Distance Learning/Videoconferencing
at the

CENTER FOR PUPPETRY Arts

Dinosaurs

Distance Learning Study Guide

K – 2nd Grade

Sponsored by: TANDBERG

NEW PUPPET DESIGN FOR 2010-2011 SCHOOL YEAR!

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_Dinosaurs2010.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 construction paper and cut-out. You may use any color you want.**
4. **Please bring all pre-cut pieces and other materials to the program.** It is helpful if each student has an individualbag 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!!!

The Distance Learning Team
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Videoconferencing Activity

Dinosaur Cup Puppet (Hand Puppet)

Materials List

Each student will need all of the following items:

1 8 oz. plastic, paper, or Styrofoam cup (any color)
1 Corythosaurus body (template on pg. 3)
1 Corythosaurus tail (template on pg. 3)
1 Corythosaurus head (template on pg. 3)
Scotch tape
scissors (to pre-cut templates PRIOR to program)
construction paper (needed only to trace & cut out templates—any color)
pencil (needed only to trace templates)

** 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 colored construction paper (any color is okay). There is no time during the program to do this!!!**

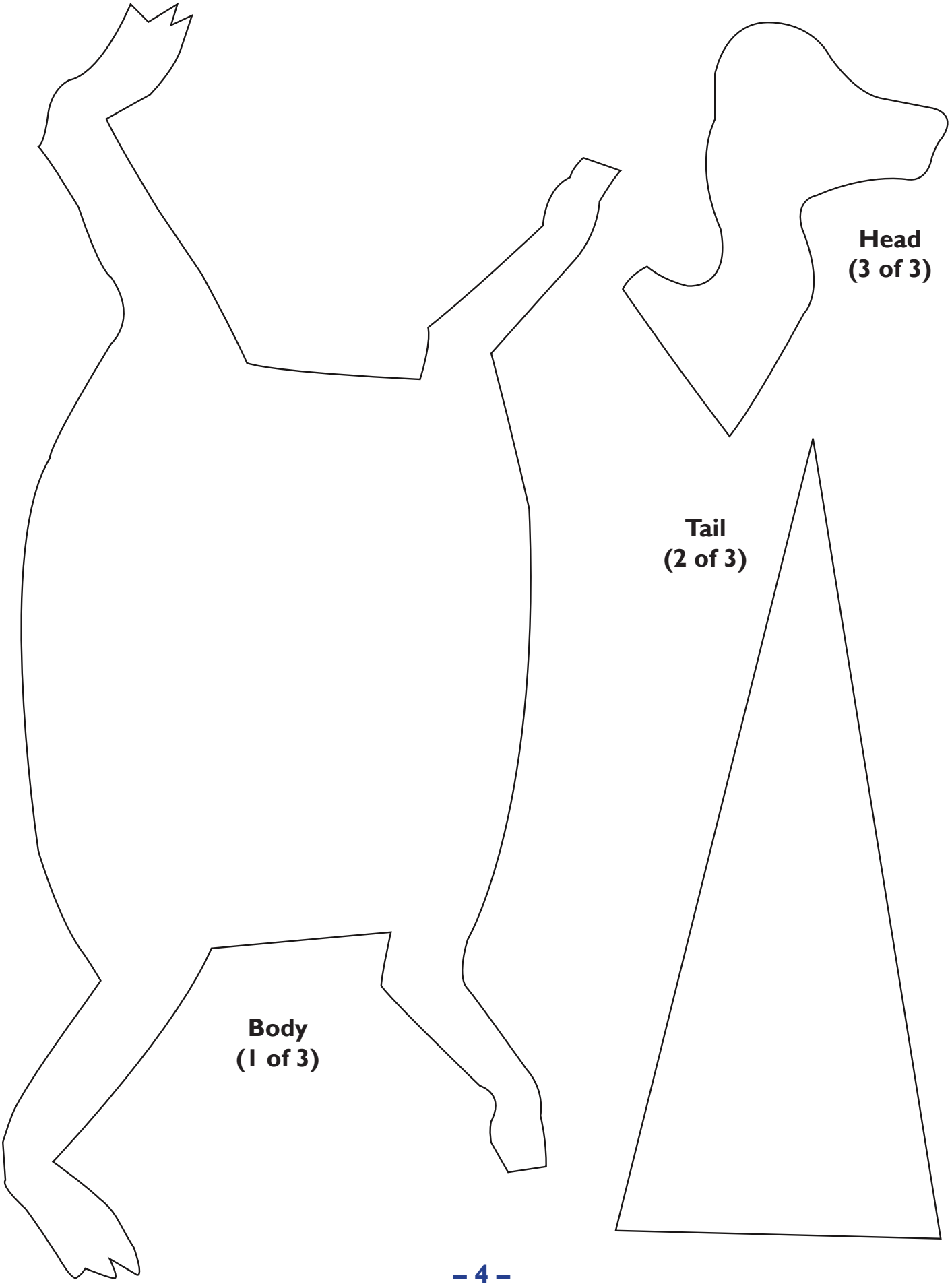
2. Bring all pre-cut templates and other materials to the site the day of the program. It is helpful if each student has an individual bag with their own puppet parts. You can use small paper lunch bags or Ziploc baggies.

