

# PALAEONTOLOGY



Palaeontology is more than just the study of dinosaur fossils. It's the study of ancient life including single cells, prehistoric plants, mammals, fish and of course dinosaur fossils. Even footprints and scats in rocks give us clues as to what once lived on earth, what they ate, how they evolved and died. The fossils that we find are evidence of how life has changed over time and gives us an insight to what our planet was like so long ago.

## Learn about palaeontology and EARN A BADGE too



Choose a selection of challenges to complete to learn about palaeontology and have fun with dinosaurs.



Order your badge



You may like to send photos of challenges being completed to share on the website



## CHALLENGE OPTIONS

### Fossils

- ☐ Make plaster, clay or cement casts of leaf and flower matter
- ☐ Make your own fossils using any method and materials
- ☐ Create your own dig site and invite your friends to dig for your hidden 'fossils'. You might consider using a sandpit, a tub of cold spaghetti or .....
- ☐ Coprolite refers to fossilised faeces. Make your own Dinosaur Poop doorstop or paperweight
- ☐ Participate in a tour of one of the dig sites in Australia (lucky you, if you live nearby one)
- ☐ Make footprints in sand and create plaster moulds of them
- ☐ Watch some documentaries about fossils and share your findings with your friends
- ☐ Find out about Fossil Fuel and how it is made
- ☐ Create a picture of a fossilised animal using pieces of pasta, sticks or twigs and leaves



### Extinction

It is said that birds are the only dinosaurs to have survived the mass extinction event 65 millions years ago.

- ☐ Find out which other animals survived, and which did not

There is debate over what actually caused the mass extinction. Make up your own story about the event, or draw a picture to show what might have happened

- ☐ Consider what causes extinction in our modern times and what we can do to help
- ☐ Find out about an animal that is currently near extinction and discuss with your friends what needs to be done to avoid this
- ☐ Investigate a plant or animal that has already become extinct in Australia and share your findings



### ORDER DETAILS

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**Themed ready-made resources  
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## Land and Sea

The land on our earth was once one big mass that split into two.

- ☐ Find out the names of the section that travelled north and the other section that travelled south. Identify the section we live in and how it further divided into smaller lands.
- ☐ Use an existing world map and cut out the shapes of the countries. See if you can fit your pieces together as the single land mass they would once have been
- ☐ If there are gaps in your land mass, investigate where that land might be
- ☐ Mark on your new map some famous or important locations or landmarks

## Volcanos

There are many active volcanoes around the world. You can even watch them erupting via live videos on the internet. Fossils are often found in volcanic rock and ash.

- ☐ Make your own volcano and see if you can make it erupt
- ☐ Make a map of the world and mark on the live volcanoes
- ☐ Bake some Chocolate Lava Cakes and share with your family or friends



## Dinosaurs

- ☐ Make a model of a dinosaur using noodles, toothpicks, cotton buds, glue etc
- ☐ Organise a dinosaur party for a group of friends.
- ☐ Create a diorama depicting life as you think it would have been during the time of dinosaurs
- ☐ One of the strangest dinosaurs was the Pegomastax - looking like a cross between a parrot and a porcupine. Design your own dinosaur. Decide on it's colour, size, where it lives, what it eats. Share your creation with your friends.
- ☐ Construct your own poseable paper T-rex
- ☐ Compare the Jurassic, Triassic and Cretaceous periods that make up the Mesozoic era.
- ☐ Watch a movie that you have not seen before that features dinosaur characters (remember that movies are fun and not always accurate)
- ☐ Watch a documentary or YouTube video about dinosaurs or palaeontology. Share your findings with your friends
- ☐ Find out about one of the many different types of dinosaurs that once roamed Australia
- ☐ Have a go at the Dinosaur I-Spy activity (resource link provided)
- ☐ Make an origami dinosaur
- ☐ Find out about Australotitan Cooperensis - a new species of dinosaur discovered in Australia in 2021 and one of the largest found in the world
- ☐ Find out about Australia's Dinosaur Trail ([australiasdinosaurtrail.com.au](http://australiasdinosaurtrail.com.au))



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## Plants and Animals

Dinosaurs weren't the only living creatures at the time.

- ☐ Find out what other animals lived at the same time as dinosaurs
- ☐ Research how palaeontologists determine what the diet of exist animals would have been
- ☐ Find out about the Geologic Time Scale and how it helps determine when certain animals lived
- ☐ Find out about some plants that existed before humans. Are they still alive today? If so, how did they survive?
- ☐ Explore how plants are fossilised



## People

There are many jobs related to palaeontology and the preservation of our past.

- ☐ Palaeontologist - Investigate the role of a palaeontologist. What does each type of palaeontology specifically focus on.
- ☐ Museum curators - Visit a museum and share your findings with your friends
- ☐ Research female Australian palaeontologists and share your findings with your friends. For example: Irene Crespin, Mary Julie Wade
- ☐ Find out some interesting facts about Mary Anning - the very first palaeontologist



## Food

- ☐ Investigate the differences between the terms carnivore, omnivore and a herbivore
- ☐ Cook and compare a herbivore meal and an omnivore meal (You might like to share your recipes for others to try).
- ☐ Investigate the Palaeolithic Diet and prepare a suitable food item
- ☐ Bake some "fossil cookies" (Combine 1 cup of peanut butter, 1 cup of sugar and 1 egg. Roll into balls, flatten and stamp on a pattern that resembles a bone. Bake for 8-10 mins at 180°)

## Group Challenges

- ☐ Play a game of "beetle" using dinosaur body parts
- ☐ Make and play a 'snakes and ladders' style game. You could use the long tail of a dinosaur to slide down (snake) and a spiky back to climb up (ladder)
- ☐ Reproduce the height and length of different dinosaurs using toilet paper to give you a visual of how big these creatures were.
- ☐ The longest dinosaur name is "Micropachycephalosaurus" (correct us if you find a longer one). Work together, or compete in teams, to see how many smaller words you can find in this word.

- Dinosaur Poop - <https://www.icanteachmychild.com/dinosaur-poop-craft/>
- Ideas for making fossils - [www.pinterest.com](http://www.pinterest.com)
- Poseable paper T-rex - <https://www.instructables.com/Poseable-Paper-T-Rex/>
- Printable Dinosaur I-Spy activity sheet - <https://www.papertraildesign.com/i-spy-dinosaurs-activity/>
- Search for 'easy dinosaur origami' for kids on YouTube

