

## PRE-VISIT ART PACK & CURRICULUM GUIDE

### GLASS: STATES OF MATTER



Amber Cowan, *Rosette in Milk and Ivory*, 2013

Flameworked American pressed glass, reworked stained glass, and mixed media

Courtesy of the artist and Heller Gallery, New York

Students will explore the art and science of glass—an everyday material transformed by artists in surprising ways to address themes of culture, the environment, and society. In the studios, students will construct their own transparent, layered objects.

#### CONNECTS TO

- Science
- Technology
- Innovation
- History
- Social Studies
- Problem-solving
- Environment
- Materials

#### BAM's SCHOOL TOUR PROGRAM GOALS

- Students will actively participate by discussing the artwork, using art vocabulary, and making meaningful, personal connections. Discussions will be associated with the information in the Pre-Visit Art Pack.
- Students will experience a studio activity that reinforces the concepts and/or techniques discussed/ viewed in the galleries resulting in a personally meaningful understanding of the artwork.
- Students will leave the museum knowing that it is a fun, enjoyable place to learn. The Docents will help them understand that they do not need an art authority to tell them how to enjoy and appreciate art.

*The Boise Art Museum's education philosophy encourages the examination and discussion of the visual arts through a holistic approach to art education. Programs support the development of critical thinking skills, visual analysis, exploration and understanding of art techniques as well as the investigation of cultural contexts, art as a form of communication, and multidisciplinary connections. In its touring program, BAM uses arts-based, student-centered, guided-discovery techniques and inquiry strategies that encourage teaching directly from the object and encompass aspects of many education philosophies.*

# TOUR CHECKLIST FOR TEACHERS

Please follow the checklist below in preparation for your tour

## BEFORE YOUR TOUR

### WITH YOUR STUDENTS:

- ☐ DO THE PRE-VISIT ART TALK and review the VOCABULARY words with your students
- ☐ SHARE THE MUSEUM MANNERS with your students.
- ☐ MAKE LARGE NAMETAGS for students with their first names only.

### WITH YOUR CHAPERONS:

- ☐ DESIGNATE YOUR ADULT CHAPERONS. A maximum of **four chaperons are admitted with the group for free.** Chaperons have specific responsibilities and are admitted with the students free of charge. Additional adults pay regular admission and are considered regular visitors in the Museum. (The teacher is counted as one of the four chaperons.)
- ☐ ASK CHAPERONS not to bring infants, younger children, or other siblings.
- ☐ REVIEW THE CHAPERON GUIDELINES with your designated chaperons.
- ☐ PRINT THE CHAPERON PASSES and HAVE YOUR PAYMENT PREPARED for any additional adults. Checks can be made payable to the Boise Art Museum or BAM. We are unable to make change, so please have the exact amount prepared if you are paying with cash. (Often teachers split the admission among all adults to cover the cost. Schools or individuals may pay for the additional adults.) **General admission is \$6; admission for seniors (62+) \$4, and full-time college students is \$3.**
- ☐ PREVIEW THE EXHIBITION with the *Free Teacher Preview Pass* included with your confirmation letter.

**A NOTE TO HELP WITH CHAPERON SELECTION:** All students will receive **Free Return Tickets** at the end of the visit. These tickets allow the student and one guest, to return and visit the Museum for free at a later date. Parents who indicate that they would like to be chaperons after you have designated the maximum limit of four (4) should be encouraged to return with their student at a later date using the **Free Return Ticket**.

## WHEN YOU ARRIVE

- ☐ ARRIVE AT THE REAR EDUCATION ENTRANCE facing Julia Davis Park and the Rose Garden. Do not enter through the front of the museum. Arrive no more than 5 minutes before your scheduled time, as your docents can only let you into the Museum at your indicated tour time. Do not ring the delivery buzzer.
- ☐ DIVIDE YOUR CLASS INTO TWO GROUPS (of approximately 15 students) for their tour.
- ☐ IDENTIFY YOUR CHAPERONS for the docent and MAKE THE PAYMENT for additional adults
- ☐ LEAVE LARGE FIRST AID KITS AND BAGS at the Education Entrance. First aid kits and bags must be smaller than 11" X 15" and must be worn on the front of your body. BAM has multiple first aid kits on site.
- ☐ REMEMBER: The Museum has no indoor or outdoor lunch facilities. Tour groups may bring their lunches and enjoy Julia Davis Park or visit the restaurants at BODO or nearby Boise State University.