3. **Pass out all templates and materials to students PRIOR to program start time.** Students will **each need 5 pieces of tape** about the length of a band-aid. 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.

Dinosaur Templates (pg. 3) NEW DESIGN FOR 2010-2011

Body (1 of 3)
Tail (2 of 3)
Head (3 of 3)


Head
(3 of 3)
Tail
(2 of 3)
Body
(1 of 3)

National Curriculum Standards met during live videoconference

Please go to www.educationworld.com for a complete list of national standards.

Fine Arts/Visual Arts

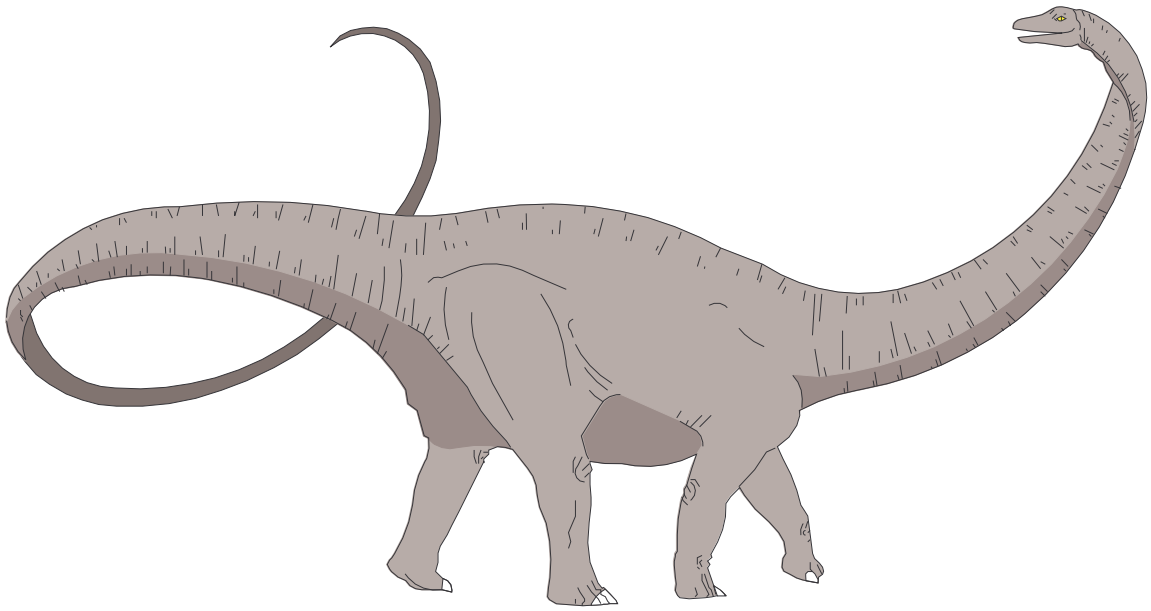
NA-V A.K-4.1 Understanding and applying media techniques, and processes
NA-V A.K-4.2 Using knowledge of structures and functions
NA-V A.K-4.3 Choosing and evaluating a range of subject matter, symbols, and ideas
NA-V A.K-4.5 Reecting upon and assessing the characteristics and merits of their work and 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 Reecting upon and assessing the characteristics and merits of their work and the work of others
NA-VA.5-8.6 Making connections betw een 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 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.REP.PK.12.1 Create and use representations to organize, record, and communicate mathematical ideas
NM-PROB.REP.PK-12.2 Select, apply, and translate among mathematical representations to solve problems
NM-PROB.REP.PK-12.3 Use representations to model and intrepret 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:

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

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

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

pubs.usgs.gov/gip/dinosaurs/
Find the answers to frequently asked questions about dinosaurs.

www.zoomschool.com/subjects/dinosaurs/
Learn about every dinosaur you can imagine.

Selected Bibliography

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CENTER FOR PUPPETRY Arts

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