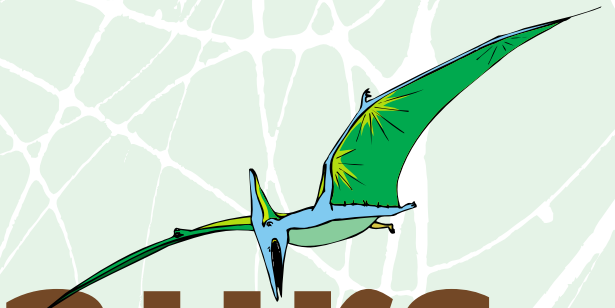


Distance Learning/Videoconferencing  
at the

CENTER FOR  
PUPPETRY  
Arts®



# Dinosaurs



Distance Learning  
Study Guide

Pre-K - 2nd

Sponsored by: **TANDBERG**

Dear Educator:

We are scheduled for a *Dinosaurs* videoconference with your group. **You will need to do preparation prior to the program.** Here are the directions for downloading the materials list, templates, and study guide which can be found in the link below.

1. Go to the following link to download the study guide:  
[http://www.puppet.org/pdf/DLSG\\_Dinosaurs2010PreK.pdf](http://www.puppet.org/pdf/DLSG_Dinosaurs2010PreK.pdf)
2. The materials list is the first thing in the study guide. **Each student needs all the materials listed for the program.**
3. **All templates** need to be traced onto poster board, file folder or some type of card stock. (**HEAVY** construction paper may be used as a substitute). **You may use any color you want.** If you plan to decorate with markers or crayons, a lighter color will work best. Dark colors are best for true shadow puppets.
4. **Please bring all pre-cut pieces and other materials to the program.** It is helpful if each student has an individual bag with their own puppet parts. You can use small paper lunch baggies or Ziploc baggies.
5. **Pass out all materials PRIOR to program start time.** This includes tape. Please have **5** strips of clear tape about the size of a bandaid **precut and ready for each student.** You can pre-tear pieces and stick them to the sides of the table, OR stick them to yard sticks (just hold out yard stick and students can take a piece of tape from it—**teacher recommended!**).
6. We will lead all students through the puppet building steps and learning activities.
7. **The program does not allow time for students to cut out materials.**
  - The activities in the study guide are for you to use at your discretion as either pre- or post-activities. We will be doing different activities with the students during the program.
  - Please let us know if you have any questions about how to prepare.
  - If you have any technical questions, please contact us directly at (404) 881-5117.

**Thank you!!!**

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# Videoconferencing Activity

## Dinosaur Shadow Puppet

### Materials List

Each student will need all of the following items:

- 1 head
- 1 tail
- 1 body
- 2 bendable drinking straws
- 2 brads
- 2 pieces of Scotch tape (about the length of a band-aid)
- scissors (to pre-cut templates PRIOR to program)
- file folder or HEAVY construction paper (needed only to trace & cut out templates—any color)
- pencil (needed only to trace templates)
- hole puncher (to punch holes in templates PRIOR to program)

