

## Mastodon Curriculum for Grade 2

### Mathematics

#### Does A Grinch Have A Wrench?

- Collect and record numerical data in systematic ways.
- Represent, compare, and interpret data using tables, tally charts, and bar graphs.

**Lesson:** Select a number of creatures. Choose as many different types as possible, including sea life, birds, and land creatures—even dinosaurs. Count a number of distinguishing features for each creature (eyes, ears, toes, legs, arms, tails, proboscises, antennae, tails, hair, scales, feathers, etc.) Show results in tally charts, tables, and bar graphs.

#### UGH! There's a Mastodon in my Classroom

- **2.5.1:** Measure/estimate length to the nearest inch, foot, yard, centimeter, and meter.
- **2.5.2:** Describe the relationships among inch, foot, and yard. Describe the relationship between centimeter and meter.
- **2.5.3:** Decide which unit of length is most appropriate in a given situation.

**Lesson:** How many mastodons can you fit in your classroom? Mastodons were 8 feet high at the shoulder, about 12 feet tall altogether. Ears were 1 to 2 feet long. Which unit is the best one to measure mastodons? Why? How many mastodons can you fit in your kitchen at home? Use the unit of measure that you think is most appropriate for each location (classroom, kitchen, etc.). (Note: How many students quickly realized that their kitchen is not 12 ft. high and, thus, zero mastodons will fit. Where, then, could mastodons fit indoors? The school gym? A movie theater?)

#### What a Way to Weigh

- **2.5.4:** Estimate area and use a given object to measure the area of other objects
- **2.5.6:** Estimate weight and use a given object to measure the weight of other objects.

**Lesson:** If a mastodon tooth weighs 5 pounds, how many Big Macs would it take to equal the weight of one mastodon tooth, of two mastodon teeth? How much does a human tooth weigh? How many human teeth would it take to equal the weight of one mastodon tooth?

If a mastodon tooth is about 7 inches long, 4 inches tall, and 3 inches wide, estimate if it will fit in the teacher's desk drawer. Estimate how many it would take to cover the top of your desk. Estimate how many you could lift. Make a chart to show what you discovered.

### Language Arts

#### A Proboscis by Any Other Name Is a Nose

- **Standard 1:** Reading/Vocabulary/Word recognition/ Vocabulary and Concept Development

**Vocabulary Lesson:** Are there any synonyms or antonyms for Mastodon? Use the prefixes *pre-*, *ex-*, and *geo-*. Use the suffixes *-ology*, *-dons*, *-ist*. Learn as many of the words from the Mastodon Vocabulary List as you can fit into your studies. Use the Vocabulary Map in Appendix for your study.

### **Mastodon Vocabulary List**

**Carnivores**

**Catastrophe**

Dinosaur

**Extinct**

Fossil

**Geology**

**Habitat**

**Herbivores**

Ice age

Insectivores

Land bridge

Life span

Mammoth

**Mastodon**

**Migration**

Omnivores

Proboscis

Quadruped

Reptile

Sediment

Skeleton

Tusks

Vertebrae

### **Extinction Lesson (Oh Where, Oh Where Has My Mastodon Gone?)**

For the concept of extinction, use the music/lyrics in the book *Crocodile Smile* by Sarah Weeks and Lois Ehlert (track 6 on the CD included with book). In fact, many of the tracks on this CD relate to balance, habitat preservation, and concern for other species as necessary conditions to support life.

Understanding extinction is a key outcome of the mastodon study. Check the Internet, ACPL holdings, and other locations for enriching materials on the concept of extinction. Ask students to list names of creatures they believe to be extinct and those they believe to be endangered. Discuss with students what they can do to make a difference.

One of the goals of the mastodon project is for student to understand their role as valuable members of their community with responsibilities to help where and how they can. If appropriate, class or individuals might wish to work to contribute to Saving the

Rainforest or contacting environmentalists to ask what they can do, or contributing to local projects that improve our habitat.

### **Why Mastodons Went Extinct**

- **Standard 2:** Reading/Comprehension/Cause and Effect

**Lesson:** Students should gather data from a variety of sources (including family and other adults). Teachers can read aloud the section about extinction in the Teacher Packet included in these materials. Then check for student comprehension of what was heard, read, and learned about mastodons and extinction. Do students think short-term catastrophe or long-term environment was the bigger contributor to demise of the mastodon? It will be necessary to work in a number of the vocabulary terms in the discussion.

Ask students to write an article for the newspaper on *Why Mastodons Went Extinct* using information they have gathered in their news story. Include the article in student's Mastodon Minutes booklet.

Again, play CD from *Crocodile Smiles* (Track 7 on Extinction). Other tracks on this CD are excellent for other story concepts. Would the mastodon, for example, ever eat a princess (I've Never Eaten a Princess, track 3) or what parts of the mastodon might people want to use for themselves (I am not a Hat, track 4).

### **Why, Oh Why Do I Love You?**

- **Standard 5:** Writing/Applications/Different types of writing and their characteristics

**Lesson:** Students should write a brief "WHY" story about the mastodon (Why they have a tail, why they have a hump, why they have 5 toes, why they only have 12 teeth, why they have tusks, etc.). Students could also write about what life was like in the Ice Age for children (A Day in the Life of a Child in the Ice Age). Details and facts should support the ideas in all written projects. (Teacher might want to tie this experience with creating a cave drawing or petroglyph described in the Enrichment section of this material on the Arts.

**Letter:** Write a letter to the editor of newspaper about why humans should (or should not) protect animals so they won't go extinct.

**Directions:** Write the directions for how the make a model of a mastodon tooth (or a mastodon jaw). Another student should test out the directions by seeing if he/she can make an actual model from clay or plaster or white bread. Students should talk with each other about clarity of the directions and problems with the process.

### **Eats, Shoots, Leaves**

- **Standard 6:** Writing/Written English Language Conventions

Students should use punctuation, sentence structure, capitalization, spelling, handwriting standards for their grade level for all writing assignments