## AFTER YOUR TOUR

- ☐ FILL OUT THE EVALUATION CARD that you receive from your tour guides. Your constructive criticism helps us continue to tailor our programs to suit your needs.
- ☐ DO THE MAKE IT! ACTIVITY or use related ideas listed in CURRICULAR CONNECTIONS to connect the tour to your classroom curricula.

## GLASS: STATES OF MATTER

---

### MUSEUM MANNERS FOR STUDENTS

*Please share and discuss these MUSEUM MANNERS with your students.*

*Remembering to follow these manners on your tour at the Boise Art Museum will help keep the artwork safe and make sure everyone has a good experience on the tour.*

- **Empty your mouth.** Food, drink, and gum are not allowed in the museum galleries.
  - **Stay at least 12” away** from the artwork and the walls.
  - **Keep your voices down** while discussing the artwork.
  - **Sit on the floor** during group discussions so everyone can see.
  - **Use indoor behavior**, running and jumping should be left for outdoors.
  - **Leave pens, markers and other writing/art materials at school**, in your backpack or on the bus.
  - **Pay attention and be a tour guide later.** At the end of the tour, your docent will give your teacher *Free Return Tickets* for each student. These tickets allow you and one guest to return and visit the Museum for free. When you return, you can take your guests on a tour using what you learned.
  - **Have fun** and enjoy your visit to the Boise Art Museum.
- 

### CHAPERON GUIDELINES

*Please share and discuss this information with your chaperons.*

*Agreeing to be a chaperon for the Boise Art Museum’s School Tour Program means that you understand the following policies and agree to participate when asked by the docent.*

- **Chaperons should not bring infants, younger children, or siblings** with them on the tour.
- Keep students with the group and encouraging students to **stay at least 12” away from the artwork and walls**.
- Make sure students **sit (not lay) on the floor, keep their hands and feet to themselves** and stay at least 12” away from the walls and artwork.
- Help students to **pay attention and participate** by staying engaged with the group and the tour.
- **Encourage student participation.** If you feel you have a relevant response to the docent’s questions, please share, but allow your comment to complement the students’ ideas.
- The docent may call on you to **help during the studio project**. Pay attention to the instructions and help all students with the process.
- **Additional adults pay regular admission** and are considered independent visitors apart from the school tour. Additional adults are not required to participate in chaperon responsibilities.
- **Cameras, large purses, backpacks, coats and umbrellas should be left on the bus** or stored by the back exit until the end of the visit.
- **Turn your cell phone off.** The use of cell phones is not permitted in the Museum galleries.

# CHAPERON PASSES

BAM offers FREE admission to four (4) adult chaperons with every pre-scheduled tour group. Additional adults must pay regular admission and are considered independent visitors to the Museum. **PLEASE PRINT THIS PAGE BEFORE ARRIVING AT BAM FOR YOUR TOUR.** Designate your four chaperons and have your payment prepared. When you arrive at BAM, please identify your four designated chaperons for the docents. Chaperons must agree to help supervise groups, follow the Museum Manners and participate in the tour activities when asked.

## TOUR CHAPERON 1 \_\_\_\_\_

(TEACHER)

The Boise Art Museum's School Tour Program provides FREE admission to 4 adult chaperons with every group of students. Accepting the responsibilities of being a tour chaperon means that you understand and agree to do the following:

- Accompany their groups at all times while they are touring the Museum.
- Help the docent keep students with the group and at least 12" away from the artwork and walls.
- Assist the students and continue to supervise while in the studios.

