

TEACHER'S GUIDE



TOURS FOR SCHOOLS AND YOUTH GROUPS

503 SOUTH STREET WATERLOO, IOWA ▪ WWW.GROUTMUSEUMDISTRICT.ORG



GROUT
MUSEUM
DISTRICT

Touch It. See It. Feel It.



WELCOME

Prepare for an exciting journey experiencing living history, learning about simple machines, getting up close and personal with reptiles or discussing the rich history of immigration and migration in the area.

Everything you need to plan a field trip to the Grout Museum District is inside, including pricing, how to make a reservation and a list of programs and demonstrations. *All programs follow Iowa Core Curriculum guidelines.*



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RATES

Children (Pre-school - Twelfth Grade)

- \$2.50 per child per program
- Preschool - First Grade programs: 30 Minutes
- Second - Twelfth Grade programs: 45 minutes

Day Away

Choose at least one program from each site to receive a 25% discount!

- \$7.50 per child
- 9:30am - 2:00pm
- Choose 4 different programs
- Includes a lunch break

Teacher/Chaperone

One adult is **REQUIRED** for every 8 children and will be admitted free. All bus drivers will also receive free admission. Additional adults will be charged the child rate depending upon program(s) selected.

GUIDELINES

- Minimum group of 15 required
- One adult required for every 8 children
- Reservation **MUST** be made at least two weeks prior to tour
- Reservations are booked on a first-come, first-served basis
- Dates cannot be "held"
- Family memberships are **NOT** allowed in place of student cost
- Adults/chaperones **ARE** allowed to use their membership
- Tours at the Grout Museum, Iowa Veterans Museum and Russell House are available Tuesday-Friday
- Tours at the Imaginarium are available Wednesday-Friday



HOW TO MAKE A RESERVATION

Please have the following information ready:

- Museum programs to be reserved
- Date and time of arrival (have alternate dates)
- Name of school and teacher in charge
- Complete mailing address and telephone number of school
- Grade level and number of students, teachers and chaperones
- Special needs (disabilities, hearing/sight impaired)

Call 319-234-6357 Monday - Friday 9am - 5pm

PRIOR TO YOUR TRIP

- You will receive a confirmation packet detailing costs, maps and parking directions
- Make a copy of the map and parking instructions for the bus driver. Bring the confirmation sheet to front desk upon arrival
- Have **ONE CHECK** for the entire amount. Teacher will be reimbursed for any absences
- Make check payable to Grout Museum District
- Check confirmation form to confirm in which building the tour will start
- Designate a chaperone for each group of 8 children. That chaperone must stay with those 8 children at all times
- Name tags for each child and adult are greatly appreciated

UPON ARRIVAL

- Programs begin promptly as scheduled, so please be on time
- If extra time is needed before the program please arrive early
- Upon arrival museum staff will greet the group
- One teacher must know the exact number of children and adults attending and have payment and confirmation form ready

Following these guidelines and instructions will assure a smooth admission process and provide a quality educational experience.



GROUT MUSEUM OF HISTORY & SCIENCE

PIONEER HALL

Grades Pre-5

Pioneer Hall helps students visualize pioneer times. With a variety of displays such as a recreated 1850's general store, 1846 cabin, tool shed, carpenter shop and blacksmith shop, students get a taste of true pioneer life.

NATIVE AMERICANS

Grades Pre-5

Learn about the lives of Native Americans, past and present, by: discussing the migration of Native Americans in Iowa, learning ways they communicated, viewing artifacts and pictures from local tribes, and playing games Native American children used to play. Also learn and perform Native American powwow dances.

SCAVENGER HUNT

Grades 2-6

Self-guided (with teacher and museum staff chaperone) tour the Grout Museum and Sullivan Brothers Iowa Veterans Museum while searching for answers about Waterloo's history and development and the different military conflicts.

ENGINE OF THE HEARTLAND

Grades 4 & up

Students will see the evolution of Waterloo from a small county-seat town into a Midwest industrial center through a series of displays and models of local industries such as John Deere, Rath Packing and the Illinois Central Railroad Roundhouse. Progression of safety in the workplace is also discussed.

WONDERS OF THE SKY

Grades 2-5

Does the sun really "set"? Who guards the North Star? These questions and more will be answered as students journey to the night sky and beyond in the planetarium. Return to Earth to make a star locator and take home your own space activity book.

PLANETARIUM SHOWS

Grades K-1

Maximum thirty-five students per session

View the familiar North Polar constellations (Big Dipper, Little Dipper, Draco the Dragon) plus a seasonal constellation. Listen to the story, "My Place in Space".