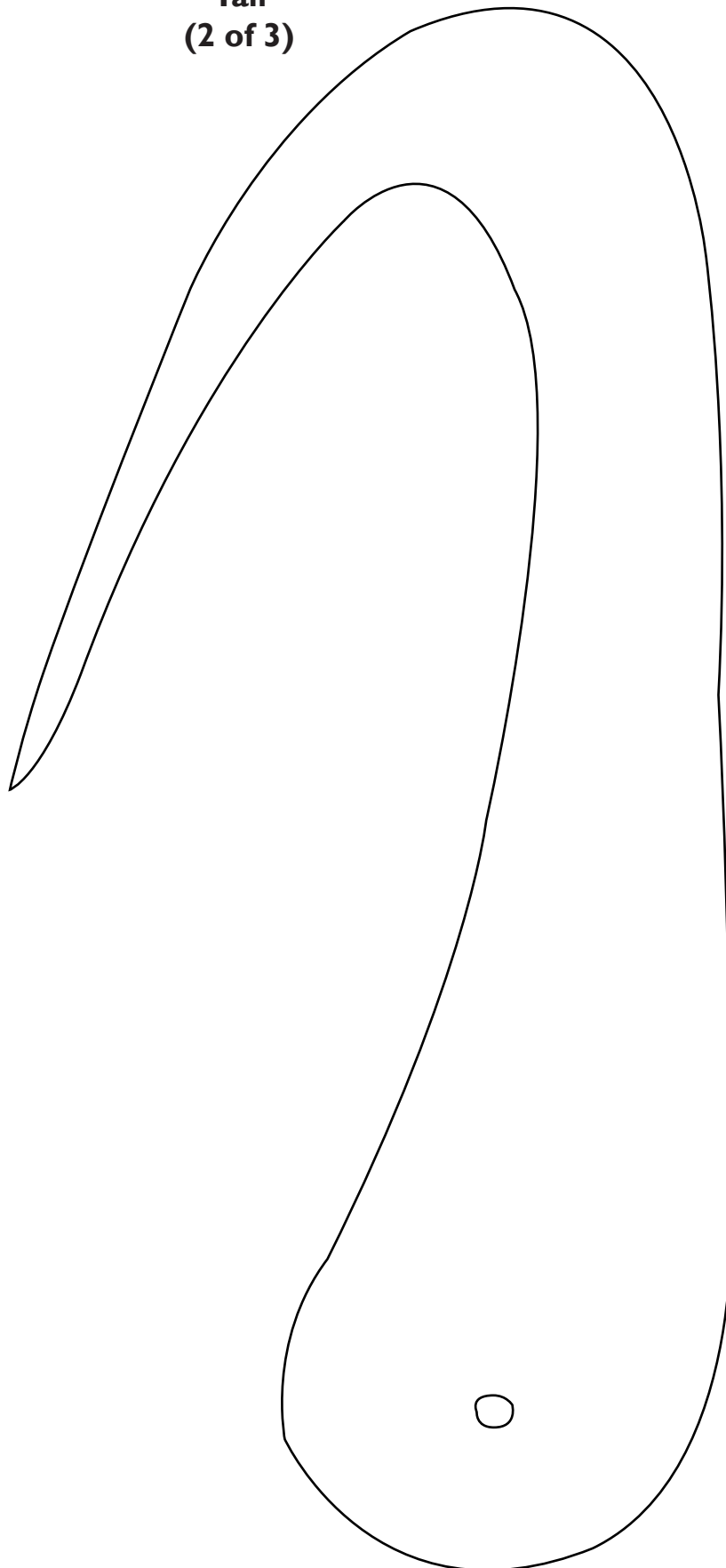
\*\* Templates **must be** pre-cut before the program!