*Please do not bring infants, siblings or younger children with you as this diverts your attention from the group.*

**THANK YOU** for helping make BAM's School Tour Program safe and enjoyable for everyone.

*This chaperon pass is only valid during a pre-scheduled school tour.  
Duplicates are not accepted.*

BAM | BOISE ART MUSEUM

## TOUR CHAPERON 2 \_\_\_\_\_

(NAME)

The Boise Art Museum's School Tour Program provides FREE admission to 4 adult chaperons with every group of students. Accepting the responsibilities of being a tour chaperon means that you understand and agree to do the following:

- Accompany their groups at all times while they are touring the Museum.
- Help the docent keep students with the group and at least 12" away from the artwork and walls.
- Assist the students and continue to supervise while in the studios.

*Please do not bring infants, siblings or younger children with you as this diverts your attention from the group.*

**THANK YOU** for helping make BAM's School Tour Program safe and enjoyable for everyone.

*This chaperon pass is only valid during a pre-scheduled school tour.  
Duplicates are not accepted.*

BAM | BOISE ART MUSEUM

## TOUR CHAPERON 3 \_\_\_\_\_

(NAME)

The Boise Art Museum's School Tour Program provides FREE admission to 4 adult chaperons with every group of students. Accepting the responsibilities of being a tour chaperon means that you understand and agree to do the following:

- Accompany their groups at all times while they are touring the Museum.
- Help the docent keep students with the group and at least 12" away from the artwork and walls.
- Assist the students and continue to supervise while in the studios.

*Please do not bring infants, siblings or younger children with you as this diverts your attention from the group.*

**THANK YOU** for helping make BAM's School Tour Program safe and enjoyable for everyone.

*This chaperon pass is only valid during a pre-scheduled school tour.  
Duplicates are not accepted.*

BAM | BOISE ART MUSEUM

## TOUR CHAPERON 4 \_\_\_\_\_

(NAME)

The Boise Art Museum's School Tour Program provides FREE admission to 4 adult chaperons with every group of students. Accepting the responsibilities of being a tour chaperon means that you understand and agree to do the following:

- Accompany their groups at all times while they are touring the Museum.
- Help the docent keep students with the group and at least 12" away from the artwork and walls.
- Assist the students and continue to supervise while in the studios.

*Please do not bring infants, siblings or younger children with you as this diverts your attention from the group.*

**THANK YOU** for helping make BAM's School Tour Program safe and enjoyable for everyone.

*This chaperon pass is only valid during a pre-scheduled school tour.  
Duplicates are not accepted.*

BAM | BOISE ART MUSEUM

## GLASS: STATES OF MATTER

<b>Matter</b>	A physical substance that occupies space and possesses mass. States of matter are distinct forms in which matter can exist. For example: solid, liquid, and gas.
<b>Medium</b>	The material that artists use to create their art. One work of art could be made of one medium or several media.
<b>Opaque</b>	No light can pass through.
<b>Translucent</b>	Allows light but not detailed images to pass through; semitransparent.
<b>Transparent</b>	Allows all the light to pass through so objects behind can be distinctly seen.

### TOUR OBJECTIVES

#### Students will...

- Learn about the ways in which artists use glass to communicate ideas.
- Compare and contrast works of art that use transparent, translucent, and opaque glass in different ways.
- Explore, through group discussion and responses, the scientific concepts involved in the creation of glass.

### ABOUT THE EXHIBITION

#### *A New State of Matter: Contemporary Glass*

Glass has been called a new state of matter because it does not fit squarely within the definition of a liquid, solid, or gas. Its amorphous molecular structure allows it to transition from a liquid to a solid over a wide temperature range, causing it to be nicknamed chameleon matter. This quality makes glass an ideal medium for a wide array of processes including blowing, kiln-forming, casting, and flame-working.

Glass can be translucent, transparent, or opaque; it can refract images or reflect them back to the viewer; it is strong, yet delicate. The ineffable and paradoxical qualities of glass make it perfectly suited for artists to explore fragility, resiliency, transparency, and transformation. This exhibition features work by contemporary artists who are using glass in innovative ways, while presenting its metaphorical possibilities. Their artworks also connect to broader cultural, environmental, political, and spiritual themes.

