DINOSAUR PICNIC

PROGRAM OVERVIEW

TOPIC: Carnivores and herbivores

THEME: There are differences between carnivorous and herbivorous dinosaurs.

PROGRAM DESCRIPTION: What types of food did dinosaurs eat? Students learn about herbivores, carnivores and omnivores and their adaptations through hands-on fossils, a craft, a flash card identification game and by "feeding" the dinosaurs.

AUDIENCE: Kindergarten – Grade 1

CURRICULUM CONNECTIONS

K	Environment and Community Awareness
Grade 1	Science: Needs of Animals and Plants

PROGRAM OBJECTIVES

1. Students will identify differences between herbivores, carnivores, and omnivores.
2. Students will be able to recognize different dinosaurs by appearance.
3. Students will act out the different dinosaurs in a role-playing story.
4. Students will recognize a variety of fossils and identify whether they are from herbivores or carnivores.

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SUGGESTED PRE-VISIT ACTIVITIES

1. EAT LIKE A LONG NECK (SAUROPOD)

Learn how a long-necked dinosaur ate. *Diplodocus* and *Apatosaurus* ("Brontosaurus") kept their necks extended horizontally, sweeping vegetation in front of them. *Brachiosaurus* could lift its head up higher to take vegetation near the tops of trees. Move around the room, using your arms as a longneck's neck and head.

2. EAT LIKE A *T. REX*

Learn how *Tyrannosaurus rex* ate. How did it use its head and mouth? Did it use its arms? Scientists are still trying to figure out how those little arms were used. Move around the room, experimenting different ways that *T. rex* might have eaten its food.

3. WHAT TIME IS IT, MR. REX?

Play a version of "What Time is it Mr. Wolf," substituting the names. Mr. Rex must move like a tyrannosaurid, and can only tag with "short" arms (arms held with elbows tightly in). All the others must move around as a type of prey – either as a four-legged dinosaur, or perhaps as a duckbill dinosaur (who could walk on four legs or run on two).

4. DINOSAUR PUZZLE GAME

Teach the children the names of dinosaurs so that they can recognize them on sight. Use cut up images of dinosaurs to create puzzles. Then, choose a dinosaur, and let the children take turns putting up one piece at a time on the board. Each time a new piece is added, the rest of the group has to guess which dinosaur it is. The game continues until the correct dinosaur is named.

Here are some good places to find pictures of dinosaurs:

http://www.enchantedlearning.com/subjects/dinosaurs/facts/

http://www.first-school.ws/theme/animals/cp_dinosaurs.htm

(Keywords: Dinosaur colouring pages, dinosaur facts)

DINOSAUR PICNIC

POST-PROGRAM ACTIVITIES

1. LET'S PACK THE PICNIC!

Look through magazines for pictures of all types of food. Get the children to sort the foods into foods that Amy (herbivores) could eat, or foods that Al (carnivores) could eat. Stick the pictures onto separate pieces of paper to create picnic "blankets."

Option: make folded paper baskets, or use real baskets for the children to pack with the pictures or with plastic play food.

2. SO, HOW DO THEY KNOW?

Palaeontologists can't watch dinosaurs to see what they ate. They can only look at fossils and compare them with animals alive today. Look at pictures, watch videos, or visit the zoo to see examples of animals alive today. Look at their teeth and feet and see if they have sharp teeth, dull teeth, sharp claws, or blunt toes. Try to guess what they eat, and then see if you can confirm your guesses.

Here are some difficult examples. Spend time discussing each animal's adaptations for their food sources. Are there any others that come up for discussion?

- parrots
- owls
- lizards
- turtles

Here is a good place to watch animal videos:

National Geographic: http://video.nationalgeographic.com/video/player/animals/index.html

3. ONLINE RESOURCES

University of California, Berkeley
http://www.ucmp.berkeley.edu/diapsids/dinosaur.html

Website on evolution and dinosaurs
http://www.pbs.org/wgbh/evolution/extinction/dinosaurs/

Includes links to dinosaurs and geology
http://en.wikipedia.org/wiki/paleontology

Bristol University
http://palaeo.gly.bris.ac.uk

Website for younger grades
http://www.enchantedlearning.com/subjects/dinosaurs/

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POST-PROGRAM ACTIVITIES

(ONLINE RESOURCES CONT.)

Smithsonian Institute
http://paleobiology.si.edu/index/html

National Geographic
http://www.animals.nationalgeographic.com/animals/prehistoric/

The Discovery Channel (current dinosaur discoveries)
http://www.dsc.discovery.com/tv-shows/curiosity/topics/paleontology.htm

Up-to-date scientific reports on dinosaur science
http://www.bbc.co.uk/sn/prehistoric_life/dinosaurs/

American Museum of Natural History, New York
http://www.amnh.org/exhibitions/permanent-exhibitions/fossil-halls

Natural History Museum, London
http://internt.nhm.ac.uk/jdsml/nature-online/dino-directory

Walking with Dinosaurs
http://www.abc.net.au/dinosaurs/dig_deeper/faq.htm#five

Links include videos, sound buttons, virtual tours, interactive quizzes, databases and timelines
http://www.dinosaur.dkonline.com

Up-to-date information on all aspects of science, including geology and palaeontology
http://www.sciencedaily.com

(Keywords: Evolution, dinosaurs, geology, Discovery Channel, Natural History Museum of London, American Museum of Natural History, Smithsonian Institute, Science Daily, Palaeontology)

4. MUSEUM RESOURCES

Check out the Royal Tyrrell Museum website at www.tyrrellmuseum.com for a wide variety of teacher resources including distance learning programs.