



Yellowstone National Park Geysers

Name: _____

Date: _____

Hydro means _____

Thermal means _____

Write a definition of hydrothermal feature:

In your own words, describe how a geyser works.

What does a geyser need in order to erupt? Check all that apply

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Heat source | <input type="checkbox"/> Sunlight |
| <input type="checkbox"/> Lungs | <input type="checkbox"/> Pressure |
| <input type="checkbox"/> Strong rock | <input type="checkbox"/> Salt |
| <input type="checkbox"/> Reliable water source | |

What do you think of when you hear the word geyser?



Draw your own geyser above. Include details showing:

- whether it is a cone or fountain geyser
 - how high it erupts
 - how long its eruptions last
- what the plumbing system underground may look like

How does water affect your hometown?

If water is everywhere, why don't all places have hydrothermal features?

What are three (3) ways people can help preserve geysers?

1. _____

2. _____

3. _____

Why are geysers so important to Yellowstone National Park?

Using the math described in the video, predict the next eruption of Old Faithful in the following situation:

- Start time: Old Faithful started erupting (not including pre-play) at 9:50 am
- Duration: It lasted for 4 minutes and 17 seconds (a long eruption)
- Interval: _____
- Use the space below show the math you'd use to determine when the next eruption is predicted to occur. Include how many minutes it will take for Old Faithful's plumbing system to recharge with hot water and pressure so that it can erupt again (the interval).

When do you predict the next eruption of Old Faithful will be?

_____ (+/- 10 minutes)

Thermal Feature Word Search

D T A E H O S A Z X Z E A L F Y Y U T A
 M H J S Z U H A Z O E W H U F J S O E Z
 N J M O H K T K H G A P M Z O V P R I O
 G H K T R B U X S S X A X D N D U T U L
 Z F Z U C Q U H K H R H D O U S O R F F
 C E D F N W Q J H O K I I M S V H O T W
 I A H W M C Y Z L Z N T I E Y S J L W T
 Q R Y N K M Y E B A A R R P A R K D X A
 V T O S H X A U E V J P A O J C G L M W
 Z H B R V F F O R Y L P W Q V U O A P F
 O Q V X E E Y E L L O W S T O N E K D Y
 P U S M G S S N T K Q C D T L Y X R U G
 W A T E R E Y O P Y B C N J C V C N V O
 V K N H R P Z E R L B Q Y M A M Z A Y L
 B E D P T P L D G Z U I Z H N K B T N O
 Y S W S N F A S N F V M K N O G P I A E
 G W R P G L J S I J J E B I M V P O H G
 B Q Y V K W X W R I L G L I V R F N R Q
 U J I R A D R S P A F L Q N N I A A E X
 J C P J Z B I B S M B O H Y A G C L O C

EARTHQUAKES
 GEYSER
 MUDPOT
 PLUMBING
 SPRING
 YELLOWSTONE

FUMAROLE
 HEAT
 NATIONAL
 PRESERVATION
 VOLCANO

GEOLOGY
 HOT
 PARK
 PRESSURE
 WATER

For further exploring: watch Yellowstone webcams (such as one on Old Faithful Geyser)

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

For more information about Yellowstone's geysers and other hydrothermal features, visit:

www.nps.gov/yell

www.nps.gov/yell/learn/kidsyouth/index.htm