Museum Tour + Activity Options
2023-24 School Year

**Textiles - Mystery Fabric**
Recommended Grades: 2 - 4
Activity duration: 30 min.
Following our tour which highlights information on the history of textile production in this region, we will talk about the difference between cotton/wool fabrics and woven/knit fabrics. Looking closely at the different materials under a microscope and with magnifying glasses, students will hone their observational skills and, working with a small group, "investigate" a number of mystery fabrics to see if they can identify them based on what they have learned.

**STEAM Challenges**

**Shoe Design**
Recommended Grades: 2-5
Activity Duration: 30-35 min.
Following our tour which highlights information on the history of the shoe making industry in this region, students are divided into small groups. Using the design thinking process, collaboration, and limited construction materials, students are challenged to create a shoe of their own that can overcome a number of obstacles. Creativity and perseverance are the key to success!

**Bridge Building**
Recommended Grades: 4+
Activity Duration: 45 min.
Following the museum tour which highlights information on the Androscoggin River and the canal system that surrounds the Bates Mill complex, students are challenged to build a bridge using simple construction materials. Following the design thinking process, students must build a bridge that can span a model canal and hold up to 100 pennies in a plastic cup. Find out whose design can hold the most weight!

**Water Wheel Design**
Recommended Grades: 6+
Activity Duration: 45 min
Following the museum tour which highlights information about the Androscoggin River, canal system and power station complex, students are challenged to create a functioning water wheel using simple construction materials. Following the design thinking process, students must create a drawing, prototype and test their design and improve upon their results through redesign and testing.
Museum Tour + Activity Options Continued

**Coding Activities**

**Historic Coding**
Recommended Grades: 4+
Activity During: 30 min.
Following the museum tour which highlights early innovation in the creation of power looms and early coding systems to control them, students are challenged to create a message using cards and hole punches. Through hands-on experiential learning students will discover the connection between Industrial Revolution age machinery and modern computing.

**Binary Basics**
Recommended Grades: 1-3
Activity Duration: 30
Following the museum tour which highlights early innovation in the creation of power looms and early coding systems to control them, students are challenged to create a bracelet using string and beads showing their name in binary code.