Each of the artists included in the exhibition examines the material and symbolic potential of glass in unique and revealing ways. For example, artists Charlotte Potter and April Surgent use the ancient process of cameo glass engraving to explore relationships in the age of social media and climate change, respectively. Jeffrey Stenbom utilizes cast glass to unveil the struggles facing the nation's veterans. David Chatt, in a repetitive, labor-intensive process, covers found objects with thousands of miniscule glass beads to discuss family and nostalgia. Amber Cowan repurposes American pressed glass to create her intricate installations that recall a by-gone era.

*Organized by the Boise Art Museum. Sponsored by the Laura Moore Cunningham Foundation, with additional grant support from the Art Alliance for Contemporary Glass*

## GLASS: STATES OF MATTER

*Please view the two reproductions (Pre-Tour Images) with your class and lead a discussion using the following questions as guidelines. There are no “right” answers. The questions are meant to guide the group discussion. Students will revisit and discuss the original works at BAM. The vocabulary in this packet will aid discussion.*

*Research and experience have shown that students feel more comfortable when they can connect with something familiar once they arrive at the Museum. The students are excited to find “their” works of art while they are at BAM. They enjoy sharing their insights from the classroom discussion with the docent and making valuable comparisons between the textbook-like reproductions and the original works of art.*

---

Amber Cowan, ***Rosette in Milk and Ivory***, 2013

Flameworked American pressed glass, reworked stained glass, and mixed media

Courtesy of the artist and Heller Gallery, New York

- What shapes and objects do you recognize in this sculpture?

The artist who made this work of art is Amber Cowan. She creates her sculptures reusing glass she finds in thrift stores.

- Have you ever made art out of objects you found? What did you make?
- When you think of glass, what types of objects come to mind? Are those objects transparent (see-through) or opaque (not see-through)?
- Why do you think the artist made this sculpture from only opaque glass? How would it be different if it were transparent?

Cowan collects old pieces of glass and then rearranges the pieces to make her sculptures.

- Why do you think the artist chose to use old glass instead of making new glass?
- What message do you think she might be trying to communicate by rearranging and reattaching the pieces?

Mary Shaffer, ***Water Wheel***, 2018

Slumped and hot glass with found and fabricated metal

Courtesy of the artist

To create her artwork, Mary Shaffer attaches glass to tools she finds. This work of art is made from a water wheel. Water wheels are machines that convert the energy of flowing or falling water into useful forms of power.

- Does the shape of this glass remind you of anything? Why do you think Shaffer chose to make glass in this shape to attach to the water wheel?

Mary Shaffer uses glass to change the function (purpose or usefulness) of tools.

- How has the function of this water wheel changed?

***The two images may also be accessed through our website, [www.boiseartmuseum.org](http://www.boiseartmuseum.org) under Education – BAM Teachers – Pre-Visit Art Packs – [Glass: States of Matter](#)***



## GLASS: STATES OF MATTER



Amber Cowan, ***Rosette in Milk and Ivory***, 2013  
Flameworked American pressed glass, reworked stained glass, and mixed media  
Courtesy of the artist and Heller Gallery, New York

*The two images may also be accessed through our website, [www.boiseartmuseum.org](http://www.boiseartmuseum.org)  
under Education – BAM Teachers – Pre-Visit Art Packs – **Glass: States of Matter***

## GLASS: STATES OF MATTER



Mary Shaffer, ***Water Wheel***, 2018  
Slumped and hot glass with found and fabricated metal  
Courtesy of the artist

*The two images may also be accessed through our website, [www.boiseartmuseum.org](http://www.boiseartmuseum.org)  
under Education – BAM Teachers – Pre-Visit Art Packs – [Glass: States of Matter](#)*



## GLASS: STATES OF MATTER

### Social Studies / History:

- Cameo glass was first produced by the Romans in the 1st century. Have students research how cameo glass has been used since then. Have them design their own cameo glass work of art based on one of the glass pieces found in their research.
- Amber Cowan uses pressed glass in her artwork. Encourage students to research the American Pressed Glass Movement and common motifs. Have students make their own sculpture out of paper based on these shapes. Each student should choose one color of paper to make their creation.
- Artist April Surgent makes cameo glass images of ice. Cameo has been used to honor and remember those who have died. Discuss with students why Surgent may have chosen the cameo process to represent her ice imagery. What other objects, animals, or places would they remember through cameo? Have them write a short essay or give a presentation to explain their choice.

