

# Discovery Tour



## Birds

Ok, you've finally arrived! This is the modern dinosaur exhibit! I know, a lot of people like to call them birds, but paleontologists like me know that all birds are really dinosaurs. That's right! Birds are the direct descendents of little theropod dinosaurs closely related to sharp-toothed carnivores like Velociraptor and Troodon. Birds inherited many of their most important features, like feathers and hollow bones, from little dinosaurs like these. So remember, the dinosaurs aren't extinct. In fact, with about 10,000 varieties of birds living today, there are more dinosaurs around than mammals! As you leave the museum today, see how many birds, or modern dinosaurs you can spot, what kinds of features do they have?



## Butterflies

Aren't butterflies amazing? And have you ever seen so many at the same time? Now, check out all the different plants here! This place needs so many different plants to feed all the different kinds of butterflies! Millions of years ago, butterflies and flowering plants lived side by side with dinosaurs in the Cretaceous time period. Butterflies and many other kinds of insects ate those plants, and dinosaurs did too! Today, even though the giant dinosaurs are gone, there are still thousands of different kinds of flowering plants and insects! Can you notice any particular flower the butterflies seem to like? What are some of the features of this flower, how big is it, what color is it and how does it smell? Use your senses to make a hypothesis on why butterflies are attracted to it.



## Constellations

Do you like to go outside at night? Give it a try and look for some constellations! Constellations are groups of stars that represent characters like Leo the Lion, Draco the Dragon, Orion the Hunter, and Cetus the Whale. There are also objects like the big and little dippers. It's kind of like connect the dots, but with stars! Pretty cool, huh? During the year, the constellations we see in the night sky change because the Earth is going around the Sun. So head out tonight and see what sorts of amazing creatures you can find hidden among the stars. If you feel like it, make up your own constellations!



## Dioramas

You're looking at a diorama—a three-dimensional model of a particular place. Many natural history museums use dioramas to give you a sense of what it's like to be somewhere else, usually a far-off place in nature. Dioramas often feature wild animals, or people and places that no longer exist. Pick your favorite diorama and stand in front of it. Can you imagine yourself being part of that scene? Or pretend that you are an animal living in that place. What would it feel like to be there? Now, take a photo! You just became a part of natural history!

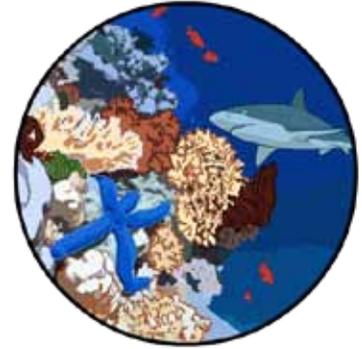


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## Ecosystems

An ecosystem is a community of plants, animals and other organisms living in a particular place. Ecosystems get their energy from the sun. On land, plants feed on the sunlight, herbivores feed on the plants, and carnivores feed on the herbivores. Then all the plants and animals are recycled to provide nutrients for future generations! Back in the Mesozoic Era, dinosaurs lived in ecosystems too. The Pteranodon Family lives in a forest ecosystem close to the ocean. Valerie Velociraptor and her family live in a desert ecosystem. Walk around the exhibit and see how many different ecosystems you can find. How does one plant or animal help the whole ecosystem?



## Expeditions

Scientists like me love to go on expeditions! An expedition is a group of people that travel to a particular place in search of something. Biologists look for plants or animals, geologists search for rocks, and, of course, paleontologists hunt for fossils! Most of the things you see in natural history museums were found on expeditions. Why do we like to go on expeditions? Because making discoveries is exciting, and a lot of fun. Hey, you can start your own expedition. Just find a friend or two, get outside, and make your own discoveries! What do you want to go searching for?



