

# MINING

is

# STEM

SCIENCE • TECHNOLOGY • ENGINEERING • MATHEMATICS

**Did you know?** Sometimes rocks from space land on Earth, (most of the time falling in the ocean). These rocks are called meteorites. Millions of years ago, rocks were used for many things (like tools). Today we use rocks to build houses, cars and even planes!

## Question

Missouri's State Capitol is made of Limestone.

The Great Pyramid in Egypt is made of Limestone.

Limestone is used to make paper, glass and paint.



Make a star on the Missouri map, to indicate where you live. Is there a quarry or mine nearby?



**True False**

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I am a **Mine Safety Manager**.  
I make sure everyone is safe.



## MAKE YOUR OWN ROCK!

### Supplies:

- School glue (water-soluble glue) or Elmer's Glue
- Assorted sediments—clean sand (can be aquarium, craft, any type of sand)
- Gravel (less than ½ inch in size)
- "Fossils" (twigs, leaves, seashells, plastic dinosaurs, etc.)
- Wax paper
- Small paper plates or bowls
- Plastic spoons
- Sedimentary rocks, such as sandstones, limestone
- Magnifying glass
- Ruler

Students can also layer their rock ingredients in a small 5-ounce cup, add glue, and stir.

### Directions:

1. Place a small piece of wax paper at each student's workspace.
2. Allow students to place a few spoonfuls of each sediment and fossil samples on the wax paper.
3. Pour glue over sediments and stir with plastic spoon.
4. Place on a mold or on a paper plate and allow to set.
5. Observe sedimentary rocks and features of the rock created.
6. Discuss how your "rock" and the sedimentary rock are alike or different. Measure rock features.
7. If there is a "fossil" in your rock? How does wind, water, sand impact the rock formation overtime?

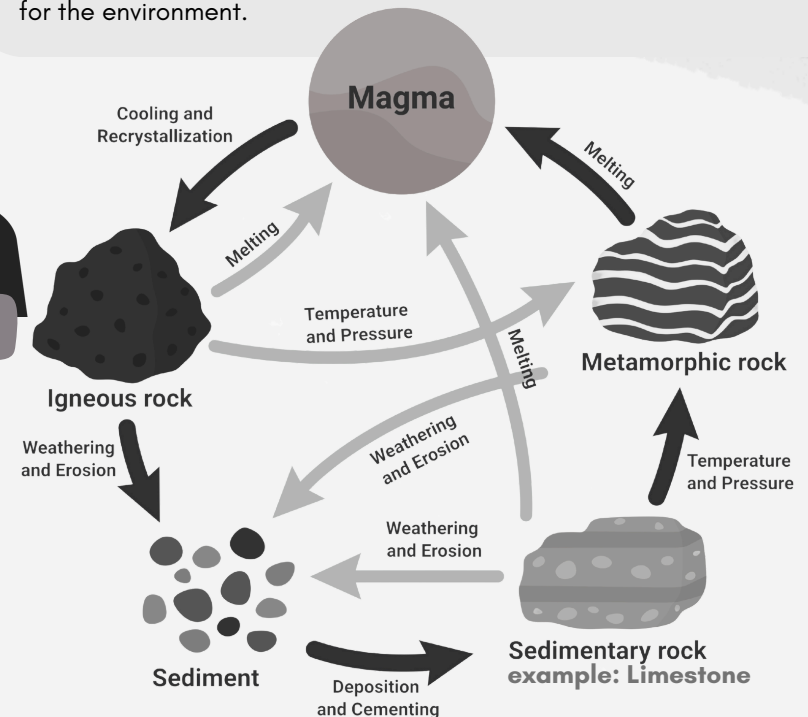
**Draw your face!**

## CAREER CONNECTIONS

**Complete the sentences using the following words:** Geologists, Environmental Scientists, Equipment, Rock

1. \_\_\_\_\_, Engineers and Miners work together to explore \_\_\_\_\_.
2. \_\_\_\_\_ Operators help mine rock and haul crushed stone to be used to make highways, bridges, buildings, and more.
3. \_\_\_\_\_ ensure rock is removed in a way that is safe for the environment.

Answers: Geologists, rock, equipment, Environmental Scientist



**The Missouri Limestone Producers Association (MPLA)** was organized in 1944 to promote the crushed stone operators in Missouri. Now known as **infra**, the organization represents the interests of all crushed stone and sand producers, vital segments of the construction aggregates industry. Learn more at [infra.com](http://infra.com).