

BERGSTROM MAHLER MUSEUM OF GLASS LEARNING TIED TO WISCONSIN EDUCATION STANDARDS

Wisconsin Standards

Art & Design Standards

Standard AA 1: CREATE– Students will generate, develop, and refine artistic work.

Artistic Process	K-2 (e)	3-5 (i)	6-8 (m)	9-12 (h)
Create	A.A.Cr.1.e: Investigate Explore studio skills, techniques, materials, tools, and elements and principles of art and design.	A.A.Cr.4.i: Investigate Experiment with studio skills, techniques, materials, tools and elements and principles of art and design through practice.	A.A.Cr.7.m: Investigate Investigate and expand knowledge of studio skills, techniques, materials, tools, and elements and principles of art and design.	A.A.Cr.10.h: Investigate Engage in critical thinking, problem solving, and research through elements and principles of art and design studio practices and processes.
	A.A.Cr.2.e: Plan Describe process and choices while creating art.	A.A.Cr.5.i: Plan Brainstorm, discuss, and sketch ideas to solve an art problem.	A.A.Cr.8.m: Plan Generate original solutions through exploration and practice.	A.A.Cr.11.h: Plan Formulate original concepts by practice, experimentation, and revision.
	A.A.Cr.3.e: Make Create works of art that introduce students to media, care of tools, and basic craftsmanship skills.	A.A.Cr.6.i: Make Utilize more complex media to express an idea and expand knowledge of tools and techniques, with attention to craftsmanship.	A.A.Cr.9.m: Make Engage in experimentation with the expressive qualities of media, tools, and techniques with refined craftsmanship.	A.A.Cr.12.h: Make Develop unique, well-crafted works of art utilizing deliberate choice of media, tools, and techniques.

Art & Design Standards

Wisconsin Standards

Standard AA 2: PRESENT- Students will develop, refine, and convey meaning through the production and presentation of artistic work.

Artistic Process	K-2 (e)	3-5 (i)	6-8 (m)	9-12 (h)
Present	A.A.Pr.1.e: Develop Meaning Explore and develop meaning by viewing personal, historical, and contemporary art.	A.A.Pr.4.i: Develop Meaning Explore and make connections through comparison of artwork from personal, historical, and contemporary artists.	A.A.Pr.7.m: Develop Meaning Convey meaning and intent through the presentation of personal, historical, and contemporary work and formulation of exhibition narratives.	A.A.Pr.10.h: Develop Meaning Curate a body of work incorporating personal, historical, and contemporary art to communicate one or more points of view.
	A.A.Pr.2.e: Communicate Explain artwork through verbal and/or written descriptions using art and design vocabulary.	A.A.Pr.5.i: Communicate Using art and design vocabulary, communicate ideas and artistic process through verbal and written descriptions.	A.A.Pr.8.m: Communicate Communicate the contextual meaning of artwork in written and verbal statements.	A.A.Pr.11.h: Communicate Analyze and describe the impact that an exhibition or collection has on personal awareness of social and cultural beliefs, and contextual understandings.
	A.A.Pr.3.e: Share Share artwork through a presentation or exhibit.	A.A.Pr.6.i: Share Create, share, and exhibit pieces from an ongoing artistic portfolio.	A.A.Pr.9.m: Share Curate and exhibit a portfolio of work to convey artistic importance or meaning.	A.A.Pr.12.h: Share Curate and exhibit artwork for presentation, portfolio development, or preservation.

Art & Design Standards

Wisconsin Standards

Standard AA 3: RESPOND- Students will critically interpret intent and meaning in order to evaluate artistic work.

Artistic Process	K-2 (e)	3-5 (i)	6-8 (m)	9-12 (h)
Respond	A.A.R.1.e: Describe Identify details, basic elements, and subject matter of an artwork.	A.A.R.6.i: Describe Describe details, subject matter, and the context of an artwork.	A.A.R.11.m: Describe Describe details, subject matter, context, and the formal characteristics of an artwork using art and design vocabulary.	A.A.R.16.h: Describe Describe the commonalities within a group of artists or visual images attributed to a particular type of art, timeframe, or culture.
	A.A.R.2.e: Analyze Distinguish between reality and imaginary when describing a work of art.	A.A.R.7.i: Analyze Compare and contrast how the use of media can influence ideas.	A.A.R.12.m: Analyze Compare and contrast the use of media, design principles, and context to influence ideas, emotions, and actions.	A.A.R.17.h: Analyze Distinguish the qualities and relationships between the components, style, and preferences communicated by media, design, artworks, and artists.
	A.A.R.3.e: Interpret Use details and subject matter to interpret an artwork's mood or meaning.	A.A.R.8.i: Interpret Use details, subject matter, and context to interpret an artwork's mood or meaning.	A.A.R.13.m: Interpret Interpret the formal and expressive qualities in a work of art or design and integrate those qualities into their own work.	A.A.R.18.h: Interpret Explain the intent, meanings, and impacts of different media works of art and design, considering complex factors of context and perspective.
	A.A.R.4.e: Inquire Determine the artist's intent by identifying the details and subject matter.	A.A.R.9.i: Inquire Determine an artist's intent by identifying the details, subject matter, and context of an artwork.	A.A.R.14.m: Inquire Compare and contrast the intent of art based on an analysis of subject matter, details, media, and context.	A.A.R.19.h: Inquire Hypothesize the intent behind a work or a collection of art works and cite evidence to support an interpretation.

