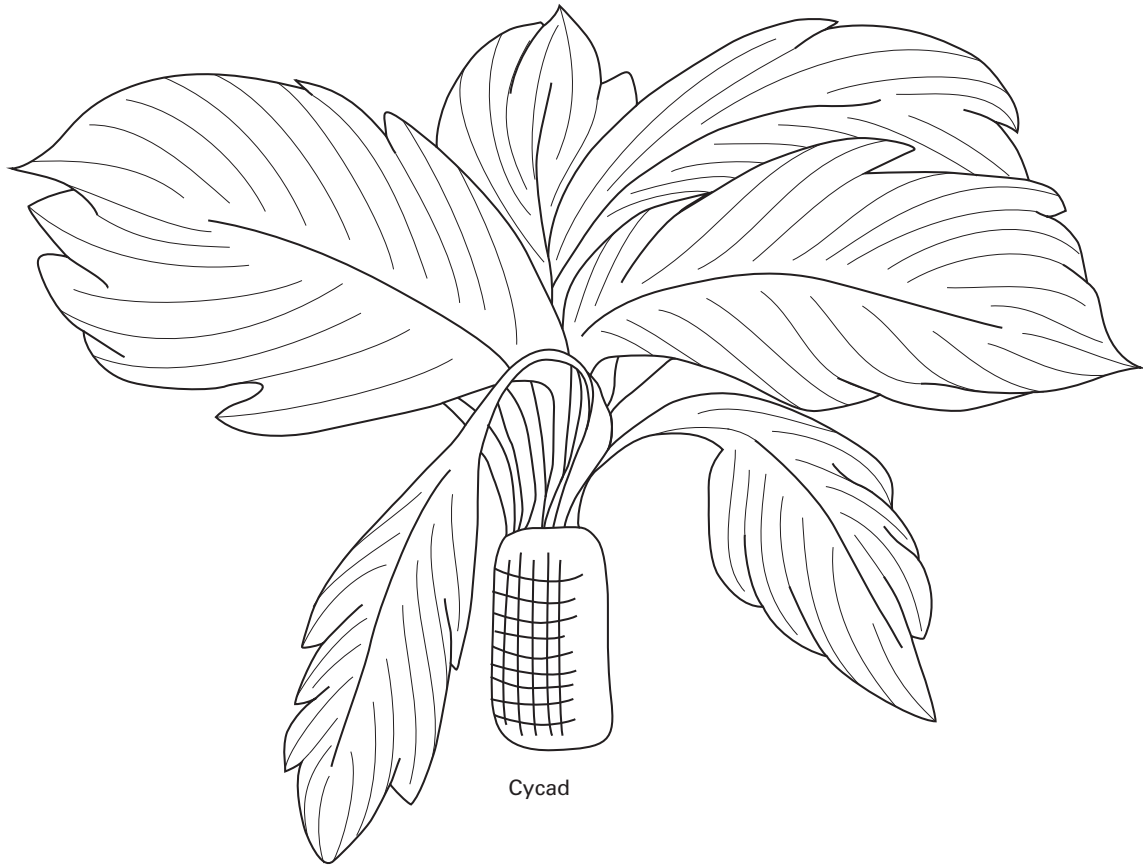
Ginkgo



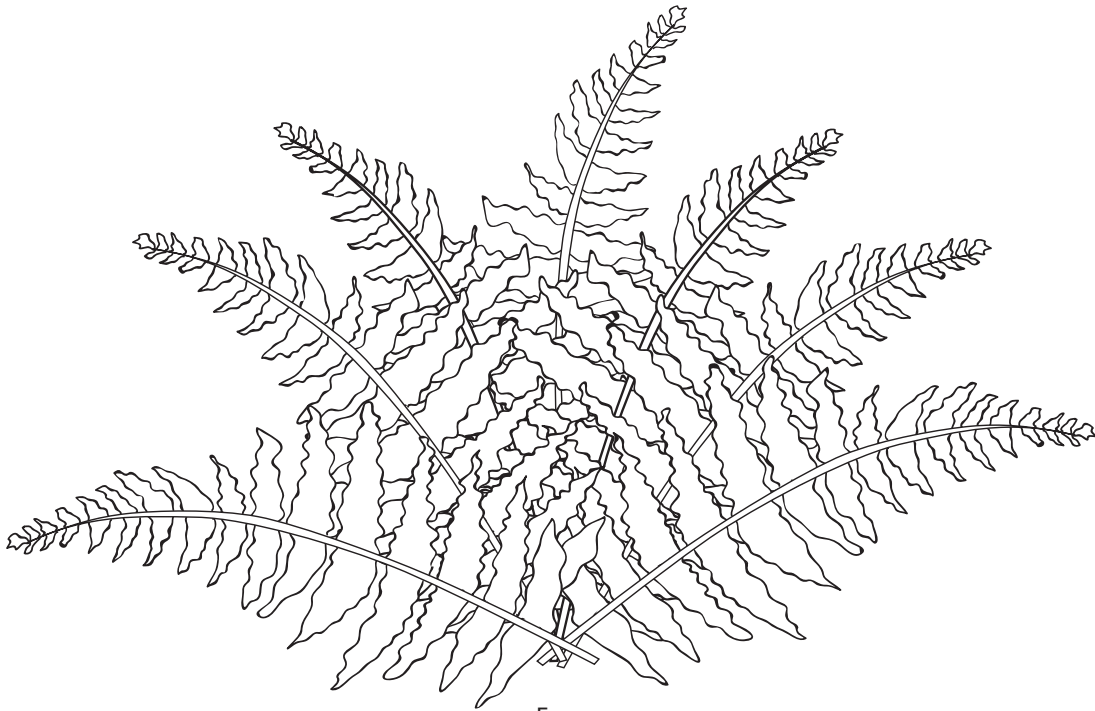
Evergreen

ACTIVITY 5

CRETACEOUS COLLAGE



Cycad



Fern

ACTIVITY 6

BUILD A VOLCANO!

RECOMMENDED FOR GRADE 2

A classic science experiment that is easy, fun, and educational.
Build your own erupting volcano!

DID YOU KNOW?

Volcanoes have played an important part in the history of the Earth; many landmasses were created and changed by volcanic activity.

Some of the largest extinction events in Earth's history are at least partly due to volcanoes.

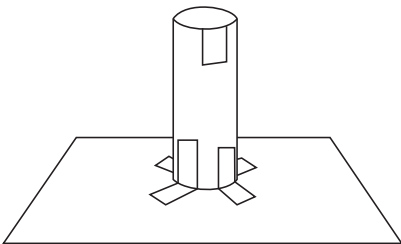
There is evidence that there was a lot of volcanic activity during the end of the Age of Dinosaurs, which may have been one of the contributing causes of dinosaur extinction.

Volcanoes can be found all over the world, but most of them are located in the "Ring of Fire" around the Pacific Ocean.

The lava from a volcano here on Earth has temperatures that exceed 1,000 degrees Celsius!

MATERIALS

- a piece of cardboard roughly 20 by 44 centimetres
- cardboard paper towel tube
- small vial or cup (plastic measuring cup, film canister, Dixie cup, etc.)
- tape
