GLY 1102 Darwin & Dinosaurs
What can we learn from fossils?

Objective: To learn how paleontologist use fossils and rocks to learn about extinct organisms and paleoenvironments.

Materials:
One set of pictures of living animal
One set of pictures of extinct animal

Procedure:
1. Look over the information packet on the modern animal.

   a. List all information you know about this animal.

      i. Make sure to include what the animals ate (herbivore/ carnivore), its posture, how its relative speed (fast/slow), if it was quadrupedal or bipedal.

      ii. Support the known information with evidence from the skeleton, make sure to be specific (i.e. do not just state I know this based on the teeth, what specifically about the teeth).

2. Look over the information packet on the extinct animal.

   a. List all information and evidence that supports what you can determine about this animal.

      i. Make sure to include what the animals ate (herbivore/ carnivore), its posture, its relative speed (fast, slow), if it was quadrupedal or bipedal.

      ii. Support the known information with evidence from the skeleton, make sure to be specific (i.e. do not just state I know this based on the teeth, what specifically about the teeth).

b. Research the locality of the extinct animal and determine the environment in which the animal lived. Make sure to include evidence from the geology that supports the conclusions.

c. Look at the picture of the horse skeleton making note of the outline of the body relative to the skeleton. Sketch an outline of the *Stegosaurus* body on the illustration of the *Stegosaurus* skeleton.

Extinct animal: *Stegosaurus*
Location: Morrison Formation
Age: Late Jurassic

Toothless premaxilla

Nostril

Eye socket

Muscle 1
(*Capiti-mandibularis*)

Muscle 2
(*Depressor m*

Jaw joint

Predentary bone

Leaf-shaped serrated teeth
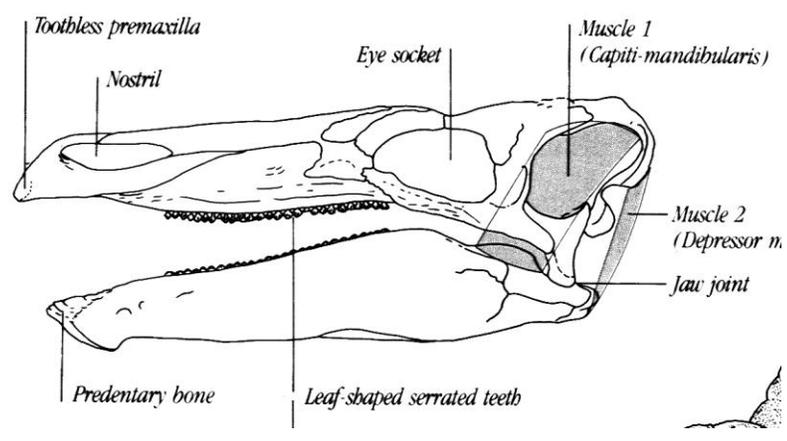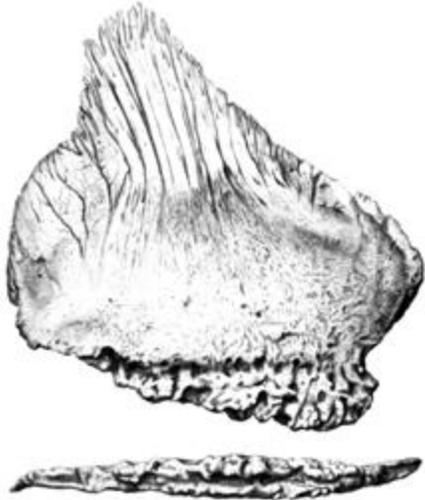
Stegosaurus plate
First hatchling *Stegosaurus* footprints

Tooth

Modern animal: *Equus* (Horse)
Teeth

Mt. II — Mt. IV
Mt. III

Horse

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