Wisconsin Standards

Art & Design Standards

Standard AA 4: CONNECT - Students will relate their artistic work with prior experience and external context.

Artistic Process	K-2 (e)	3-5 (i)	6-8 (m)	9-12 (h)
Connect	A.A.Cn.1.e: Interdisciplinary Recognize and demonstrate relationships between art and design, and other disciplines.	A.A.Cn.4.i: Interdisciplinary Describe and demonstrate relationships between art and design, and their learning in other disciplines.	A.A.Cn.7.m: Interdisciplinary Analyze works of art and design that illustrate interdisciplinary perspectives.	A.A.Cn.10.h: Interdisciplinary Apply interdisciplinary perspectives in own artistic work.
	A.A.Cn.2.e: Career Connections Recognize art and design careers.	A.A.Cn.5.i: Career Connections Identify art and design processes in a variety of careers.	A.A.Cn.8.m: Career Connections Analyze art and design processes in a variety of careers.	A.A.Cn.11.h: Career Connections Research or experience options in art and design careers.
	A.A.Cn.3.e: Cultural, Social, and Historical Awareness Understand that people from different times and places have made art and design for a variety of reasons.	A.A.Cn.6.i: Cultural, Social, and Historical Awareness Explain how art and design are used to communicate ideas, beliefs, and values of groups and individuals.	A.A.Cn.9.m: Cultural, Social, and Historical Awareness Analyze how art and design, and viewers' responses to them, have been influenced by the times, places, traditions, and cultures.	A.A.Cn.12.h: Cultural, Social, and Historical Awareness Compare purposes of art in a variety of social, cultural, and historical contexts.

Wisconsin Academic Standards

Science Standards

Science: Crosscutting Concepts (CC) — Energy and Matter

Standard SCI.CC5: Students use science and engineering practices, disciplinary core ideas, and an understanding of **energy and matter** to make sense of phenomena and solve problems. Performance Indicators (by Grade Band)

Learning Priority	K-2	3-5	6-8 (m)	9-12 (h)
CC5: Energy and Matter	SCI.CC5.K-2 Students observe objects may break into smaller pieces, be put together into larger pieces, or change shapes.	SCI.CC5.3-5 Students understand matter is made of particles and energy can be transferred in various ways and between objects. Students observe the conservation of matter by tracking matter flows and cycles before and after processes, recognizing the total mass of substances does not change. Note: In this grade band, students are not expected to be able to differentiate between mass and weight.	SCI.CC5.m Students understand matter is conserved because atoms are conserved in physical and chemical processes. They also understand that within a natural or designed system the transfer of energy drives the motion and cycling of matter. Energy may take different forms (e.g. energy in fields, thermal energy, and energy of motion). The transfer of energy can be tracked as energy flows through a designed or natural system.	SCI.CC5.h Students understand that the total amount of energy and matter in closed systems is conserved. They describe changes of energy and matter in a system in terms of energy and matter flows into, out of, and within that system. They also learn that energy cannot be created or destroyed. It only moves between one place and another place, between objects and/or fields, or between systems. Energy drives the cycling of matter within and between systems. In nuclear processes, atoms are not conserved, but the total number of protons plus neutrons is conserved.

- States of Matter & Thermal Shock
 - Amorphous solid
- Glass=Silica + oxides (Sodium oxide & calcium oxide)
 - Lowers the melting point

Wisconsin Academic Standards

Social Studies Standards

Behavioral Science

Standard SS.BH1: Wisconsin students will examine individual cognition, perception, behavior, and identity (Psychology).
Performance Indicators (by Grade Band)

Learning Priority	K-2 (e)
BH1.a: Individual cognition, perception, and behavior	SS.BH1.a.2 Understand we are individuals influenced by our relationships and environments.
BH1.b: Personal identity and empathy	SS.BH1.b.2 Identify situations and places that impact a person's emotions.

- Identify situations and places that impact a person's emotion
 - Healing power of viewing and doing art

Other ways to connect the museum to in school learning

- Environmental Science
 - Flora and Fauna Paperweights
- German Language & History
 - Germanic Glass Collection
- English Class
 - Ties to Walt Whitman and Paul Stankard (Paperweight Artist)
- French lesson
 - Ties to French factories
 - Baccarat
 - Clichy