

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 align with Iowa Core guidelines.*



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WHAT DOES IT COST?

Children (Pre-school - Twelfth Grade)

- \$3.00 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!

- \$9.00 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.

WHAT DO I NEED TO KNOW?

- Minimum group of 15 kids 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, and Iowa Veterans Museum are available Tuesday-Friday
- Tours at the Imaginarium and Russell House 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
- If paying by check have **ONE CHECK** for the entire amount. Teacher will be reimbursed for any absences. We also accept Visa, Mastercard, & Discover
- Make check payable to Grout Museum District
- Confirmation form designates the building where the tour starts
- 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

An 1846 cabin, 1850s general store, tool shed, carpenters shop, and blacksmith shop help students visualize life for Iowa's pioneers.

NATIVE AMERICANS

Grades Pre-5

Explore the culture of Native Americans, by: discussing the migration of Native Americans in Iowa, learning ways they communicated, viewing artifacts and pictures from local tribes, and learn and perform Native American powwow dances.

GREEK MYTHOLOGY

Grades K-5

Greek mythology is as rich as the culture that engendered it. This is an excellent tool in teaching Greek mythology. Learn about Andromeda a Princess of Ethiopia, daughter of Cepheus and Cassiopea and much more.

NATIVE AMERICAN MYTHOLOGY

Grades K-5

What is the difference between Greek mythology and other cultures? Explore the origins and the importance of Native American mythology stories.

NIGHT SKY

Grades K-5

What will you see in the sky tonight? Discover constellations and the motion of the night sky. Children can identify major constellations, and view the changing sky through the night.

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.

