

TARGETED QUESTIONS

Use this [video](#) as a tool to spark classroom discussions. Encourage students to activate their prior knowledge and apply it to the conversation. Experiences with art can help students draw upon critical and creative thinking skills to practice analyzing, evaluating, and imagining across disciplines.



VISUAL ARTS

Ask Students:

“Which elements in this woodblock print inform the viewer about the culture in which the artwork was made, and how do the elements convey that information?”

Linked to Standard: Grades 7-8. Visual Arts. Responding. 7. Perceive and analyze artistic work. Analyze elements of a work that are indicative of the historical or cultural context in which it was created. (7-8.V.R.07)

Ask students:

“Why do you think the various labels on the artwork were important to include at the time this print was made in 1855? What does that tell us about Japanese culture at this time?”

Linked to Standard: Grades 7-8. Visual Arts. Connecting. 11. Relate artistic ideas and works to societal, cultural and historical contexts to deepen understanding. Identify visual ideas from a variety of cultures connected to different historical populations. (7-8.V.Co.11)

SCIENCE

Ask Students:

“Using your knowledge of gravity’s impact on ocean tides, how do you think the Naruto Whirlpools are affected by low tide and high tide, and why?”

Linked to Standard: Grade 8. MS-ESS1-2. Explain the role of gravity in ocean tides, the orbital motions of planets, their moons, and asteroids in the solar system.

Ask Students:

“Major ocean trenches run along the eastern side of Japan. How might activation of energy from Earth’s interior impact the trenches? How could this then impact the Naruto Whirlpools?”

Linked to Standard: Grade 8. MS-ESS2-1. Use a model to illustrate that energy from Earth’s interior drives convection that cycles Earth’s crust, leading to melting, crystallization, weathering, and deformation of large rock formations, including generation of ocean sea floor at ridges, submergence of ocean sea floor at trenches, mountain building, and active volcanic

ENGLISH LANGUAGE ARTS

Ask Students:

“After watching the video, what’s one thing you most want to know or understand about the Naruto Whirlpools? Which guiding questions would you ask to help you research this topic? What kind of sources would you need to consult to get started?”

Linked to Standard: Grade 8. Writing Standards [W]. Research to Build and Present Knowledge. 7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

Ask Students:

“How would your understanding of the Naruto Whirlpools be different if you only saw a video of them? What if you only saw the artwork of them? What are the advantages and disadvantages of gathering information on a topic through each medium?”

Linked to Standard: Grade 8. Reading Standards for Informational Text [RI]. Integration of Knowledge and Ideas. 7. Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.

CREATIVE CHALLENGES

Encourage students to allow the creative process to guide their responses to the [video](#). Students' final products will differ as they apply their own unique skills, knowledge, and interpretations to the challenge.

VISUAL ARTS

Challenge Students:

“How would you describe the composition of this woodblock print? Select another famous natural landmark and create an artwork of it. In your artwork, employ the same composition principles that are seen in *Awa Province: Naruto Whirlpools*.”

Linked to Standard: Grades 7-8. Visual Arts. Creating. 1. Generate and conceptualize artistic ideas and work. Generate artistic ideas that demonstrate differences in composition principles (e.g., balance, proportion, emphasis) and push the boundaries of what materials can do. (7-8.V.Cr.01)

Challenge Students:

“Generate a list of emotions that the artist of *Awa Province: Naruto Whirlpools* may have hoped to evoke for viewers. Then, study other Ukiyo-e woodblock prints and choose one that you believe elicits the opposite emotions in the viewer. Be prepared to explain why you matched these artworks with the expressed intents.”

Linked to Standard: Grades 7-8. Visual Arts. Presenting. 6. Convey meaning through the presentation of artistic work. Match a piece of artwork with expressed intent (e.g., wanting the audience to feel tension between two positions). (7-8.V.P.06)



SCIENCE

Challenge Students:

“Create two drawings with labels to show: 1). Your prediction of what the water particles might look like in an everyday experience at the Naruto Whirlpools, and 2). what the water particles might look like when thermal energy is either added or removed.”

Linked to MA Learning Standard: Grade 8. MS-PS1-4. Develop a model that describes and predicts changes in particle motion, relative spatial arrangement, temperature, and state of a pure substance when thermal energy is added or removed.

ENGLISH LANGUAGE ARTS

Challenge Students:

“Write a narrative poem (serious or humorous) from the perspective of the water that rushes through these whirlpools. Include figurative and sensory language to explore the water's experience. What does the water think about the people who have been coming to see the whirlpool for centuries?”

Linked to Standard: Grade 8. Writing Standards [W]. Text Types and Purposes. 3. Write narratives to develop experiences or events using effective literary techniques, relevant descriptive details, and well-structured sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an appropriate narrative sequence. b. Use narrative techniques such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another and show the relationships among experiences and events. d. Use precise words and phrases and relevant descriptive details to convey a tone (the writer's attitude toward the subject: e.g., humorous, serious, or ironic) and to convey experiences or events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.

Challenge Students:

“Choose and research a famous natural landmark. Give an oral presentation to the class to share your knowledge. Make a claim about why the landmark is important. Include in your presentation interesting facts, details, and visual examples, like photographs or artworks.”

Linked to Standard: Grade 8. Speaking and Listening Standards [SL]. Presentation of Knowledge and Ideas. 4. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate vocabulary, eye contact, volume, and pronunciation. 5. Integrate multimedia components and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.