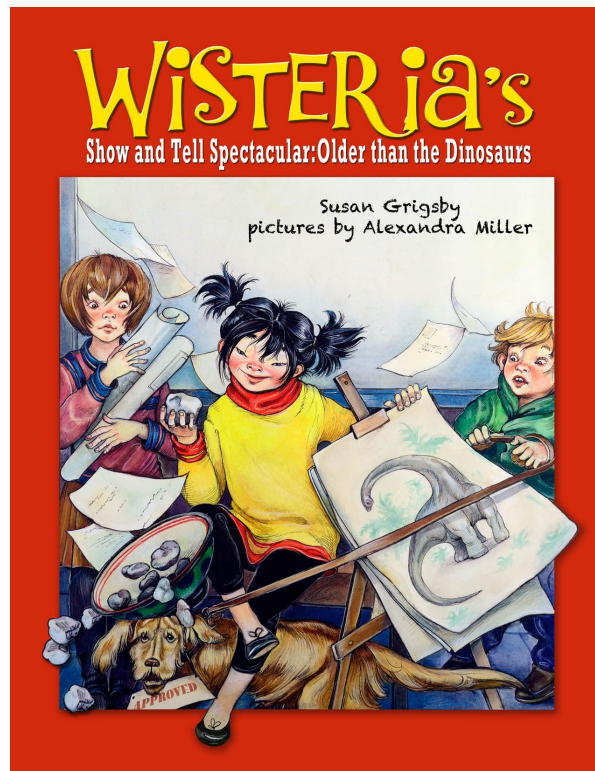


**Teacher's Activity Guide for  
Wisteria's Show and Tell Spectacular:  
Older than the Dinosaurs**



**Book written by Susan Grigsby  
and illustrated by Alexandra Miller**

**Teacher's Guide written by Susan Grigsby**

**Rock and Fossil Photography by David Grigsby**

**Rock & Fossil Collection Courtesy of Jimmy D. Orsund**

## Vocabulary:

**Archaeologist:** A person that studies past human life and culture by the recovery and examination of remaining material evidence, such as graves, buildings, tools, and pottery

**Avalanche:** A rapid downward flow of rocks or snow, usually from a mountainside



**Binoculars:** A device for looking at distant objects

**Dire:** Urgent, desperate

**Dog Years:** A mythical unit of time based on the popular theory that dogs age seven times faster than humans

### Fossil:

The preserved remains, or traces of remains, of ancient animals or plants



**Geologist:** A person that studies the solid earth and its rocks and minerals



**Honey Hive:** A habitat that bees live in, man-made or natural

**Limestone:** Sedimentary rock formed from the skeletons and shells of ocean organisms

**Paleontologist:** A person that studies fossils

**Petrified:** Converted to stone or a stony substance

**Rubble:** Broken bits and pieces

**Sediment:** Mineral or organic matter deposited by water, air, or ice

**Sedimentary rock:** Rocks formed from material deposited as sediment and then consolidated by pressure

**Spewing:** To cast forth, gush, eject

**Surfer:** A person that rides the ocean waves on a surfboard

## How Old is Old? Exploring Timelines -

**Discussion question:** A loaf of bread in a bakery is called “old” after just one day and put on sale as “Day-Old Bread” and the news that happened yesterday is called “old news”. What makes something “old”? Ask each student to list something old and place it on a group timeline.

**National Geographic** has a great interactive **Prehistoric Timeline** at

<http://science.nationalgeographic.com/science/prehistoric-world/prehistoric-timeline.html> that includes **rocks and dinosaurs!**

and here is a **Timeline of Food:** <http://www.foodtimeline.org/>



**Timeline possibilities at school -**

**On the playground,**

draw a line with chalk in order to mark off the range of possible ages of the students, by years and months. Using measurement, ask them to help develop the proportional scale ( e.g. – One Meter = One Month). Ask the children to find their place on the timeline, by age order, and to mark their place in years and months. Recreate this timeline on paper indoors and use it for math lessons. Adapt for your grade level.

Send children home with an **explorer’s sheet**. Ask them to document several items at home, from ‘new’ to ‘old’ to “really old”, as well as the ages of family members, and the age of the building they live in. At school, have them share their **Family History Timelines** using words and images.

## THE AGE OF TREES

On the Nature Explore site, The Arbor Day Foundation provides an interactive lesson for children: *Learn about The Life of a Tree* and how to read its age by the rings.

<http://www.arborday.org/kids/early/lifeofatree/>



## THE AGE OF THE SUN



The sun is about four and a half BILLION years old according to scientists at NASA and its temperature is 5700 C! Learn more about the sun at:

[http://www.nasa.gov/vision/universe/solarsystem/sun\\_for\\_kids\\_main.html](http://www.nasa.gov/vision/universe/solarsystem/sun_for_kids_main.html)

Interact live with solar scientists during **Solar Week, October 15-19, 2012** by visiting <http://www.solarweek.org/cms/>, a site supported by NASA.

## WHEN ARTIFACTS SPEAK

**Creative Writing** - Ask your students to write a **Persona Poem** in which one of the “old” objects they’ve brought in tells its story. Where was it made and what is it made of? Where has it been and what has it seen? What people did it meet?

## ROCK HUNTERS

Students of any age can go on a search for rocks. Reinforce **Math Skills** by sorting, counting, and making charts and graphs to present data. Older students can test rocks and identify them. The next page provides many links to use for **Science and Math**.



## LINKS TO RESOURCES

### Games and Activities for Children and Teachers to Explore:

Learn about the different types of **rocks** and how they're formed, then test your skills at:

<http://www.learner.org/interactives/rockcycle/index.html>



Dinosaurs and Archaeology: <http://www.childrensmuseum.org/games>

**EXPLORATIONS THROUGH TIME** from The University of California Museum of Paleontology has fantastic interactive modules for students in grades K-4 (and ones for older students too) that look at topics ranging from **geologic time to fossils**.

<http://www.ucmp.berkeley.edu/education/explotime.html>

The **Science Spot Kid Zone** has links to many sites about **Dinosaurs, Fossils, and Geologic Time**: [www.sciencespot.net/Pages/kdzdino.html](http://www.sciencespot.net/Pages/kdzdino.html)

Two more sites with a **HUGE** number of links to **Geology Activities**:

<http://www.kidinfo.com/Science/Geology.html>

<http://farr-integratingit.net/Integration/General/Geology/>



### Lesson Plans for Teachers:

Dinosaurs and more! These are beautiful – from the

Children's Museum of Indianapolis <http://www.childrensmuseum.org/units-of-study>

**Rock Cycle Lab** - A fun, hands-on rock cycle lab using crayons to help students understand the processes that form rocks.