Activity Ideas

Timeline

Use the information on the cards to place the fossils, models and replicas on the timeline.

Find out when humans evolved and draw a person to add to the timeline. Were dinosaurs and people around at the same time?

Look up your favorite dinosaur on the internet or in a book, make your own information card for it and add it to the timeline.

Can you add the year you were born to the timeline? About how far away from the end would it be (1cm = 1 million years). What about the year your teacher, parents or grandparents were born?

This timeline shows the last 400 million years. The Earth is about 4.54 billion (or 4540 million) years old. If you kept the same scale, (1cm = 1 million years), how long would you need to make the timeline to cover the time since the Earth formed? Would it fit in the schoolyard?

Almost everything we know about dinosaurs comes from fossils. But what are fossils and how did they form?
https://www.youtube.com/watch?v=87E8bQrX4Wg

Scale and size

Dinosaurs ranged from small carnivores less than a meter long to huge sauropods up to 40m long. The model dinosaurs are not life-size (or they wouldn't fit in the box). Choose one of the dinosaur cards. How big was the dinosaur really? Can you measure out that distance? Would it fit in the classroom or the school yard? The card also shows the scale of the model. Can you draw a picture of yourself at that scale? How would you feel standing next to your dinosaur! For more ideas see
https://letstalkscience.ca/educational-resources/lessons/how-large-were-dinosaurs

A Paleographic puzzle

Dinosaurs went extinct long before the first humans arrived. All we know about them comes from the fossils we have discovered. Often the fossils are incomplete or damaged or mixed up with bones from other fossils. This makes figuring out what the dinosaurs looked like and how they lived a difficult puzzle with lots of guess work. Sometimes Paleontologists make mistakes. Iguanodon was originally thought to resemble a large, fat lizard and its thumb bone was mistaken for a nose horn.

Look at the two velociraptor models. Which one do you think looks more like a dinosaur? If you just had a skeleton, how could you figure out which model it looked like? Luckily it is not just bones that can be fossilised. Rare fossils have been found capturing the imprint of skin or features. We have found fossilized nests, with eggs containing baby dinosaurs intact. Fossilised poo can tell us more about what dinosaurs ate.

For more resources on how paleontologists piece together the clues and work with artists to bring dinosaurs to life see https://www.sciencefriday.com/educational-resources/how-do-scientists-know-what-dinosaurs-looked-like/

Make your own ammonite casts

Museums often make casts (copies) of fossils to display or to send to other museums to study. Use the silicone moulds to make your own fossil cast from plaster of paris or moulding clay. Plaster of paris should set enough to be gently removed from the mould in around 30 minutes. These are moulds of real fossils. Museums all over the world have scanned their collections and shared the 3d models freely online. I 3d printed some of these models and then poured liquid silicon on the printed models to make the moulds.