### Pre-Program Instructions

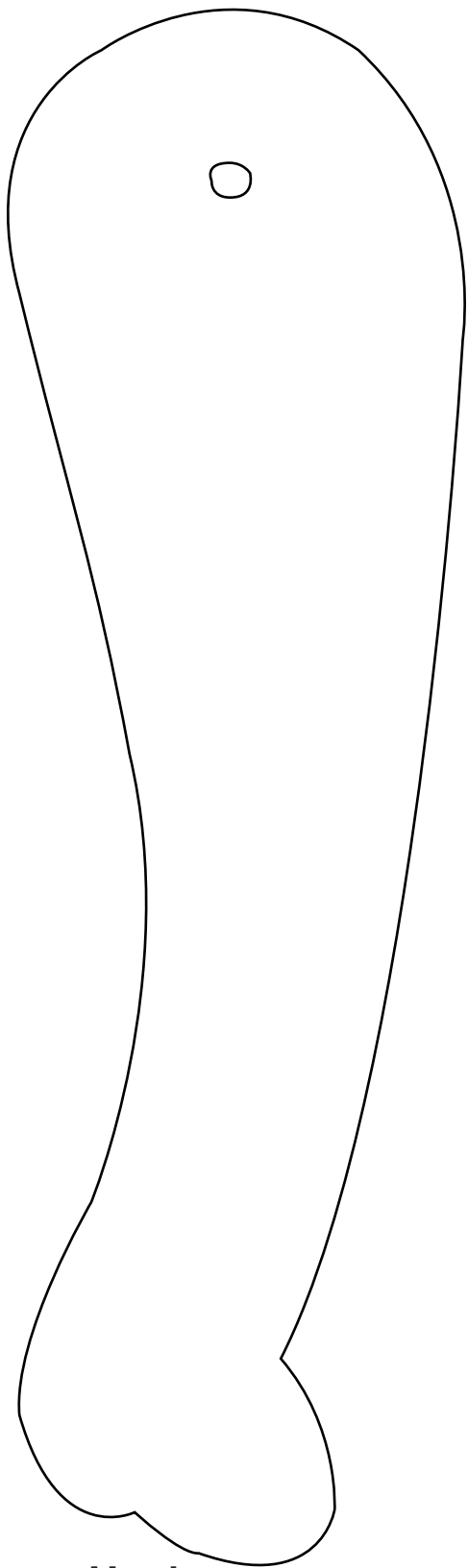
*Please read carefully.*

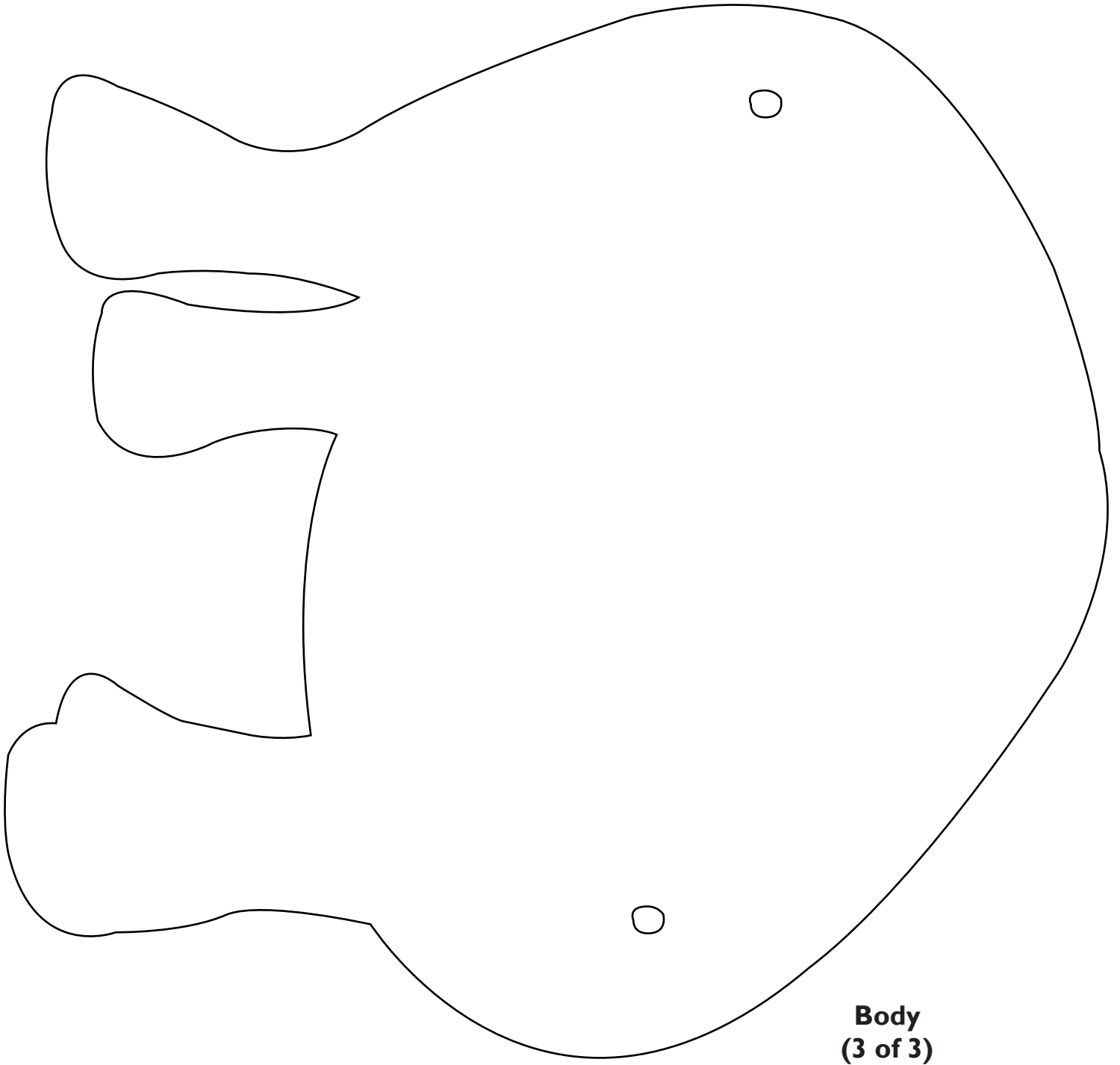
1. **Prior to the program, trace and cut out templates onto file folder or HEAVY construction paper (any color is okay). PRE-PUNCH HOLES onto head and body of puppet (refer to template for hole placement). There is no time during the program to do this!!!**
2. **Please bring all pre-cut, pre-punched pieces and other materials to the program.**  
It is helpful if each student has an individual bag with their own puppet parts. You can use small paper lunch baggies or Ziploc baggies.
3. **Pass out all templates and materials to students PRIOR to program start time.** This includes tape, brass fasteners, and straws. Please have 2 strips of clear tape about the size of a bandaid precut and ready for each student. You can stick the tape to the sides of the tables where the students are working, or on a yard stick (easy to hold out for students to take the tape pieces—***teacher preferred method***).
4. Wait for the program to begin. We will lead students through all puppet building and learning activities.

