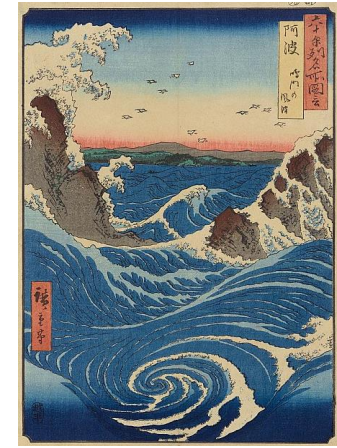


TARGETED QUESTIONS

Develop robust classroom dialogues around what is seen and heard in the [video](#). Students are encouraged to activate their prior knowledge and apply it to the conversation. By prompting the use of higher-order thinking skills, students analyze and evaluate.



VISUAL ARTS

Ask Students:

“Which elements in this woodblock print inform the viewer about the culture in which the artwork was made (Japanese culture), 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, and 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 chains.

ENGLISH LANGUAGE ARTS

Ask Students:

“If you were going to conduct research on the Naruto Whirlpools and/or this artwork, which research questions would you ask? How might those questions lead to additional questions to explore through research?”

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 different mediums?”

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.

RIGOROUS CHALLENGES

Encourage students to respond to the [video](#) in ways that are driven by the creative process. 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 intended the viewer to feel. Then, study other Ukiyo-e woodblock prints and choose one that you believe evokes 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:

“Imagine that you’re planning a trip to Japan to see the Naruto whirlpools. Write a letter to a friend making a claim about why he/she/they should join you on the trip to visit the whirlpools, even if your friend is nervous to travel.”

Linked to Standard: Grade 8. Writing Standards [W]. Text Types and Purposes. 1. Write arguments (e.g., essays, letters to the editor, advocacy speeches) to support claims with clear reasons and relevant evidence.

- Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically in paragraphs and sections.
- Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
- Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
- Establish and maintain a style appropriate to audience and purpose (e.g., formal for academic writing).
- Provide a concluding statement or section that follows from and supports the argument presented.

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.