PLANETARIUM SHOWS

Grades 2 & up

Maximum forty-five students per session

Visit the planetarium and view constellations visible for the current month. Listen to the myths that accompany these fascinating pictures in the sky.

PLANET PEEK

Pre-1

Maximum thirty-five students per session

View the familiar North Polar constellations (Ursa Major and Ursa Minor, plus a seasonal constellation (Orion the Hunter, Leo the Lion or Scorpius the Scorpion). Learn about the planets through story, slides and a planet "show".





BLUEDORN SCIENCE IMAGINARIUM

DEMONSTRATIONS

Maximum thirty students per session

SHELLS, SCALES & SPINES

All ages

This interactive demonstration showcases cold-blooded reptiles, including several live specimens from the Imaginarium's menagerie. Touch, see and feel the different types of reptile and discover what makes each unique. Concepts: basic facts and animal classification and behaviors.

SUPER COLD

Grades 3 & up

Using liquid nitrogen, learn how temperature is related to the three phases of matter: solids, liquids and gases. The mind shattering experiments that students will see during this demonstration will blow them away! Concepts: Phase changes, temperature, and contraction/expansion.

INCREDIBLE EGGS

All ages

Candling, spinning and swimming: are these characteristics associated with eggs? Concepts: Center of gravity, inertia, density and pressure distribution.

SNAKES ALIVE!

Grades 1 & up

This demonstration teaches basic interesting facts about snakes, and is a good way to supplement a reptiles unit! Concepts: Basic facts and animal behaviors.

KITCHEN SCIENCE

Grades K-6

Get students excited about science as they watch and participate in experiments using materials found in everyday life. Concepts: Fire, air pressure, acids/bases and chemical reactions.

COMBUSTION

Grades 1 & up

Fire is a chemical reaction that scientists call combustion! Be amazed by this explosive demonstration while watching amazing effects like flash powder, flash paper and exploding hydrogen balloons. Fire safety is stressed throughout. Concepts: Fire, oxygen, temperature, fuel and explosions/concussions.

CREEPY CRAWLIES

All ages

Find out why hissing cockroaches hiss, count the legs on a millipede, see how furry a giant tarantula really is and feel a snake's scales. This demonstration is guaranteed to fascinate and creep-out even your boldest students! Concepts: Basic facts and animal behaviors.

UNDER PRESSURE

Grades K & up

Witness the amazing power of air! Students will be astounded as they participate in a variety of exciting experiments all about air pressure. Concepts: Air pressure, expansion/contraction, Bernoulli effect, effects of pressure, force and motion.

NEWTON'S PLAYGROUND

Grades 2 & up

Crash, Boom, Bang! Explore Newton's laws of motion in this exciting and engaging demonstration. Students will love these entertaining experiments, which demonstrate how objects move and behave in the universe. Concepts: Laws of motion, inertia, weight, gravity, mass and energy.



CLASSES

Maximum thirty students per session

K'NEX

Grades 3 & up

Explore the world of simple machines by building, modifying, and experimenting with the three classes of levers. This class emphasizes teamwork, critical thinking, force, motion, and problem solving skills.

DINOSAURS AND FOSSILS

Grades 2-5

The study of dinosaurs stretches our imaginations and invites us to discover a world and time much different from our own. Learn how paleontologists are able to classify the different types of fossils and what those fossils can tell us about the types of life that were present in the distant past.

MARVELOUS MINERALS

Grades 3-6

Learn about the unique and interesting properties of rocks and minerals. Through hands-on participation, students will learn to classify and identify several different minerals and rocks using scientific tests. Moh's Scale of Hardness is applied.

MAGNETS

Grades Pre-2

Satisfy your curiosity for the seemingly magical properties of magnets. This class introduces the basic concepts of magnets such as which materials are magnetic and which are not, the bi-polar nature of magnets, and the concepts of attraction/repulsion to young learners.

EXPLORE!

All ages

The Imaginarium is three floors and has over 75 hands-on learning science exhibits. Children can fly a hot air balloon, ride an angular momentum machine, host their own weather forecast on television, watch a tornado form and much more. Exhibits range from the physical sciences to chemistry, electricity, color and light, weather and live animal displays.



CHEMICAL CLOCK REACTION

Grades 3 & up

Discover the amazing feats that can be accomplished with the science of chemistry. This class uses household materials to form chemical clock reactions. Students will measure and mix solutions in this highly hands-on experience.