**Tail  
(2 of 3)**



**Head  
(1 of 3)**





**Body  
(3 of 3)**

# National Curriculum Standards met during live videoconference

Please go to [www.educationworld.com](http://www.educationworld.com) for a complete list of national standards.

## Fine Arts/Visual Arts

NA-V.A.K-4.1 Understanding and applying media techniques, and processes

NA-V.A.K-4.2 Using knowledge of structures and functions

NA-V.A.K-4.3 Choosing and evaluating a range of subject matter, symbols, and ideas

NA-V.A.K-4.5 Reacting upon and assessing the characteristics and merits of their work and the work of others

NA-V.A.K-4.6 Making connections between visual arts and other disciplines

NA-V.A.5-8.1 Understanding and applying media, techniques, and processes

NA-V.A.5-8.2 Using knowledge of structures and functions

NA-V.A.5-8.3 Choosing and evaluating a range of subject matter, symbols, and ideas

NA-V.A.5-8.5 Reacting upon and assessing the characteristics and merits of their work and the work of others

NA-V.A.5-8.6 Making connections between visual arts and other discipline

## Technology

NT.K-12.1 Creativity and Innovation

NT.K-12.2 Communications and Collaboration

NT.K-12.3 Research and Information Fluency

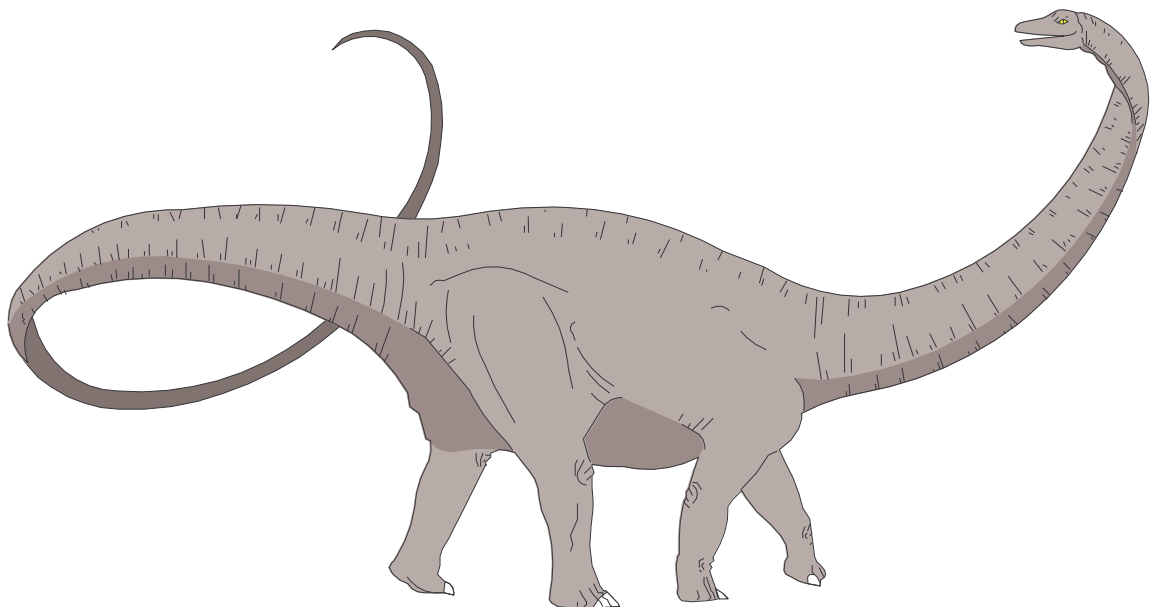
NT.K-12.5 Digital Citizenship

NT.K-12.6 Technology Operations and Concepts

## Life Science

NS.K-4.3 The characteristics of organisms; Life cycles of organisms; Organisms and environments

NS.5-8.3 Structure and function in living systems; Populations and ecosystems; Diversity and adaptations of organisms



# Pre- & Post-Videoconference Classroom Activities

## Activity 1: How Big Were the Dinosaurs? See for Yourself.

### National Curriculum Standards met by this activity

Please go to [www.educationworld.com](http://www.educationworld.com) for a complete list of national standards.

[NM-ALG.PK-2.1](#) Understand patterns, relations, and functions

[NM-ALG.PK-2.3](#) Use mathematical models to represent and understand quantitative relationships

[NM-ALG.PK-2.4](#) Analyze change in various contexts

[NM-GEO.PK-2.2](#) Specify locations and describe spatial relationships using coordinate geometry and other representational systems

[NM-GEO.PK-2.3](#) Apply transformations and use symmetry to analyze mathematical situations

[NM-GEO.PK-2.4](#) Use visualization, spatial reasoning, and geometric modeling to solve problems

[NM-MEA.PK-2.1](#) Understand measurable attributes of objects and the units, systems, and processes of measurement

[NM-MEA.PK-2.2](#) Apply appropriate techniques, tools, and formulas to determine measurements

[NM-DATA.PK-2.1](#) Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer

[NM-DATA.PK-2.2](#) Select and use appropriate statistical methods to analyze data

[NM-PROB.PK-12.1](#) Build new mathematical knowledge through problem solving

[NM-PROB.PK-12.2](#) Solve problems that arise in mathematics and in other contexts

[NM-PROB.PK-12.3](#) Apply and adapt a variety of appropriate strategies to solve problems

[NM-PROB.REA.PK-12.1](#) Recognize reasoning and proof as fundamental aspects of mathematics

[NM-PROB.REA.PK-12.4](#) Select and use various types of reasoning and methods of proof

[NM-PROB.CONN.PK-12.2](#) Understand how mathematical ideas interconnect and build on one another to produce a coherent whole

[NM-PROB.REPPK.12.1](#) Create and use representations to organize, record, and communicate mathematical ideas

[NM-PROB.REPPK-12.2](#) Select, apply, and translate among mathematical representations to solve problems

[NM-PROB.REPPK-12.3](#) Use representations to model and interpret physical, social, and mathematical phenomena

## Activity

**Objective:** Students will work in pairs to model the length of five different dinosaurs using standard measures (feet).

