EDUCATOR WORKSHOP: PROCESS OF PALEONTOLOGY
What’s a FOSSIL?

- A **fossil** is any evidence of ancient life greater than 10,000 years old (though some definitions use the start of the Holocene Epoch 11,700 years ago as the boundary)
What’s PALEONTOLOGY?

• **Paleontology** is the study of ancient life

• Different than **archaeology**, which is the study of human history and prehistory through material remains
Excavation start to finish

- Location
- Prospecting
- Excavation and jacketing
- Preparation
- Collections and storage
- Research
Geologic Time

Geologic Time Scale

Cretaceous

Paleozoic Era

Mesozoic Era a.k.a. “Age of Dinosaurs”

Jurassic

Triassic

Quaternary Period:
2.6 million years ago to the present

Neogene Period:
23-2.6 million years ago

Paleogene Period:
66-23 million years ago

Cretaceous Period:
145-66 million years ago

Jurassic Period:
201-145 million years ago

Triassic Period:
252-201 million years ago

Permian Period:
299-252 million years ago

Not all dinosaurs went extinct—birds continue to thrive!

Extinction Event:
About 50% of all life went extinct

Extinction Event:
About 90% of all life went extinct

Trilobites!
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LOCATION: where to look?

The North America Tapestry of Time and Terrain by USGS
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Quarry map showing how Zed’s bones were orientated
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