### Language Arts:

- Charlotte Potter creates cameo portraits that reference her online social media networks. She is interested in mapping relationships and showing the connections that form like webs. Have students interview one another and find their commonalities: Were they born in the same place? Do they like similar things? Do they know some of the same people? Have students draw small thumbnail images that represent themselves with blue colored pencils (to reference the traditional cameo process). Connect these images with string to create your own classroom web.
- Jeff Zimmer is a glass artist who creates multi-layered works based on mysterious images. Have students choose a work of art from his website ([www.jeffxzimmer.com](http://www.jeffxzimmer.com)) and write a fictional story inspired by the imagery.

### Science:

- Explore your school and encourage groups of students to find transparent, translucent, or opaque materials. Have them take pictures or write them down. See who can find the most of each category!
- Have students research states of matter. Have them create a matching game with different materials and objects that they need to pair to their respective states of matter.
- Artist April Surgent uses her artwork to draw attention to climate change. Have students read the following article from Glass Magazine about Surgent's work and how it ties to her research in Antarctica and Hawaii (<https://www.glassartmagazine.com/independent-artist/item/1950-independent-artist-april-surgent-fusing-art-and-science-through-cameo-engraving>). Assign students a region of the world to research how climate change has impacted the known environment and how people and animals are adapting.
- Steffen Dam creates specimen cabinets out of glass. Have students research the history and use of specimen cabinets. What sorts of specimens or objects would they collect? Have them write a proposal for their own cabinet and create a layout of how they would organize it.

## GLASS: STATES OF MATTER

### Math:

- Artist David Chatt covers found objects like boom boxes and tables in glass beads. Have students choose an object in your room and calculate how many beads they would need to completely cover it.
- American pressed glass used molds to create patterns. These patterns are indexed online (<http://www.eapgs.org/patterns/index.php>). Encourage students look these shapes for inspiration in creating their own shapes. Cut these shapes out of paper and have students arrange their shapes in different patterns.

### Technology:

- Glass has been crucial to the development of technology in our modern world. Have students research the impact of glass on technology (such as fiber optic cables or cell phone screens) and have them present to the class.
- Norwood Viviano creates glass city maps through 3D printing. He connects cities to their main form of industry. Have students choose a technological industry and research a corporation's impact on their city. Encourage them to discuss how jobs, city blocks, and the environment have changed.
- Mary Shaffer takes functional objects and alters them with glass so that they no longer serve their original purpose. Choose a form of technology (it can be simple like a wheel or complex like a computer) and have students alter it so that it no longer functions the same way. Have them explain their choices—did their change somehow reference the original function? How does it tie in?

### Arts:

- Play with layering transparent, translucent, and opaque materials such as paper, frosted mylar, and clear plastic bags. Create drawings on all three layers. Layer these together to create a composition. How do your drawings connect? Are you telling a story through your work of art?
- Erica Rosenfeld collects multiples and unique, small objects for her terrarium-like creations. Have students make a work of art where they collect multiples and arrange them in a structure. Encourage students to write an artist statement addressing the following questions: What do their multiples have in common? What type of structure did they make and does it connect to a concept? How and where will they install their work of art?

## GLASS: STATES OF MATTER

### **RESOURCES**

<https://www.thoughtco.com/glass-composition-and-properties-608351>—Thought Co. article on the properties and composition of glass with helpful links to articles regarding history, sociology, recycling, and chemistry

<https://www.collectorsweekly.com/glassware/vaseline-glass>—Article on antique Vaseline glass or uranium glass

<https://www.theatlantic.com/technology/archive/2018/04/humankinds-most-important-material/557315/>—Article detailing how glass has impacted science and technology

Barbara Purchia. *Glass Art: 112 Contemporary Artists*. Schiffer. November 28, 2016. ISBN-13: 978-0764351884.

