

Activity: Dinosaur Dig

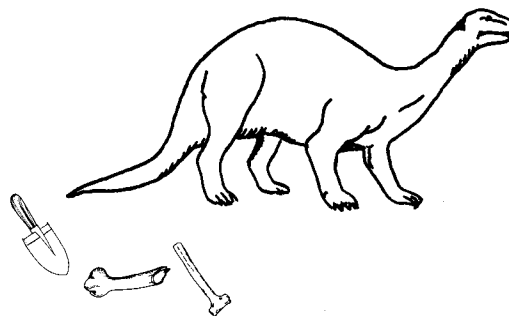
Grade Level: Grade 2

Major Emphasis: Investigating Prehistoric Times

Major Curriculum Area: Science

Related Curriculum Areas:

- Refer to Outdoor Education Curriculum Matrix K-2
- Mathematics
- Social Studies
- Language Arts



Program Indicator:

The student will be able to describe life during the prehistoric period.

Student Outcomes: The student will:

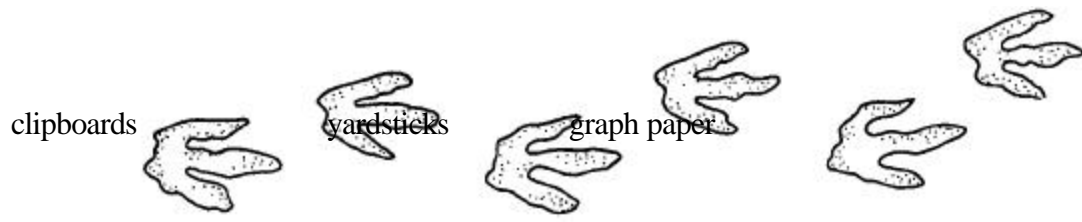
1. identify names of dinosaurs and their parts.
2. measure a variety of dinosaur parts.
3. map a dig site and discover artificial dinosaur bones hidden within that site.
4. interpret information to identify and draw a dinosaur.

Readiness:

1. Refer to the second grade Unified Science Curriculum, "Adaptations of Plants and Animals from Prehistoric to Modern Times."
2. Introduce vocabulary:
dinosaur extinct paleontologist prehistoric paleontology
fossil plant eater skeleton herbivore dig site
meat eater carnivore modern
3. Identify the characteristics of the different prehistoric periods.
4. Make a time line of the prehistoric periods.
5. Review the role of the paleontologist and how to proceed on a dig.

Materials:

- | | | | |
|-------------------|----------------|-------------|---------------------------|
| Supplements A & B | string or yarn | trowels | rake |
| brushes | stakes | chart paper | dinosaur study prints |
| 100 foot tape | hammer | easel | artificial dinosaur bones |



Procedures: (DL1,2&3)

1. Bury the dinosaur bones two (2) inches in the sand (before the activity begins).
2. Review the "age of the dinosaurs" using the dinosaur study prints.
3. Using the dinosaur measurement chart, practice pronouncing dinosaur names and use the 100 foot tape to measure dinosaur parts. Refer to Supplement A.
4. Divide the dig site into four quadrants using stakes and string.
5. Have the students map the dig site using the chart paper.
6. Introduce "dig site" rules to students:
 - a. Work in assigned quadrant.
 - b. Work from the edge to the center.
 - c. Carefully uncover bones leaving them in place.
7. Pass out digging materials.
8. Assign work areas and student work groups.
9. Have the students use dig materials to uncover dinosaur bones.
10. Have the students draw and label the position of the bones on their maps (Figure 1). Include a title. Refer to Supplement B.

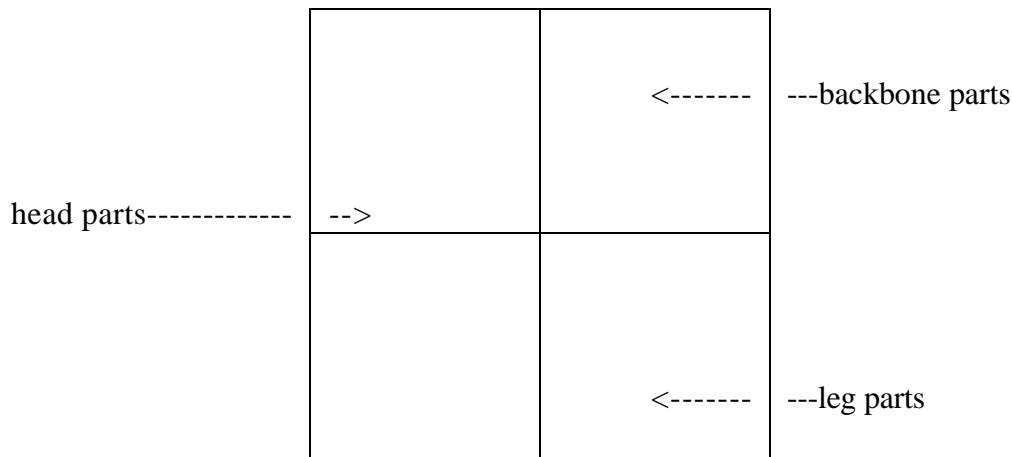
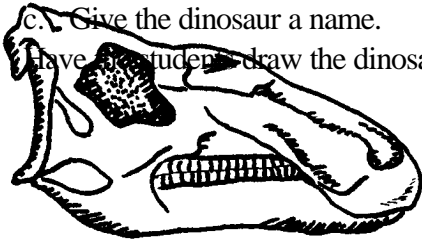


