## Geologic Timeline

## Precambrian Era begins (4.6 BYA)

Gneiss and Sioux quartzite form (3.6 BYA)

Bacteria (3 BYA)

Algoman Orogeny (2.65 BYA)

Atmosphere contains oxygen for the First time (2.45 BYA)

Iron formation (2.45 BYA)

Penokean Orogeny (1.8 BYA)

Mid-Continent Rift (1.1 BYA)

Volcanic arcs form NE Minnesota

Green Algae (1.0 BYA)

Volcanoes go dormant in MN (600 MYA)

## Paleozoic Era Begins (545 MYA)

Jellyfish (545 MYA)

Shallow seas form in SE Minnesota (525 MYA)

Trilobites (520 MYA)

Spiders (450 MYA)

FIRST LAND PLANTS (430 MYA)

Sharks (400 MYA)

Ferns (370 MYA)

Cockroaches (330 MYA)

Earthworms (300 MYA)

Largest pine trees (280 MYA)

Pangaea Forms (260 MYA)

## Mesozoic Era Begins (250 MYA)

Small dinosaurs walk the earth (240 MYA)

Archaeopteryx (140 MYA)

First Flowering Plants (125 MYA)

*Tyrannosaurus rex* dies (65 MYA)

## Cenozoic Era Begins (65 MYA)

Grass (55 MYA)

Mammoths (1.8 MYA)

Glaciers Advance (2 MYA)

SE karst topography forms (cave formations) (160 TYA)

Glacial Lake Agassiz (10 TYA)

Glacial River Warren forms (10 TYA)

Nicollet Man (9TYA)