Lesson Outline
The Boiling River

Materials:
- Boiling River Team Information
- Great Big Story video: https://www.youtube.com/watch?v=yRNwHoc7bq0&t=29s
- Pencils
- Nature Journal
- Water color paints
- Chromebook

Vocabulary: (write on the board before class)
- shaman
- geothermal

Lesson:

1. **Recap** the expectation of last week: What does it look like to be an explorer, inside and outside? Show the Student Explorer Video

2. Today, we are going to watch and learn about an explorer that has been studying a relatively new area, the Boiling River in the Amazon. As you watch the video...
   - Listen for the two **vocabulary** words for the day. We will have you share what you think they mean afterward.
   - Be thinking, “What would scientists, explorers, or others want to study and learn from the Boiling River?” or “What type of exploration might happen at the Boiling River?”

3. **Watch:** The Amazons Boiling River Kills Anything That Enters

4. **Discussion:**
   a. Weave in the vocabulary as more information and background is shared about Andres Ruzo ([How I found the mythical boiling river in the Amazon](#))
   b. Germinate ideas of possible Boiling River Exploration

5. **Small Group Research:** (5-8 minutes)
   a. In groups of about 3, students will grab a folder of information (Boiling River Teams). After learning what they can about research that has happened at the Boiling River, they will prepare a short (1 min) oral
presentation about their Boiling River Team, the type of work the team did, and why it would be important or fascinating.

6. **Small Group Presentations**: (1 min. each)

7. **Visualize like an explorer**: (Nature Journals)
   a. [https://www.youtube.com/watch?v=M_cvdHZ-III](https://www.youtube.com/watch?v=M_cvdHZ-III) (50 sec.) or [https://www.youtube.com/watch?v=NzzE-Q6hHxw](https://www.youtube.com/watch?v=NzzE-Q6hHxw)
   b. Using websites and video, students will closely observe one species of plants, animals or a water feature that they would expect to see if they explored the Amazon and the Boiling River region.
   c. Using pencil and watercolors, students will carefully paint their chosen species in their nature journal. Students work in their own space without talking during this activity.
   d. Students will also respond to the following questions in writing in their nature journals.
      i. I notice…
      ii. I wonder…
      iii. This reminds me of…
   e. Time permitting, students can leave their journals open on their tables and participate in a gallery walk, observing what their peers chose to paint. Afterward, as a whole group, students can share why they chose the feature they chose to paint.
   f. Connect observations and journals to work of Lewis and Clark-examples (4th-grade History standard)

8. During the next week:
   a. Close Read Article about Rosa Vasquez, one of the Boiling River Team Members [https://spark.adobe.com/page/SD1vAarYBPwnn/](https://spark.adobe.com/page/SD1vAarYBPwnn/)