Geyser Riser

A geyser is a spring that ejects a column of hot water and steam into the air. Here’s how it works:

Below ground hot rock boils water into steam.

The steam builds up, but not much seeps out. (Note the tiny opening at the top.)

Then...POW! The geyser "blows its lid."

Here’s all you need:
- water
- liquid soap
- small bottle with a narrow neck
- Alka-Seltzer™ tablets (broken into pieces)
- large tub or sink
- sponge for clean-up

Let’s Make a Geyser!

Here’s what to do:

1. Fill a bottle almost to the top with very warm tap water. Add a few drops of liquid soap.
2. Set the bottle in a large tub or sink to catch any spills.
3. Drop a broken-up Alka-Seltzer™ tablet into the bottle. Immediately put your palm firmly over the top. If you are doing this in a group, you may want to repeat the experiment so that each person has a chance to do this part of the experiment.

4. Lift your hand and listen again. Do you hear a "pop" sound as the gas rushes out? What makes the soap jet out like that?
5. If you repeat the experiment, try adding more soap and another Alka-Seltzer™ tablet. Is the pressure different? What about the "pop"? Does the soap jet out the same way?

Here’s more about geysers:
Gas expands, especially when it’s hot. Squeeze a balloon that's half full. It pushes back! It is really the air inside pushing out against the balloon walls. Squeeze a full balloon. It really pushes back! Like a balloon, geysers fill with gas, but the walls don't stretch. So the pressure (pushing) inside gets harder and harder until, whoosh! The gas shoots out a hole, taking underground water with it. Some geysers shoot water up to 400 feet in the air! And some erupt all the time. Old Faithful, a famous geyser in Yellowstone Park, erupts on an average of every 75 minutes!

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