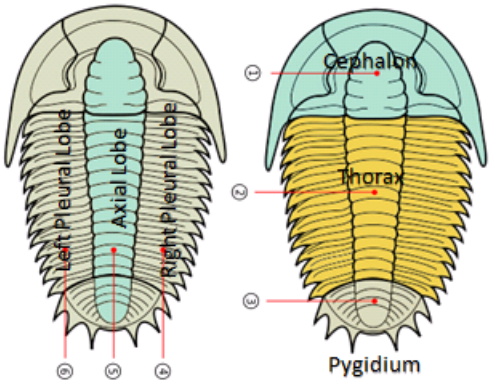
Trilobites and other Fossils at the Gamebridge Quarry



Trilobites are arthropods, related to modern day crabs, lobsters, shrimps

They lived in the seas and oceans of the Paleozoic Era, 542 to 251 Million years ago; they are the *indicator species* for the Paleozoic

There were 20,000+ species of Trilobite over their 270 million years of existence

Their bodies are divided into three parts – the *Cephalon* (head), *Thorax* (middle) and *Pygidium* (tail)

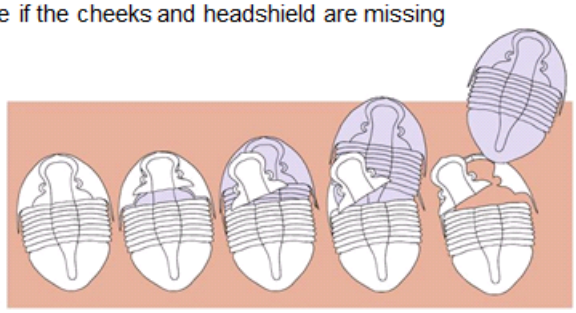
Their name is derived from their three "lobes" – the central axial lobe, and the two lateral pleural lobes

Source: Dr. Sam Gon at trilobites.info

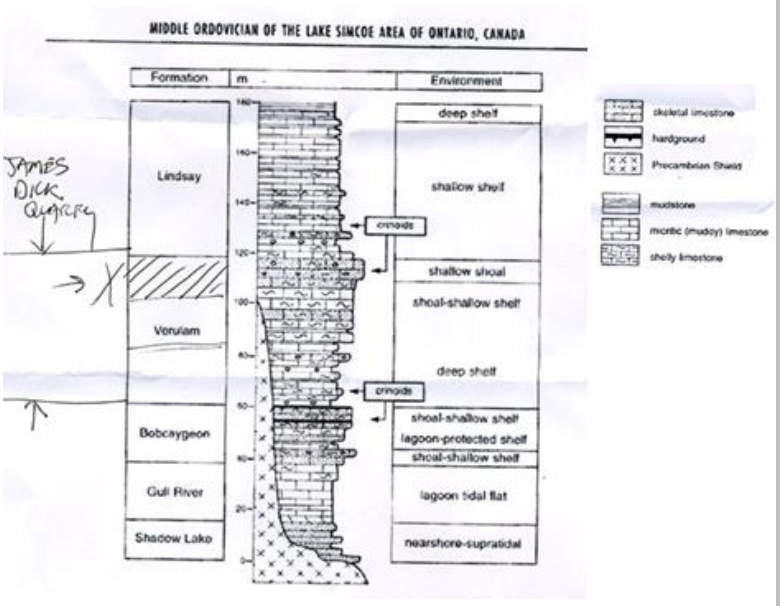
Molting

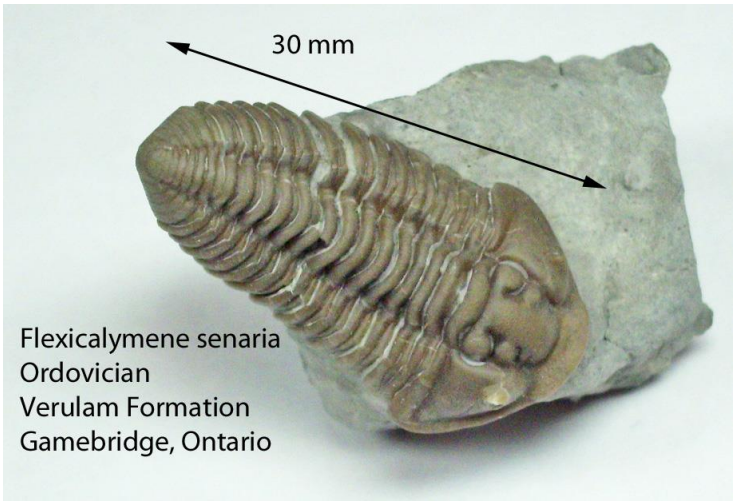
Like all arthropods, Trilobites grew by shedding their old exoskeleton. This process of molting could occur 20 to 30 times during a trilobite's lifetime.

Basically they would bust out their cheeks and crawl out through their head! As a result, you can identify a "molt" from a "real" trilobite if the cheeks and headshield are missing or broken.



Source: Dr. Sam Gon at trilobites.info

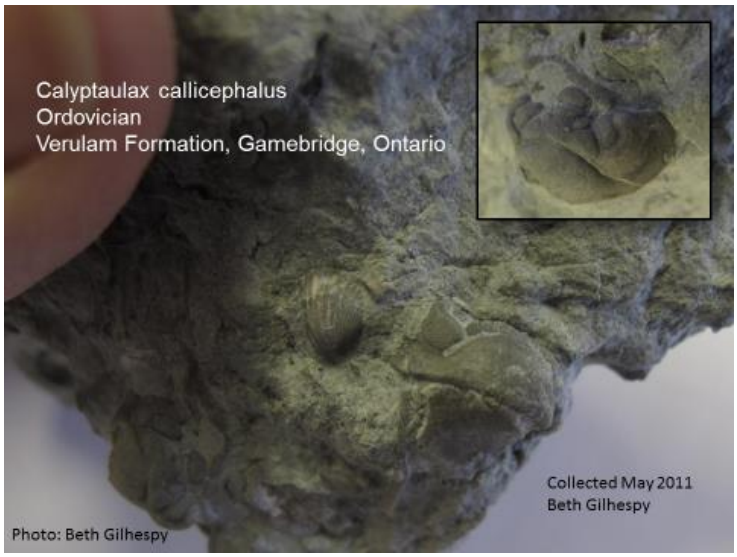




Trilobite (Flexicalymene senaria)
Ordovician
Verulam Formation, Gamebridge, Ontario

"Enrolled"

Collected May 2011
David D'Andrea



The Eyes Have it…

All trilobites had compound eyes with multiple lenses (like flies). While most trilobites had a single cornea covering all of their lenses (holochroal eyes), some trilobites in the Phacopidae group had a cornea on <u>each</u> of their lenses (schizochroal eyes). *The lenses in their eyes were made of calcite!*

Holochroal Eyes

Schizochroal Eyes

http://viewsofthemahantango.blogspot.ca/2012/01/pleurocystites-squamosus-from-verulam.html

Plaesiomys brachiopod

Rhyncotrema brachiopod

Rafinesquina alternata brachiopod

Anazyga recurvirostra brachiopod

"Hash Plate" with Rhyncotrema brachiopod
Ordovician
Verulam Formation, Gamebridge, Ontario