Oolitic Sand Experiment

Supplies

- · Baggie of oolitic sand
- Plastic cup
- White vinegar

Background Information

Great Salt Lake does not have normal sand, it has **oolitic** sand. Oolitic sand is very different from most sand because of how it forms. While normal sand is made of tiny broken up pieces of rock, oolitic sand is made of a mineral called calcium carbonate that solidifies in round layers around tiny pieces of organic material—often a piece of brine shrimp waste—in the Lake. The calcium carbonate comes from limestone in our mountains, and mixing it with acid creates a chemical reaction.

Sand (magnified)



Oolitic sand (magnified)



Activity Instructions

- Pour your oolitic sand into the plastic cup.
- Look closely at the individual grains. Can you tell what shape they are?
- Stir the sand with your finger. How does it feel?
- Pour a small amount of vinegar into your cup of sand, and watch the sand react with the acidic vinegar!
- You can even hold the cup up to your ear and listen to the reaction.

Brainstorm Questions

What kind of reaction did you observe in the activity?

Do you think normal sand would react this way?

Where did the minerals that made the oolitic sand come from?