**Materials:** Dinosaur length information (provided below), six large spools of different colored yarn, a yardstick or tape measure, a ruler (or a class set of rulers), five cardboard paper towel tubes, scissors, a gymnasium floor or large outdoor area, lawn stakes (outdoors) or sandbag-type weights (indoors), wooden dowels slightly longer than the cardboard tubes, chalkboard, dry erase board or chart paper, colored markers that match yarn colors.

### **Procedure:**

1. Refer to the following information regarding the length of certain dinosaurs:

<b><u>Dinosaur</u></b>	<b><u>Length</u></b>
T. rex	40 feet
Triceratops	25 feet
Ankylosaurus	25 feet
Parasaurolophus	30 feet
Apatosaurus	90 feet

2. Assign each of the dinosaurs a corresponding yarn color and record the color next to each dinosaur's name.
3. Measure out and cut lengths of different colored yarn to represent the actual length of each dinosaur. Wrap each length of colored yarn around a cardboard paper towel tube (spool). Place a wooden dowel through the tube so spool will rotate on dowel to let yarn out.
4. Prepare 10 sandbag-type weights (or lawn stakes if conducting lesson outdoors). You might want to attach a picture of each dinosaur on each sand bag or stake.
5. Ask students to think of a way that they could show just how long dinosaurs really were. Tell students that they will be taking part in an activity that will enable them to see first-hand just how long dinosaurs really were. Explain to them that the unit of measure they will be using is one foot. Hold up the ruler as an example, or give each student a ruler.
6. Write the names of the five dinosaurs on the board or chart paper in the color that corresponds to the yarn color. Then write the length of each dinosaur next to each one's name.
7. Explain to the students that you have measured out yarn in those exact lengths. Show them the spools. Ask them if they can predict which color is the longest just by looking at the spool.
8. Align students so that all of the starting points are even on a gym floor or outdoor field. Have one student stand at the starting point holding the ends of the wooden dowel so spool can turn freely. Have the other person in the pair unwind the yarn while walking in a straight line. Help students to tie the ends of the yarn to the sandbag weights or stakes. When they are finished, you will have made a giant bar graph. Have students walk the length of each piece of yarn comparing the distances.
9. Ask: Which dinosaur was the longest? Which was the shortest? Were any two the same length? Which two were closest in length? Ask students to rank the dinosaurs first, second, third, fourth, and fifth according to length.
10. Conclude the activity by creating a bar graph to hang in the classroom.

## Activity 2: Create a Fantasy Dinosaur Book

### National Curriculum Standards met by this activity

Please go to [www.educationworld.com](http://www.educationworld.com) for a complete list of national standards.

[NL-ENG.K-12.1](#) Reading for perspective

[NL-ENG.K-12.4](#) Communication skills

[NL-ENG.K-12.5](#) Communication strategies

[NL-ENG.K-12.6](#) Applying knowledge

[NL-ENG.K-12.7](#) Evaluating data

[NL-ENG.K-12.8](#) Developing research skills

[NL-ENG.K-12.12](#) Applying language skills

[NT.K-12.1](#) Basic operations and concepts

[NT.K-12.3](#) Technology productivity tools

[NT.K-12.4](#) Technology communication tools

[NT.K-12.5](#) Technology research tools

### Activity

**Objective:** Students will create a fantasy picture book about a dinosaur for their classroom.

**Materials:** Computers with MS Word or other word processing software, printers, paper and pencils, construction paper, and crayons or markers.