SCAVENGER HUNT

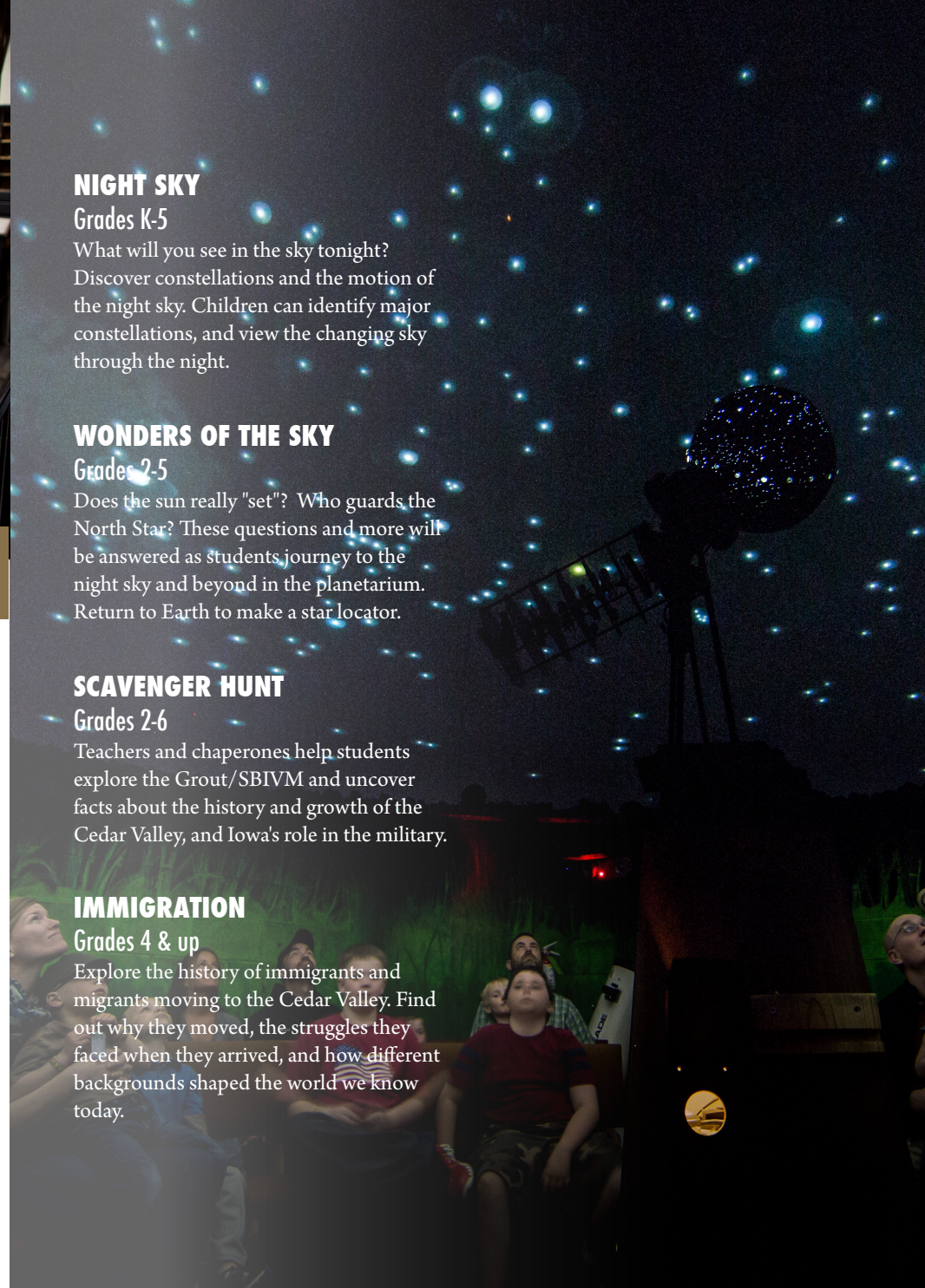
Grades 2-6

Teachers and chaperones help students explore the Grout/SBIVM and uncover facts about the history and growth of the Cedar Valley, and Iowa's role in the military.

IMMIGRATION

Grades 4 & up

Explore the history of immigrants and migrants moving to the Cedar Valley. Find out why they moved, the struggles they faced when they arrived, and how different backgrounds shaped the world we know today.





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.

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.

BUBBLES

Grades Pre-3

Learn about the concepts of surface tension and friction through experimentation and the creation of bubbles. *(Best in Summer)*

WILD WEATHER

Grades K & up

Learn the science behind wild weather. Watch evaporation and condensation, lightning, and tornado demonstrations. Concepts: Weather and weather patterns, air pressure, water cycle, force and motion.

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.

KITCHEN SCIENCE

Grades K-6

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

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.

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.

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.

ELECTRICITY

Grades 2 & up

Learn about positive and negative charges, how electricity is generated, how it powers every day objects and learn about the Tesla Coil and Van de Graff. *(Best in Winter)*

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.



CLASSES

Maximum thirty students per session

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.

BUBBLES

Grades Pre-3

Learn about the concepts of surface tension and friction through experimentation and the creation of bubbles. *(Best in Summer)*

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.

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.

EXPLORE!

All ages

The Imaginarium's three floors house 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.





SULLIVAN BROTHERS IOWA VETERANS MUSEUM

SBIVM SCAVENGER HUNT

Grades 1 & up

Teachers and chaperones help students explore both floors of the SBIVM and uncover facts about Iowa's role in the military. Fun, age appropriate hints!

CIVIL WAR

Grades 1 & up

While touring through the permanent Civil War exhibit, students will learn about slavery and other causes of the Civil War. Who was fighting in this war? Where did this war take place? Students will also listen to stories about what life was like for both soldiers and children during the war through letters and memorabilia.

SBIVM GUIDED or SELF-GUIDED

Grades 2 & up

Tour both levels of the SBIVM. 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.

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.

SCIENCE OF WAR

Grades 4 & up

This tour combines history and science as students learn about some of the greatest wartime technological innovations, such as the physics of airplanes and the chemistry of firearms.

IOWANS IN THE VIETNAM WAR

Grades 4 & up

Experience the Vietnam War, one of the longest wars in American history, which combines an interactive international timeline, individual stories of Iowa Veterans, and Iowa's only *Faces to Go With Names* exhibit. *Request a Vietnam Veteran to speak during your visit. Availability not guaranteed.*

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.



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.

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.

Call 319.234.6357 for our current Temporary Exhibits and how they could be incorporated in to your tour.

RENSSELAER 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.

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

To schedule outreach programs or to request an Outreach Guide:
Call 319-234-6357, Monday - Friday, 9:00am - 5:00pm



NON-SCHOOL YOUTH GROUPS

Must be a group of 15 or more

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.

To schedule non-school tours or request a Group Tour brochure call
319-234-6357, Monday-Friday, 9:00am - 5:00pm



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.



RENSSELAER 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