BUBBLES

Grades Pre-3

Learn about the concepts of surface tension and friction through experimentation and the creation of bubbles.





IOWA VETERANS MUSEUM

GUIDED/ SELF-GUIDED

Grades 2 & up

Tour both levels of the Sullivan Brothers Iowa Veterans Museum. Choose between a guided tour by the museum staff or a self guided tour. Tour includes information about service men and women and artifacts from the Civil War to the present.

CIVIL WAR

Grades 1 & up

Tour the Civil War exhibit. Learn more about the reasons why this war started, soldiers' lives during the Civil War, and important people in the United States during this time period. This tour will also include information about Abraham Lincoln and slavery.

SULLIVAN BROTHERS/WWII

Grades 2 & up

Learn more about Waterloo's Sullivan brothers and their fascinating story through a short video and a tour through their exhibit. Also learn more about World War II: who was involved, where it took place and the reasons behind the start of the war.

CURRENT CONFLICTS

Grades 1 & up

This tour focuses on today's United States troops: the different branches of the military, life as servicemen and women and locations overseas where troops are stationed. Students will also tour the Current Conflict exhibit. Students will then get a chance to write a letter to troops serving overseas.

Maximum thirty students per session

VICTORIAN ERA CHILDREN

Pre & up

What would it have been like to grow up during the Victorian Era? Was there a difference if you were rich or poor? Tour the Rensselaer Russell House Museum while focusing on the lives of the children. Includes daily life, chores, toys and games children played.



MIND YOUR MANNERS

Grades 2 & up

Were children in Victorian America really "seen and not heard"? What manners were children expected to master before they could join their parents at the dinner table? This tour discovers how American children's lives have changed since the 1880's.

VICTORIAN ELEGANCE

Grades 1 & up

Discover the way of life for a Victorian family living in Waterloo in the 1890s. Students will see clothing, furnishings and utensils during their tour of the Rensselaer Russell House Museum, a grand Italianate style home.

RENSELAER RUSSELL HOUSE MUSEUM



SCIENCE OUTREACH

Do you need more time or maybe fewer tasks? Let the Grout Museum District do the work for you! Science outreach programs are presented by museum staff who supply all the materials and activities for a low cost.

To schedule outreach programs or to request an Outreach Guide:

Call 319-233-8708 Monday - Friday, 9:00am - 5:00pm

Science Outreach Demonstrations are supported, in part, by the Guernsey Charitable Foundation



NON-SCHOOL YOUTH GROUPS

Special group rates are available for other youth groups not affiliated with a school (i.e.: Scouts, YMCA, daycare, clubs). Tours available during regular museum hours: Tuesday - Saturday, 9am - 5pm. All guidelines apply (see page 2). Prices are per museum site.

CHILDREN

Guided Tour	\$4
<i>Add a planetarium show or science demo</i>	\$1.75
Self- Guided Tour	\$3

ADDITIONAL ADULT CHAPERONES

Same price as children at Imaginarium and Russell House Museum

Iowa Veterans Museum

<i>Guided Tour</i>	\$7
<i>Self- Guided Tour</i>	\$6

Guided tours are not available on Saturdays

Self-guided tours of the Iowa Veterans Museum include the Grout Museum



CALL NOW TO BOOK YOUR FIELD TRIP 319-234-6357



BLUEDORN SCIENCE IMAGINARIUM

A "playground" for the imagination," this interactive science center provides fun hands-on exhibits that demonstrate how science affects everyday life. Visitors may also enjoy science demonstrations.



GROUT MUSEUM OF HISTORY & SCIENCE

The Grout Museum of History & Science's history collection focuses on the period from 1833, when Iowa was opened for settlement, to the present. The Maytag Car, 1915 Waterloo Boy, Rath Packing Company whistle and Pioneer Hall Mural help visitors envision and understand bygone eras.



RENSELAER RUSSELL HOUSE MUSEUM

Completed in 1861, this lovely brick structure is one of the oldest homes in Black Hawk County. Guided tours allow visitors to step into an authentic Victorian interior, including original family belongings and wander through picturesque Victorian gardens.



SULLIVAN BROTHERS IOWA VETERANS MUSEUM

The Sullivan Brothers Iowa Veterans Museum honors all Iowans who served the nation from the Civil War to the present. The collection, preservation and interpretation of their stories and artifacts are the core mission of the museum.

Educational programs in the Grout Museum District are supported, in part, by the R.J. McElroy Trust and the Helen and Max Guernsey Charitable Foundation