

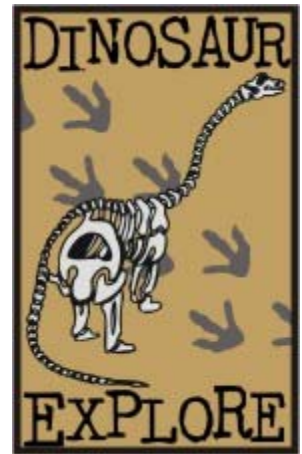
## DINOSAUR EXPLORE:

A patch program for all Daisy, Brownie and Junior Girl Scouts.

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Additional credit to Girl Scouts of DuPage County Council



Requirements:

**Daisy Girl Scouts:** Complete starred (\*) requirement #1 and four additional activities.

**Brownie Girl Scouts:** Complete seven activities including the five starred (\*) requirements.

**Junior Girl Scouts and up:** Complete ten activities, including the five starred (\*) requirements.

- \* 1. Visit a dinosaur display. If you can't find one to visit in person, visit one on-line. Websites to try:  
Project Exploration, Chicago: [www.projectexploration.org](http://www.projectexploration.org)  
Field Museum of Natural History: [www.fmnh.org/sue](http://www.fmnh.org/sue)  
The Carnegie Museum of Natural History: [www.clpgh.org/cmnh/discovery](http://www.clpgh.org/cmnh/discovery)
  2. Learn about paleontologists and geologists and their work.
  3. Make a fossil (see activity section)
  4. Learn about herbivores and carnivores. What's the difference? Name a dinosaur from each category.
  5. In 1810, a young girl from England found one of the first specimens of an Ichthyosaur. Another woman discovered the most complete T. Rex fossil ever in 1990. Name these two women. What kind of training or education did each woman have?
  - \* 6. Scientists believe dinosaurs were close relatives of birds and crocodiles because of similarities in their anatomy. Dinosaurs also share bones with humans. Compare the skeletons of a dinosaur and a human, list three bones they have in common.
  7. Dinosaur Gizzards (see activity section)
  8. Dinosaurs lived on earth for around 200,000 years. All dinosaur species did not live throughout the entire time period. Using books, or the web, find out about two dinosaurs that lived during each of the following periods: Mesozoic, Triassic, Jurassic and Cretaceous. Make a timeline with your information.
  9. Dinosaur Tracks (see activity section)
- Go on-line to the Project Exploration website ([www.projectexploration.org](http://www.projectexploration.org)) to help you with the following activities.
- \* 10. Name the dinosaur discovered by Gabrielle Lyon in 1995. Locate on a map where it was discovered.

- \* 11. Dr. Paul Sereno, paleontologist, president and co-founder of Project Exploration, made some unique discoveries. Find out about the most complete long-necked dinosaur ever discovered from the cretaceous period.
- \*12. Find out about three dinosaurs from the GIANTS: African Dinosaurs exhibit. Is it a carnivore or herbivore? Where was it discovered?
- 13. Name two plants that are here today, that were also alive at the time of the dinosaurs (dating back to 370 million years ago).
- 14. Name the dinosaur that is Africa's answer to Tyrannosaurus. Is it an herbivore or a carnivore? Where was it discovered?
- 15. Name the dinosaur that was discovered in 1997 in the heart of the Sahara desert of Niger. Hint: It comes from the Spinosaur family of dinosaurs.
- 16. Go to the Features section, scroll down to the scrapbook section, and check out the All Girls Expedition 2004 scrapbook.

### Activities

#### Make a Fossil

Fossils are parts or traces of plants or animals that have been turned into rock. Parts of plants or animals bodies that have been fossilized are called body fossils. (Examples are fossil seashells, leaves, pollen and dinosaur teeth) Trace fossils include tracks, burrows, nests and footprints.

#### Supplies needed:

Small paper bowl  
Vegetable oil  
Small plastic dinosaurs or seashells  
Plaster of Paris  
Water

#### Directions:

1. Dip the seashells (or plastic dinosaurs) in vegetable oil and set aside.
2. Fill the paper bowls about halfway with the Plaster of Paris
3. Mix in water, a little at a time, until it is the consistency of thick pudding.
4. Press the seashell or dinosaur gently into the plaster. Make sure the plaster does not cover it.
5. When the plaster is dry, remove the object.

