#### SEDIMENTARY

# WISCONSIN DOLOMITE/LIMESTONE

## WISCONSIN DOLOMITE/LIMESTONE

### Age range 385-490 million years old

How the rock Limestone, a sedimentary rock, formed from the shells of marine was formed animals and by precipitation of calcium carbonate on the ocean floor. With time, these materials hardened into limestone. Magnesium in seawater moved through the limestone to replace some of the calcium to form dolomite. Dolomite is also known as dolostone.

- Did you Limestone powder is added to toothpaste to scrub teeth clean.
  - know? The ancient Egyptian pyramids were made of limestone.
    - Most Wisconsin fossils are found in this kind of rock.
    - Marble is metamorphosed from limestone and dolomite.



# WISCONSIN GRANITE

### Age range 1,000-2,700 million years old

How the rock Granite, an igneous rock, forms when magma, rising from deep inside was formed the earth, cools and slowly solidifies below ground. Granite is mostly made of crystals of three rock-forming minerals. The glassy-looking mineral is quartz. The mineral that gives this granite its ruby-red color is feldspar. And the black specks are small crystals of biotite, a dark mica mineral.

- Did you Granite is so tough it can't be scratched with a knife or nail.
  - know? Granite is used for kitchen counters and building stone.
    - The tomb of Ulysses S. Grant is made of Wisconsin red granite.
    - Red granite became the official state rock of Wisconsin in 1971.

#### METAMORPHIC



### Age range 1,700–1,900 million years old

**How the rock** Quartzite is a metamorphic rock that started out as sandstone. **was formed** Intense heat and pressure during deep burial changed the rock to quartzite by fusing the sand grains together.

- **Did you** Quartzite rings like a bell when hit with a hammer.
  - **know?** Wisconsin's Baraboo quartzite was once part of an ancient mountain range.
    - Quartzite is one of Wisconsin's most durable rocks, which is why it's used to line the beds of many railroad tracks.

#### SEDIMENTARY



# WISCONSIN SANDSTONE

## WISCONSIN SANDSTONE

### Age range 460-500 million years old

How the rock Sandstone, a sedimentary rock, started out as loose sand in dunes and was formed on beaches. As the sand was buried beneath thick layers of sediment, the grains were pushed closely together. They were later cemented in place by minerals to become sandstone.

- **Did you** Silicon chips in computers are manufactured from highly purified sandstone.
  - Crushed sandstone is melted to make window glass.
  - Statues and tombstones have been carved from sandstone.

#### SEDIMENTARY



## WISCONSIN SHALE ROCKS

## WISCONSIN SHALE

### Age range 360–500 million years old

### How the rock Shale, a sedimentary rock, is made of small, sheet-like clay particles. was formed The particles remain suspended in fast-moving streams and rivers, settling out in the quiet water of lagoons, lakes, and deep oceans. The clay becomes buried and is compacted into the thinly layered rock we call shale.

- **Did you** Shale is soft enough it can be cut with a knife.
  - know? Shale is ground up and used to make cat litter.
    - Terra-cotta garden pots, bricks, and tile are made of shale.
    - Oil and gas can be found in shale, but not in Wisconsin.



### Age range 360-500 million years old

About the Trilobites (TRY-luh-bites), distant relatives of spiders and horseshoe fossil crabs, lived in the seas that once covered Wisconsin. Most species were small, 1 to 2 inches long, but some grew to 2 feet. They had hard shells that they shed as they grew. Their shells were divided into three ridges (tri-lobes) along the length of their body, giving them their name.

- **Did you** They breathed through gills attached to their legs.
  - know? Trilobites are the only animals to have eyes made of crystals.
    - One trilobite could leave behind multiple shells that could later become fossils.
    - A trilobite was named the state fossil in 1985.