



Gallery: Fossil Gallery

Course Name: Geologic Time Scale

Grade Level: 6, 7, 9 - 12

Activity: Geologic Time Scale Hall Art (pre or post activity)

Approximate Time Required: one class period with possible home research

Vocabulary:

era	Precambrian Eon	Archean Eon	Paleozoic Era	herbivore
period	Hadean Eon	Proterozoic Eon	Mesozoic Era	carnivore
geology	eon	Phanerozoic Eon	Cenozoic Era	omnivore

Objective: Students will create a hall wall art showing plants and animals of the Paleozoic, Mesozoic, and Cenozoic eras.

Materials Needed:

1. 3—6 ft. pieces of bulletin board paper
2. pencils, markers, rulers, yardsticks, glue, crayons
3. pictures of prehistoric plants and animals with name tags showing pronunciations

Procedure: Students may work in 3 teams to develop their assigned era.

Have each team become familiar with the attachment showing the layout, then:

1. Draw a line along the 6 foot edge of the bulletin board paper, 8 inches from the top to display the era and time frame.
2. Draw a second line 5 inches from the first line to display their respective periods and time frames.

Paleozoic team:

1. Divide the Paleozoic board into 6-10 inch and 1-12 inch sections down from the title frames.
2. Label the periods and time frames.

Mesozoic team:

1. Divide the Mesozoic board into 3-2 foot sections down from the title frames.
2. Label the periods and time frames.

Cenozoic team:

1. Divide the Cenozoic board into 2-3 foot sections down from the title frames.
2. Label the periods and time frames.

Now affix the plant and animal pictures with the name tags under the appropriate eon and era.

Observations:

1. What have the students learned about the age of the earth?
2. Can the students describe the increments of time which define the age of the earth?
3. Have the students worked as a team to complete the project?

Evaluation:

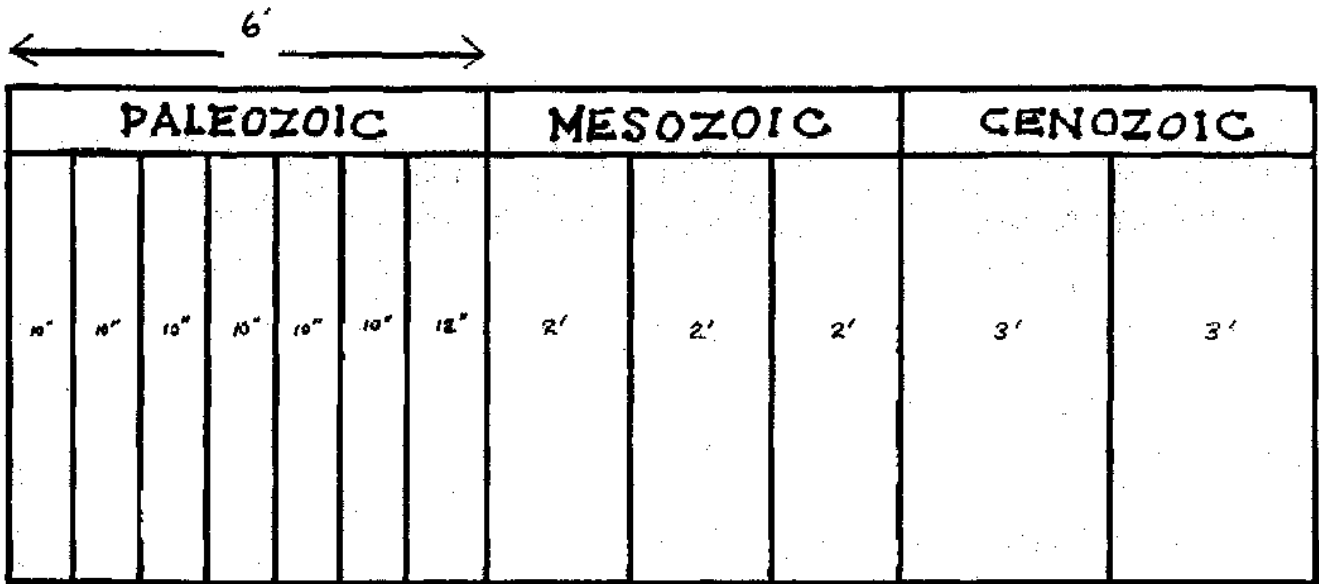
1. Review the students' work on the hall art.
2. Question their comprehension of eons, eras, and periods.
3. Have the students complete a timeline questionnaire (like the one attached).

Modifications:

1. Titles and time frames could be pre-done.
2. Pictures and names could be of less complex animals.
3. Scientific names could be provided with the common names of the plant or animal.

