

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:

“Why do you think the painter, Johann Zacharias Quast, used the specific elements of art that he did (color, form, line, shape, space, texture, value) to convey a desired effect? What might his artistic choices say about the time and society he was living in?”

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:

“How do you think the painter, Johann Zacharias Quast, was influenced by the culture in which he was living, and how does that translate to the artwork *The Bug Plate*?”

Linked to Standard: Grades 7-8. Visual Arts. Responding. 8. Interpret intent and meaning in artistic work. Explain how an artistic work was influenced by the culture or historical context in which it was created. (7-8.V.R.08)

SCIENCE

Ask Students:

“How could a scientist use an artwork from the past, like *The Bug Plate*, to help make a claim about how environmental and genetic factors influence the growth of organisms?”

Linked to Standard: Grade 8. MS-LS1-5. Construct an argument based on evidence for how environmental and genetic factors influence the growth of organisms.

ENGLISH LANGUAGE ARTS

Ask Students:

“What were the key ideas and the main purposes of the video? Why do you think employees at The Clark Art Institute felt this information was important to present?”

Linked to Standard: Grade 8. Speaking and Listening Standards [SL]. Comprehension and Collaboration. 2. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.

Ask Students:

“If you were going to conduct research on this artwork, the insects and arachnids featured on it, and/or the process of producing porcelain, 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.

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:

"In the video we learn that sometimes artists of the era painted/drew insects from their imaginations based on what they knew about real insects. Using your knowledge about insects and the elements of art and principles of design, plan an artwork of an imaginary insect. Be sure to make intentional choices, develop sketches before beginning, and persevere through creative blocks."

Linked to Standard: Grades 7-8. Visual Arts. Creating. 3. Refine and complete artistic work. Apply strategies to work through creative blocks. (7-8.V.Cr.03)

Challenge Students:

"Create an artwork depicting a plate in your own personal artistic style. On *The Bug Plate*, insects and arachnids are the repeating subject. Select a repeating subject that has personal significance to you. Be prepared to explain your artistic choices and influences."

Linked to Standard: Grades 7-8. Visual Arts. Connecting. 10. Synthesize and relate knowledge and personal experiences to make art. Describe and demonstrate influences of personal artistic style and preferences in visual arts. (7-8.V.Co.10)

SCIENCE

Challenge Students:

"Develop a series of artworks to show the process of natural selection (over many generations) for an imaginary insect of your design. Show how the insect's genetic variations of some traits increase its likelihood of surviving and reproducing in a changing environment."

Linked to Standard: Grade 8.MS-LS4-4. Use a model to describe the process of natural selection, in which genetic variations of some traits in a population increase some individuals' likelihood of surviving and reproducing in a changing environment. Provide evidence that natural selection occurs over many generations.

Challenge Students:

"Conduct research on a modern porcelain factory to learn how porcelain is made using basic processes in manufacturing systems, including forming, separating, conditioning, assembling, finishing, quality control, and safety. Pay close attention to human control of these processes and computer control of the processes. Present your findings to the class, and compare the advantages and disadvantages of human vs. computer control of the processes."

Linked to Standard: Grade 8. MS-ETS2-5 (MA). Present information that illustrates how a product can be created using basic processes in manufacturing systems, including forming, separating, conditioning, assembling, finishing, quality control, and safety. Compare the advantages and disadvantages of human vs. computer control of these processes.



Challenge Students:

"Write a creative short story or a dialogue poem about *The Bug Plate*. Characters may include the painter, Johann Zacharias Quast, people working at the Lippert & Haas porcelain factory, and/or the insects and arachnids. Be sure to include elements that make a story successful, like choosing a point of view and using narrative techniques, such as dialogue."

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.

- 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.
- Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.
- 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.
- 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.
- Provide a conclusion that follows from and reflects on the narrated experiences or events.

ENGLISH LANGUAGE ARTS