### **ARTISTS**

<http://www.davidchatt.com/>—Artist David Chatt’s website (contains nudity—please preview before showing to students)

<https://ambercowan.com/home.html>—Amber Cowan’s website

<https://www.aprilsurgent.com/>—April Surgent’s website

<https://www.charlottepotter.com>—Charlotte Potter’s website

<http://www.jeffxzimmer.com/>—Jeff Zimmer’s website

<https://steffendam.dk/>—Steffan Dam’s website

<https://www.norwoodviviano.com/>—Norwood Viviano’s website

<http://www.maryshaffer.com/>—Mary Shaffer’s website

<http://www.hellergallery.com/erica-rosenfeld/>—Heller Gallery website featuring Erica Rosenfeld

## GLASS: STATES OF MATTER

### **MUSEUMS, GALLERIES, AND ORGANIZATIONS**

<https://www.cmog.org/>—Corning Museum of Glass website

<https://www.museumofglass.org/>—Museum of Glass (Tacoma, WA)

<http://www.pilchuck.com/>—Pilchuk Glass School

<http://www.hellergallery.com/>—Heller Gallery (glass gallery in New York)

<http://www.bullseyeglass.com/>—Bullseye Glass Company

<https://www.habatat.com/>—Habatat Galleries (glass gallery in Michigan)

<https://contempglass.org/>—American Alliance for Contemporary Glass

<http://www.craftschools.us/>—The Craft School Experience

Diane Wright. *Glass: Masterworks in Glass from the Chrysler Museum of Art*. Chrysler Museum of Art. May 17, 2017. ISBN-13: 978-0692788356.

### **PROCESSES**

<https://www.pbs.org/video/more-fire-glass-studio-1ltlvo/>—More Fire Glass Studio PBS Video

<https://www.cmog.org/research/all-about-glass?f%5b0%5d=bundle%3Avideo&keyword=glassmaking%20processes>—Corning Museum of Glass collection of short videos on glass making processes

<https://www.pbs.org/video/northwest-now-nwn-823-museum-glass/>—Northwest Now (PBS) video on the Museum of Glass in Tacoma, WA

<https://youtu.be/foi10wJpT5I>—Informational video from MocomiKids explains how plate glass and blown glass are made

<https://teenkidsnews.com/tkn-news/science/how-is-glass-made/>—Informational article and video on how glass is made

Benjamin W. Cobb. *Kids Design Glass*. University of Washington Press. October 19, 2009. ISBN-13: 978-0295989372.

Cheryl Jakab. *Glass (Artists at Work)*. Smart Apple Media. January 1, 2007. ISBN-13: 978-1583407608.

## GLASS: STATES OF MATTER

*To extend the museum experience  
and connect the tour to your curriculum,  
consider using or adapting this lesson plan suggestion*

### Window Clings

#### Introduction

Glass artists often use combinations of transparent, translucent, and opaque. Some utilize light sources like light boxes or the sun to change the way their artwork is viewed. Using paint and glue, students will design their own window clings that can be displayed on classroom windows or at home.

#### Materials

- Paper
- Marker, pen or dark pencil
- Plastic page protectors (or plastic sandwich baggy)
- Glue
- Dish soap
- Food coloring, watercolor paint, or acrylic paint
- Paintbrush
- Puff paint (optional)



#### Instructions

- Have students draw their design on the paper with a marker or dark-colored pen or pencil.
- Slip their designs in a plastic page protector or plastic sandwich baggy.
- Measure out 2T of white school glue and put it into a bowl. Add 2 drops of dish soap. Stir in liquid or gel food coloring. You can also use liquid watercolor or acrylic paint (acrylic paint will create a more opaque window cling). The more color used, the more vibrant the color will be. This recipe can be increased to create more window cling paint depending on how many students are participating.
- Students should apply a thick layer of paint to their design with a paintbrush. The thicker the paint, the more sturdy the window cling and the easier it peels off of surfaces.
- As an option, students can outline their window cling with puff paint to create neater edges.
- Let the window cling dry overnight. Be sure to look underneath the template to be sure the paint is no longer wet.
- Peel the window clings off—do so slowly and gently. If the window cling is too difficult to pull off, it can be placed in the freezer for a few hours to firm it up.

#### **EXTENSION:**

##### **Work together as a group**

Have your students decide on a theme and assign each student an object to design. Working together, create a window cling scene as a classroom.