Georgia Standards: S6E5g, S6E3a-c, S6E5e-g, S7CS6c, S7L5c, SCS4a-b, SCS7c, SCS8a-f, SES1c-d, SES3d-e, SES4a-e, SES6d-E, SG1a-d, SZ2a, SZ2c, SZ3a-c, SAST6c-d, SB4c, SB4e, SB4f, SB5a-e, SEV3c, SEC1a-D

Below is an example of how to divide the bulletin board paper.



Paleozoic Era

Ended 225 Million Years Ago

Cambrian Period 123 million years	Ordovician Period 45 million years	Silurian Period 30 million years	Devonian Period 60 million years	Mississippian Period 35 million years	Pennsylvanian Period 35 million years	Permian Period 50 million years
---	--	--	--	---	---	---

trilobites
(tri-la-bites)



ostracoderms
(aws-truh-ko-durms)

eurypterids
(yoo-rip-to-rids)



antiarchs (an-tee-arks)
ichthyostegallians
(ik-thee-o-steg-a-lee-ans)

eryops
(ee-ree-ops)
diplocaulus
(dip-lo-koh-lus)



cotylosaurs
(kot-il-o-sawrs)
giant dragonfly

dimetrodons
(dy-met-ruh-dons)



Began 225 Million Years Ago

Mesozoic Era

Ended 65 Million Years Ago

Triassic Period
45 million years

Jurassic Period
50 million years

Cretaceous Period
65 million years

jellyfish
snails

thecodontosaurus
(thee-kuh-don-tuh-sawr-us)

ichthyosaurs
(ik-thee-uh-sawr-us)

coelophysis (see-lo-fiss-iss)

stegosaurus
(steg-uh-sawr-us)

allosaurus (al-uh-sawr-us)

apatosaurus
(ah-pat-uh-sawr-us)

brachiosaurus
(brak-ee-uh-sawr-us)

diplodocus
(dih-plod-uh-kus)

ankylosaurus (ang-kile-uh-sawr-us)

corythosaurus (ko-rith-uh-sawr-us)

iguanodon (ig-wan-o-don)

pachycephalosaurus (pak-ee-sef-uh-lo-sawr-us)

parasaurolophus (par-ah-sawr-ol-uh-fus)

styracosaurus (sty-rak-uh-sawr-us)

triceratops (try-sair-uh-tops)

spinosaurus (spy-nuh-sawr-us)

tyrannosaurus (ty-ran-uh-sawr-us)

elasmosaurus (ee-laz-muh-sawr-us)

pteranodon (tair-an-o-don)

pterodactylus (tair-uh-dak-til-us)

deltatherium (del-ta-theer-ee-um)

Began 65 Million Years Ago

Cenozoic Era

Present Time

Tertiary Period
61.5 million years

Quaternary Period
3.5 million years

eohippus (ee-oh-hip-us)

smilodon (smy-luh-don)

diatryma (di-uh-try-ma)

wooly mammoth (wool-ee mam-oth)

glyptodon (glip-toh-don)

mammals

birds

reptiles

fish

man

Timeline Questions

Part I

Use the Geologic Time Line bookmarks you received from the Tellus Science Museum to answer the following questions.

1. Name the three eons of the Precambrian super-eon :
 - a. _____
 - b. _____
 - c. _____
2. Name the eon in which we live: _____
3. Name the era in which we live: _____
4. Name the period in which we live: _____
5. List the three periods of the Mesozoic era:
 - a. _____
 - b. _____
 - c. _____
6. Name the period from which the first fossils came: _____
 - a. How long ago was this? _____
7. According to scientists, how old is the Earth? _____
8. What era of time is known as the "Age of the Dinosaurs"? _____
9. In what time period did people exist? _____
10. Did dinosaurs live at the same time as man? (Yes or No) _____

Part II

If you could go back in time to one of the three eras, which one would you choose to visit? Write a story about your trip on a separate sheet of paper. Tell how you think the Earth looked, what types of plants and animals you would see, and where you might find shelter. Give your story a title.

Timeline Questions--Key

Part I

Use the Geologic Time Line bookmarks you received from the Tellus Science Museum to answer the following questions.

1. Name the three eons of the Precambrian super-eon :
 - a. Hadean
 - b. Archean
 - c. Proterozoic
2. Name the eon in which we live: Phanerozoic
3. Name the era in which we live: Cenozoic
4. Name the period in which we live: Quaternary
5. List the three periods of the Mesozoic era:
 - a. Triassic
 - b. Jurassic
 - c. Cretaceous
6. Name the period from which the first fossils came: Cambrian
 - a. How long ago was this? 542 million years ago
7. According to scientists, how old is the Earth? 4.6 billion years old
8. What era of time is known as the "Age of the Dinosaurs"? Mesozoic
9. In what time period did people exist? Quaternary
10. Did dinosaurs live at the same time as man? (Yes or No) no