Figure 1: Dig Site Setup

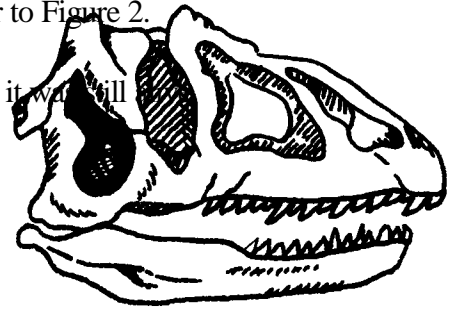
11. Have students remove the bones and reassemble them to form the dinosaur.

12. Study the dinosaur and try to:
 - a. Estimate the height and length of the dinosaur.
 - b. Decide if the dinosaur was a plant eater or meat eater. Refer to Figure 2.
 - c. Give the dinosaur a name.

13. Have students draw the dinosaur as it may have looked when it was still



Plant Eater



Meat Eater

Figure 2: Types of Skulls

Summary: (DL4)

1. What dinosaur do you think you uncovered on your dinosaur dig? Give two reasons for your answer.

Follow-Up: (DL2&3)

1. Describe how the animal moved or ate by observing his skeleton.
2. Write a framed paragraph about the dig activity. A sample paragraph:
I thought the dinosaur dig was..... First we..... We also..... One problem we had was..... The part I liked the best was.....
3. Discuss that change and extinction are natural processes that occur very slowly over millions of years. People are now causing changes to occur very rapidly and the Earth might not be able to adjust. Ask the students to give examples of these changes and how they might affect us. Examples are: increased species extinction, endangered species, pollutants in the air and water and loss of forests and wetlands.
4. Create a mural depicting the dinosaur and its habitat.
5. Identify the lengths of dinosaurs. Have students use links to measure one foot lengths. Connect the links together to illustrate the length of each dinosaur.
6. Compare/Contrast prehistoric times to modern times.

Extension Activities:

1. Gather information and write to inform about dinosaurs.

2. Make a diorama of a period of time when dinosaurs lived.
3. Make fossils out of plaster of paris. Refer to "Digging into Dinosaurs", p. 40.
4. Make a soaring pterosaur. Refer to Ranger Rick's Dinosaur Cookbook, pp. 8-9.

Teacher Resources:

Books:

- < *NatureScope: "Digging into Dinosaurs", National Wildlife Federation.
- < *NatureScope: "Endangered Species: Wild and Rare", National Wildlife Federation.
- < *Ranger Rick's Dinosaur Book, National Wildlife Federation.
- < *Ranger Rick's Dinosaur Cookbook, National Wildlife Federation.

Films:

- < "The Dinosaur Age," 6272.
- < "Dinosaurs; The Terrible Lizards," 1088.

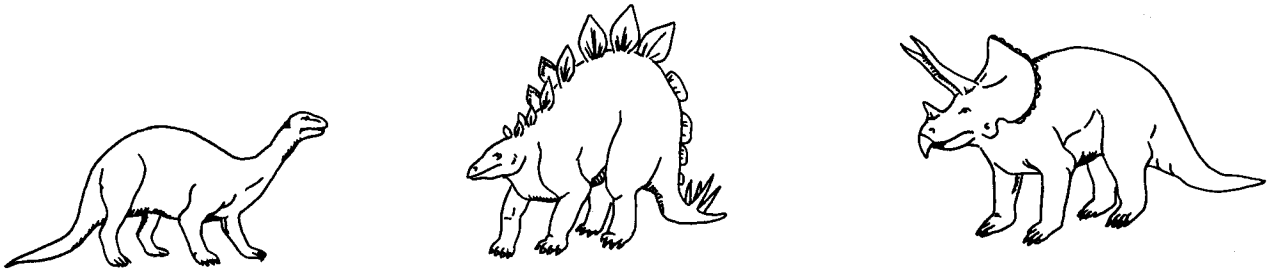
Filmstrip Kits:

- < "How Man Began," Benefit Press.
- < "Plants and Animals of Long Ago," National Geographic Educational Filmstrips, 4560 PLA.
- < "Stone Age Man," Educational Dimensions Corporation.

Study Prints:

- < *"Dinosaurs and Other Prehistoric Animals," Marvel Education Company.

Dinosaur Measurement Chart



Dinosaur	Part	Measurement
Allosaurus (al-uh-sawr-us)	foot print	1 foot
Triceratops (try-sair-a-tops)	brow horn	40 inches
Tyrannosaurus (tre-ran-uh-saur-us)	tooth	6 inches
Tyrannosaurus	skull	4 feet
Pachycephalosaur (pak-ee-sef-uh-lo-sawr-us)	body	15 feet

Brachiosaurus (brak-ce-uh-sawr-us)	body	75 feet
Ultrasaurus (ul-tra-sawr-us)	body	85 feet

Supplement B

Title

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Label the length and width of the plot. Label "N" for north. Draw and label the dinosaur bones in the appropriate area. Sketch a prediction of the entire dinosaur body on the back of this paper. Include a title for your map.

