



Daily Dose of Science Challenge: Geysers

Question: What are geysers and how do they work?

Background: Hydrothermal features include things like geysers, hot springs, mud pots, and fumaroles. Geysers are underground hot springs that have reached a pinch-point in the “plumbing” system. When the pressure reaches a certain point, it forces the water and steam through the pinch point into a stream that shoots above the surface. *Make sure to watch the full Daily Dose video on Youtube or TheScienceZone.org!*

Activity:

Suggested materials:

- Plastic water bottle
- Alka-Seltzer tablets
- A tub/large plastic container if attempting inside

Vocabulary to incorporate into this lesson:

- Hydrothermal
- Geothermal

Procedure:

1. Crush up Alka-Seltzer tablets
2. Quickly pour them into the full water bottle
3. Cover the opening of the bottle with your hand
4. Count to 5 and remove hand

Explain:

What made the water explode out? How could we make this a bigger splash? A smaller splash? How is this similar to how a geyser acts?

Extension

Try a few more times to see how big or small of an “eruption” you can make. Try with different containers or openings in the bottle.

Connect with us:

Share photos/videos of your most impressive geyser!

Additional resources:

Old Faithful webcam: <https://www.nps.gov/yell/learn/photosmultimedia/webcams.htm>

Yellowstone Facebook: <https://www.facebook.com/YellowstoneNPS/>

Teacher Resources: Distance learning (<https://www.nps.gov/yell/learn/education/learning/index.htm>) and curriculum downloads (<https://www.nps.gov/yell/learn/education/classrooms/curriculummaterials.htm>)

