

**TITLE: The Long and Short of it!**

**Audience:** All ages especially those in early childhood

**Activity Overview:**

This demonstration can be done outside or inside providing there is a straight 150' area. A rope with marked measurements provides information about 24 popular species of dinosaurs. Participants will be able run along with the presenter as (he/she) gives information about each dinosaur.

**Program/Exhibit Criterion addressed:**

As well as coordinating with the feature exhibit *Dinosaurs: Ancient Fossils, New Discoveries*, this demonstration fulfills the following Discovery Place, Inc. Learning Experiences program criteria:

- Dramatic Presence/Experiential Immersion Programming: Participants will better understand how large some of the dinosaurs that walked the earth really were.
- Apparatus: The rope itself is an extremely large ruler that the visitors can help manipulate.
- Control of media: Participants will use their senses of sight, touch and hearing as they help unroll the rope, listen to the dinosaur names and descriptions and view an image of each dinosaur. With their imaginations the visitors will be able to picture what each dinosaur looked like and its actual size.
- Learning styles: This demonstration addresses several different learning styles. The experience is visual, auditory, and kinesthetic.
- Flexibility/Displaying the Big Idea/Minimizing risk for all: This activity is easy, fun, and adaptable to all ages and abilities.

**Objectives/Desired Outcomes:**

The visitors will come away from the demonstration with an understanding of the actual sizes of dinosaurs.

**NATIONAL STANDARDS ADDRESSED:**

Science Inquiry

**CONTENT STANDARD A:**

As a result of activities in grades K-12, all students should develop:

- Understandings about scientific inquiry

**CONTENT STANDARD C:**

As a result of activities in grades K-4, all students should develop understanding of:

- Organisms and environments

**Time Involved:**

- 5 minutes for preparation
- 10- 15 minutes for the activity depending on the length of discussion as each dinosaur is explained.

**Materials Needed:**

- A 150' rope on a hose reel
- 24 dinosaur pictures
- Information on the lengths, pronunciations, and name definitions of the 24 chosen dinosaurs

**Reproducibles:** Glossary of dinosaurs

**Background:**

**Paleontologists use fossil remains to help recreate what dinosaurs may have looked like. The size and shape of a given dinosaur can help scientists understand how and where it once lived. There is amazing variety in the physical composition of dinosaurs.**

**Lesson Steps:**

1. Escort participants to the area where the demonstration will take place.
2. Have one person hold the hose reel while the rope is unrolled.
3. Instruct the participant to run or walk the different marked measurements of the rope. Shout out the name of each dinosaur as the participant passes its marked length.
4. Discuss with participating visitors what they learned and if it changed what they thought about the size of dinosaurs.
5. When the demonstration concludes roll the rope back onto the hose reel.
6. Thank the individuals for their participation.

**Evaluation:**

The presenter will be able to view the successfulness of the demonstration through the excitement of the participants and by encouraging the participants to explain which dinosaurs were small and which were large.

**Reproducible 1: Glossary of dinosaurs**

**Dinosaur Name:** Compsognathus (KOMP-sog-NAY-thus)

**Name Definition:** elegant jaw

**Length:** .914m

**Dinosaur Name:** Caudipteryx (kaw-DIP-tuh-rix)

**Name Definition:** tail feather

**Length:** .914m

**Dinosaur Name:** Sinosauropteryx (SIGH- no-saw-ROP-ter-ix)

**Name Definition:** Chinese lizard feather

**Length:** .914m

**Dinosaur Name:** Avimimus (AY-vee-MY-mus)

**Name Definition:** bird mimic

**Length:** 1.524m

**Dinosaur Name:** Velociraptor (vel-oss-ee-RAP-tor)

**Name Definition:** swift robber

**Length:** 2.07m

**Dinosaur Name:** Oviraptor (oh-vee-RAP-tuh)

**Name Definition:** egg robber

**Length:** 3.048m

**Dinosaur Name:** Struthioimus (STROO-thee-oh-My-mus)

**Name Definition:** ostrich mimic

**Length:** 3.962m

**Dinosaur Name:** Pachycephalosaurus (PAK-ee-kef-AH-loh-SAW-rus)

**Name Definition:** thick headed lizard

**Length:** 4.572m

**Dinosaur Name:** Triceratops (try-SAIR-uh-TOPS)

**Name Definition:** three horned face

**Length:** 7.924m

**Dinosaur Name:** Stegosaurus (STEG-oh-SAW-rus)

**Name Definition:** plated lizard

**Length:** 8.229m

**Reproducible 1: Glossary of dinosaurs**

**Dinosaur Name:** Maiasaura (MY-uh-SAW-rah)  
**Name Definition:** good mother lizard  
**Length:** 9.144m

**Dinosaur Name:** Iguanodon (ig-WAHN-oh-don)  
**Name Definition:** iguana tooth  
**Length:** 9.144m

**Dinosaur Name:** Iguanodon (ig-WAHN-oh-don)  
**Name Definition:** iguana tooth  
**Length:** 9.144m

**Dinosaur Name:** Ankylosaurus (an-Kee-loh-SAW-rus)  
**Name Definition:** stiff lizard  
**Length:** 10.058m

**Dinosaur Name:** Suchomimus (SOO-koh-MY-mus)  
**Name Definition:** crocodile mimic  
**Length:** 10.973m

**Dinosaur Name:** Allosaurus (AL-oh-SAW-rus)  
**Name Definition:** other lizard  
**Length:** 11.887m

**Dinosaur Name:** Tyrannosaurus Rex (tie-RAN-oh-SAW-rus)  
**Name Definition:** tyrant lizard  
**Length:** 12.802m

**Dinosaur Name:** Spinosaurus (SPY-noh-SAW-rus)  
**Name Definition:** spiny lizard  
**Length:** 14.630m

**Dinosaur Name:** Giganotosaurus (JIG-an-oh-toh-SAW-rus)  
**Name Definition:** giant southern lizard  
**Length:** 15.240m

**Dinosaur Name:** Apatosaurus (uh-PAT-oh-SAW-rus)  
**Name Definition:** deceptive lizard  
**Length:** 22.250m

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**Reproducible 1: Glossary of dinosaurs**

**Dinosaur Name:** Barosaurus (BAH-roh-SAW-rus)

**Name Definition:** heavy lizard

**Length:** 24.384m

**Dinosaur Name:** Diplodocus (dip-LOH-doh-kus)

**Name Definition:** double beam

**Length:** 27.127m

**Dinosaur Name:** Brachiosaurus (BRAK-ee-oh-SAW-rus)

**Name Definition:** arm lizard

**Length:** 30.480m

**Dinosaur Name:** Argentinosaurus (AHR-gen-TEEN-uh-SAWR-us)

**Name Definition:** Argentina lizard

**Length:** 39.624m

**Dinosaur Name:** Seimosaurus (SIZE-moh-SORE-us)

**Name Definition:** earth shaking lizard

**Length:** 45.720m

**References:**

1. [www.dinodictionary.com](http://www.dinodictionary.com)