#### Procedure:

1. Have students select a dinosaur to write about. They may gather information online or from a library book. Make sure that students know about the habitat where their dinosaurs lived, what their dinosaurs ate, important physical characteristics of their dinosaurs, etc.
2. Have students follow the steps of the writing process using a computer with MS Word or other word processing software:
  - 1) PREWRITING
    - Generates ideas
  - 2) DRAFTING
    - Focuses on topic
    - Uses prewriting ideas to complete first draft
  - 3) REVISING
    - Expands use of descriptive words
    - Improves sequence
    - Adds variety of sentence types
    - Organizes writing to include a clear beginning, middle and ending
  - 4) EDITING
    - Begins each sentence and proper noun with a capital letter
    - Uses correct spelling
    - Uses appropriate punctuation
    - Uses complete sentences
  - 5) PUBLISHING
    - Shares writing with others
3. Have students divide their text into pages and use a printer to print the text for each page across the bottom of each page of their book.
4. Next, students should illustrate each page with an appropriate picture to accompany the text they have written.
5. Bind student books. Have each student share her or his book aloud. Make books available for all students to read during reading time.

# **Activity 3: Dinosaur Eggs: A Touch and Feel Activity**

## **National Curriculum Standards met by this activity**

Please go to [www.educationworld.com](http://www.educationworld.com) for a complete list of national standards.

[NS.K-4.1](#) Science as inquiry

[NS.K-4.3](#) Life science

[NS.K-4.7](#) History of nature and science

[NA-VA.K-4.3](#) Choosing and evaluating a range of subject matter, symbols, and ideas

[NA-VA.K-4.6](#) Making connections between visual arts and other disciplines

## **Activity**

**Objective:** Scientists believe that dinosaur eggs and reptile eggs are very similar. The eggs are believed to both have a tough, leathery shell with built-in food and water supplies. The following activity will allow students to examine their own “dinosaur” egg.

### **Materials:**

- 1 raw chicken egg
- a glass of vinegar
- a glass of water
- a spoon
- paper
- pencils
- crayons
- markers
- water-based paint
- paint brushes

### **Procedure:**

1. Take a raw chicken egg and place it in a glass of vinegar for 24 hours. To make sure the egg stays submerged, place a spoon on top of it to weigh it down.
2. The eggshell will begin to dissolve leaving bubbles in the water. The vinegar works as an acid to gently remove the shell.
3. Once the shell is dissolved, remove the egg and place it in a glass of water.
4. The teacher should remove the egg from the glass of water and allow students to touch it.
5. Ask students to describe how it looks and feels. Is it hard or soft? What do they see inside?
6. Finally, have each student draw or paint a picture of a dinosaur egg to include in their dinosaur book (Activity 2). Or, students can post their drawings in the classroom.

# Other Resources

## Websites to Explore

[www.fernbank.edu/museum](http://www.fernbank.edu/museum)

Fernbank Museum of Natural History has the world's largest dinosaurs.

[www.fieldmuseum.org/sue/index.html](http://www.fieldmuseum.org/sue/index.html)

Visit Sue, the largest, best-preserved, most complete T-rex fossil ever found. Sue now resides at the Field Museum of Natural History in Chicago.

[palaeo.gly.bris.ac.uk/dinobase/dinopage.html](http://palaeo.gly.bris.ac.uk/dinobase/dinopage.html)

Check out Dinobase, a database with a list of dinosaurs, a classification of dinosaurs, pictures and more from the University of Bristol, U.K.

[www.bbc.co.uk/dinosaurs](http://www.bbc.co.uk/dinosaurs)

Explore this resource that is a companion to the computer animated BBC television series Walking With Dinosaurs.

[www.nmnh.si.edu/paleo/dino](http://www.nmnh.si.edu/paleo/dino)

Visit the Smithsonian Museum of Natural History in Washington, DC and a comprehensive dinosaur website created by the Dept. of Paleobiology.

[www.nationalgeographic.com/dinorama](http://www.nationalgeographic.com/dinorama)

Dive into Dinorama, National Geographic's website devoted to dinosaurs.

[pubs.usgs.gov/gip/dinosaurs/](http://pubs.usgs.gov/gip/dinosaurs/)

Find the answers to frequently asked questions about dinosaurs.

[www.zoomschool.com/subjects/dinosaurs/](http://www.zoomschool.com/subjects/dinosaurs/)

Learn about every dinosaur you can imagine.

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