- newspaper
- aluminium foil
- spray paint (optional)
- spray glue (optional)
- sand or ash (optional)



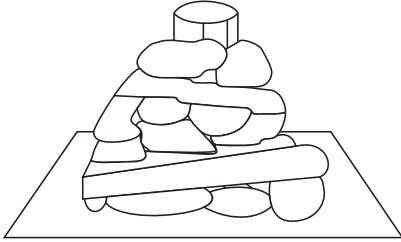
INSTRUCTIONS

Step 1

Tape the cardboard tube to the centre of the piece of cardboard standing up. Tape the plastic vial or cup into the top of the tube, with the open side up.

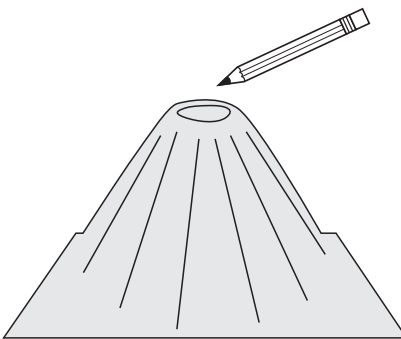
ACTIVITY 6

BUILD A VOLCANO!



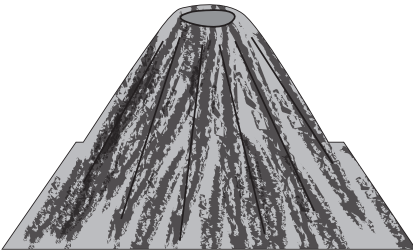
Step 2

Roll sheets of newspapers into balls and tape them into place around the tube in a conical mountain shape.



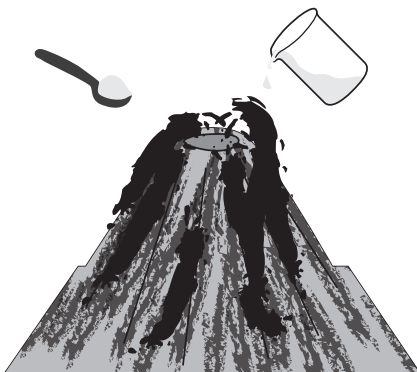
Step 3

Wrap the mountain-shaped object in tin foil and tape it to the bottom of the cardboard base. Use a pencil to poke a hole through the tin foil over the plastic vial.



Step 4

The teacher can use spray paint to paint the volcano black or brown. The teacher can spray the volcano with spray glue and then sprinkle sand on the volcano.



Step 5

Fill the plastic vial two thirds full with baking soda. Mix two tablespoons of vinegar with red food colouring and pour it into the plastic vial. Step back and watch your beautiful volcano go kablooie!