When you remove the objects, you can see your fossil image in the hardened plaster.

## Activities

### Dinosaur Gizzards

How did plant-eating (herbivores) dinosaurs grind up all of the food they swallowed? The same way that birds do, with rocks. Dinosaurs probably swallowed rocks that got caught in a little pouch in their throat called a "gizzard." To find out what happened to their food, try this:

#### Supplies needed:

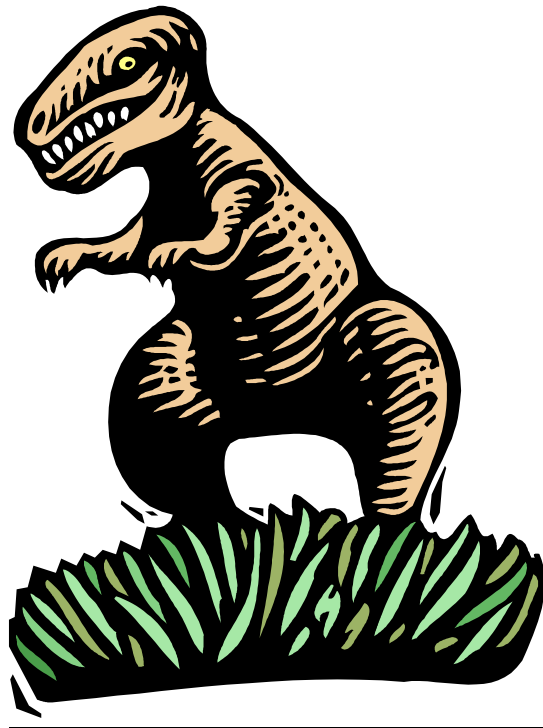
1-quart size Ziploc bag

Small rocks

Leaves, seeds, pine needles

#### Directions:

1. Put several small rocks into a Ziploc bag. This is your dinosaurs gizzard.
2. Feed your dinosaur. Fill the bag about half way with leaves, seeds and pine needles.
3. Let the gizzard muscles go to work. Squeeze and rub the bag together until the rocks start to break down the food.



## Activities

### Dinosaur Tracks

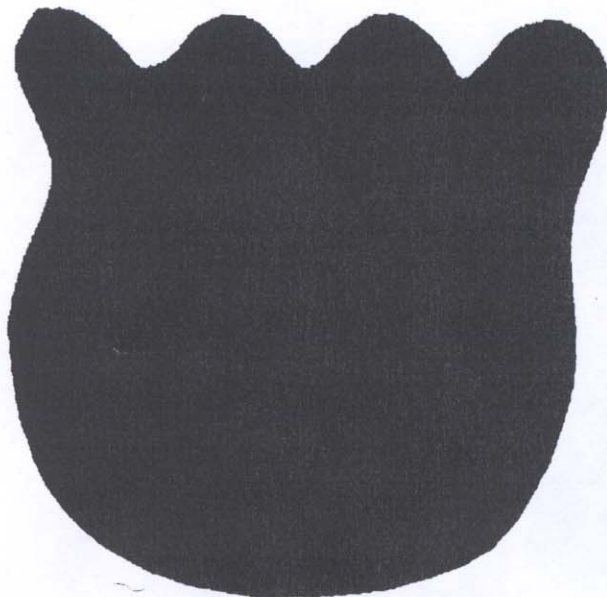
Make life-size dinosaur tracks from newspaper using the attached patterns. Place the tracks around the room the indicated distance apart to show how big a dinosaur's footstep was.



This footprint is 1-1/4 inches long.  
Think "bird footprint"



This footprint is from a T Rex type dinosaur. Make it about 2 feet long and 1 foot wide at the heel, and 1-1/2 feet wide at the toes. Place them 10-15 feet apart.



Make this long-necked dinosaur footprint 4 feet long by 4 feet wide. Place them 20-30 feet apart.