

Analyzing & Interpreting Data

Activity #2: Old Faithful Eruptions

Background: Old Faithful Geyser in Yellowstone Park erupts somewhat predictably. The pattern of eruptions can be determined by investigating the relationship between the duration of eruptions and the interval (time between eruptions).

Learners can use websites that provide information regarding eruption periods of Old Faithful. Be sure to find information on both the interval and the duration of eruptions. Create a scatter plot to analyze the data. Discuss how to interpret the data and then use the data to predict future eruptions.

Some possible web resources:

- www.geyserwatch.com
- www.geysertimes.org

If current data is not accessible, use this [Old Faithful Geyser Data Sheet](#) (PDF format) from 1999.

Related Crosscutting Concepts:

- [Patterns](#)
- [Cause & Effect](#)
- [Systems & System Models](#)
- [Stability & Change](#)

Related Disciplinary Core Ideas:

- [Core Idea PS2: Motion and Stability: Forces and Interactions](#)
 - [PS2.A: Forces and Motion](#)
 - [PS2.B: Types of Interactions](#)

- [PS2.C: Stability and Instability in Physical Systems](#)
- [Core Idea PS3: Energy](#)
 - [PS3.A: Definitions of Energy](#)
 - [PS3.B: Conservation of Energy and Energy Transfer](#)
- [Core Idea ESS2: Earth's Systems](#)
 - [ESS2.A: Earth Materials and Systems](#)