



Teacher's Guide to

# GIANTS

African Dinosaurs  
at The Garfield Park Conservatory  
created by Project Exploration



These activities will help you explore *GIANTS* and the plants and bones around you. All you need are: *a map of the exhibit and very sharp eyes*

## ▶ 1. Palm House, "Growing"

### 1 *Jobaria* the Giant

*Jobaria* is a sauropod dinosaur that lived exclusively on Africa 135 million years ago. Sauropods are long-necked, four-legged, plant-eating dinosaurs.

Look carefully at *Jobaria's* toes.  
How many toes does it have on one foot?

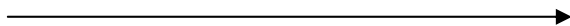
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## ▶ 2. Fern Room, "Lost World"

### 5 6 *Afrovenator* and Fern Fronds

Plants that were alive and common during the dinosaur era are alive today and growing in this room! Ferns are one kind of ancient plant. As its leaves grow they unfurl from the center. Look at the predatory dinosaur *Afrovenator* and the Fern Fronds. Which part of *Afrovenator's* skeleton was used as the basis for these fern fronds?

Walk through the fern room and find a fern with a curled frond. Sketch it here and label it with its scientific name.



### ▶ 3. Show House, "Transformation"

#### 10 11 *Deltadromeus* & Human

Humans and dinosaurs did NOT live at the same time, but for just about every bone in the human skeleton there is a match on a dinosaur skeleton. All vertebrates (all animals with backbones) are built based on the same body plan: a skull, backbone, shoulder girdle, pelvic girdle and four limbs. And the limbs all have the same structure: one bone connects to two bones, which connect to many bones. (For example all vertebrate hind limbs are composed of a femur (one bone), a tibia and a fibula (two bones), and an ankle and foot (many bones). When an animal's tibia is longer than its femur, this tells us the animal is adapted for fast running.

Look at the hind leg of *Deltadromeus* and the hind leg of the human. Which of these two animals is more adapted for fast running?

### ▶ 4. Aroid House, "Fishing"

#### 17 18 Pterosaur model and *Suchomimus*

The teeth of plant eaters tend to be leaf-shaped and positioned tightly next to each other in the jaws. The teeth of meat eaters are sharp and curved. The teeth of specialized fish-eaters are slender and longest at the front of the jaws for snagging fish.

Look for *Suchomimus* 18 lurking behind you. Is *Suchomimus* a plant-eater, a meat-eater or a specialized fish eater?

Separate from mammals, pterosaurs developed hair-like fibers over their bodies to keep warm.

Which parts of the pterosaur don't have hair?

Guess: Why do you think these parts are hairless?

### ▶ 5. Sweet House, "Finding"

#### 27 *Carcharodontosaurus* Jaw

Skulls - including yours - are made up of lots of bones. The largest jaw bone is called the maxilla. Your maxilla has six teeth. The bone in this case is the original fossil maxilla of *Carcharodontosaurus*.

A *T-rex* has 12 teeth in its maxilla. Which animal has more?

*Carcharodontosaurus* or *T-rex*