## Fossils

Hey, you've finally arrived at my favorite exhibit—fossils! It's because of fossils that we know a lot about dinosaurs and other creatures that lived millions of years ago. Fossils are the remains of ancient life—not just dinosaurs, but all other animals that lived long ago, as well as plants, fungi, and microbes. Fossils form when a plant or animal is buried in some kind of mud or sand that later turns to rock. Usually only the hard parts are preserved, like bones and teeth. Millions of years later, paleontologists like me come along and dig them up to show you! Now, it's your turn to be a paleontologist. Take a look at some of the fossils around you. What are the smallest and largest fossils you can find in this exhibit? What do they tell us about the animals and how they lived?



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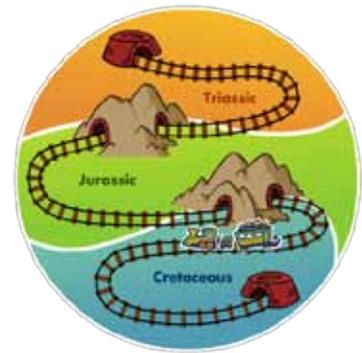
## Gems

Wow, check out those gems! They're beautiful, aren't they? Gems are made of minerals, and there's lots of different kinds, like diamonds, rubies, emeralds, and sapphires. Look closely. How many different colors can you see in those gems? Many museums have collections of gems, as well as rocks, fossils, shells, birds, mammals, and other nature stuff. On Dinosaur Train, our friend Don the Pteranodon loves to collect gems and lots of other things, like dinosaur teeth, and each of them have different characteristics. As you walk around this exhibit, see how many different kinds of nature things you can identify!



## Geologic Timeline

Earth has been around for billions of years. Scientists divide up this HUGE amount of time into chunks with names like eras and periods. Put them all together and you have the geologic timeline! Life on Earth has been changing since it first began about 4 billion years ago, so different kinds of plants and animals lived at different times. My favorite animals, the dinosaurs, lived in the Mesozoic Era, which has three time periods: the Triassic, Jurassic, and Cretaceous. The Pteranodon family loves to travel through all three of these periods on the Dinosaur Train! Take a close look at a geologic timeline in this exhibit. See if you can find out when the first humans appeared.



## Meteors

Have you ever seen a shooting star? Shooting stars, or meteors, are bright streaks of light that zoom across the sky. Actually, they aren't stars at all, but tiny bits of rock left behind by comets. When these pebble-sized rocks enter Earth's atmosphere, they burn up and make bright streaks of light that are easiest to see at night. A few times a year, you can see hundreds of shooting stars, or meteors, in a single night. These events, called meteor showers, happen when Earth passes through the old path of a comet. So head outside at night, lie back, and see if you can see some shooting stars!



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## Ocean life

Earth is a water planet. Oceans cover more than two-thirds of the surface, and the seas are home to millions of amazing plants and animals. As you walk around, see if you can find any exhibits about squids, sharks, or coral. All of these animals and many more belong to groups that lived millions of years ago during the Age of Dinosaurs. Compare the images of prehistoric marine animals to those alive today. How are they the same and how are they different?



## Solar System

Our home planet, Earth, is one of a family of eight planets that we call the “solar system.” Our family of planets has been around a very long time, more than four billion years! In the center of the solar system is a gigantic star that is both very bright and very hot. Do you know what it is? That’s right, the Sun! All the planets in our solar system travel around the Sun. It takes one year for Earth to go once around this star! As the Earth makes its way around the Sun, it also spins like a top, making one full turn every day. During the daytime, we are on the side of Earth facing toward the sun, and at night we are on the side facing away from the sun. Which side of the Earth are you on right now?



## Tectonic plates / Continental Drift

If you look at a map of the world, you’ll find the seven major continents: North America, South America, Africa, Europe, Asia, Australia, and Antarctica. But did you know that the world didn’t always look this way? When the dinosaurs first appeared, all the continents were joined together into one gigantic “supercontinent” called Pangaea. During the Mesozoic Era, when the dinosaurs lived, Pangaea slowly broke up into the continents we know today. And as the continents drifted apart from one another, the dinosaurs and other living things went along for the ride. That’s why paleontologists have found dinosaur fossils on every continent! Take a look at a map of the world and see if you can spot any continents that look like they might fit together. Which continents are they?

