

Name That Rock

Much of the habitat around the Edwards Aquifer contains karst. This activity will allow you to find out if a rock is limestone or not in a few simple steps.

1. Begin by gathering your supplies:

- 3 different types of rocks you have collected
- damp paper towel
- pointed object (nail, pick, etc)
- 1 tsp vinegar for each rock

2. Draw each of your rocks in the boxes below. What is different about each one?

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Reaction:	Fizz <input type="checkbox"/>	Fizz <input type="checkbox"/>	Fizz <input type="checkbox"/>
	No Fizz <input type="checkbox"/>	No Fizz <input type="checkbox"/>	No Fizz <input type="checkbox"/>

3. Experiment:

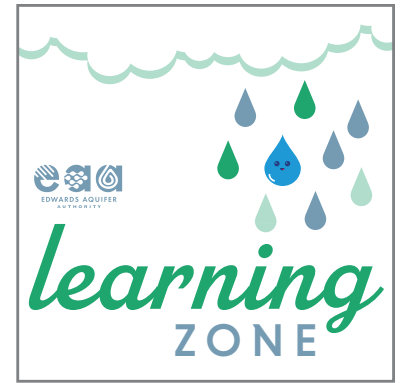
- Clean each of the rocks with the damp paper towel.
- Using your pointed object, scratch the rock to try and scrape powder from the rock.
(Note that not all rocks will be soft enough to produce powder).
- Gather 1 tsp vinegar in your straw or dropper and place on a scratched area of rock.
- Watch what transforms when the acid meets the powder.

4. Conclusion: Do you have limestone?

Did your rock fizz? Then you likely have limestone rock, which is made from calcium carbonate. It is composed of the bones and shells of ancient sea creatures that were once abundant in this region. As such, it is one of the only rocks in this area that will have a chemical reaction when exposed to acid.

Know more:

This process of acid reacting to the rock is how the holes are made in limestone. Rain water is slightly acidic. As it makes its way through the atmosphere it becomes more acidic. It becomes a stronger acid as it goes through the soil and mixes with humic matter in the ground. By the time it reaches limestone it is strong enough to dissolve the rock. As the weak acid reacts with the rock carbon dioxide is released back into the atmosphere forming the bubbles that we see in this experiment.



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