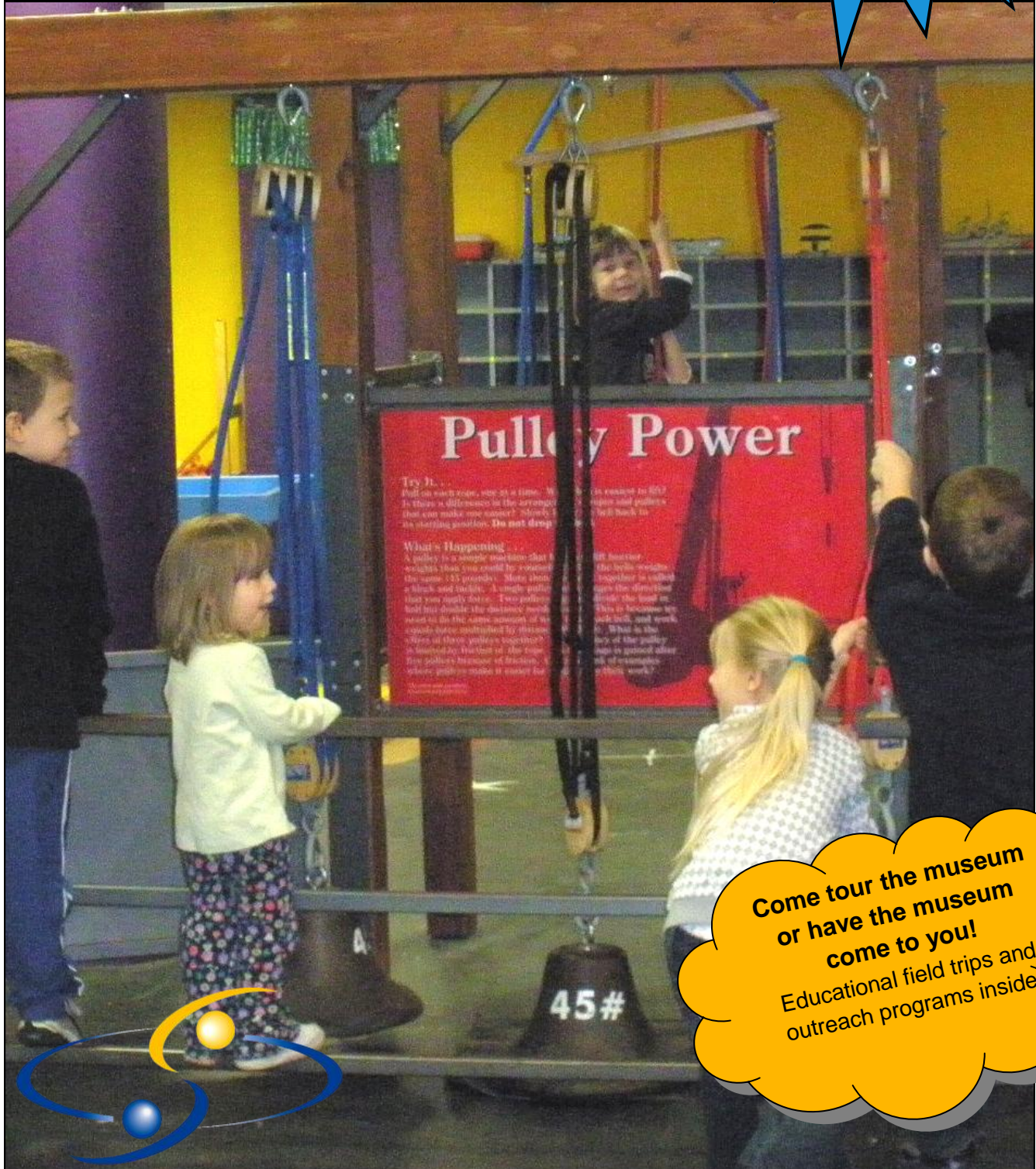


SCIENCE CENTER EDUCATOR'S GUIDE

2013-2014
School Year



**Come tour the museum
or have the museum
come to you!**
Educational field trips and
outreach programs inside.

Can't find a program that fits your needs? Call us at 319-363-STEM (7836)

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Revision 09/19/13

OUR MISSION

The mission of the Science Center is to be an innovative Science, Technology, Engineering, and Math (STEM) based learning center, providing exciting and engaging facilities and programming meant to inspire and stimulate the imagination of the children, families, school/youth groups, and the individuals we serve.



BENCHMARKS

Our classes meet these Iowa Core Content Standards:

Science Benchmarks:

- Students can understand and apply skills used in scientific inquiry.
 - Students can understand and apply the processes and skills of scientific inquiry.
 - Students can analyze and interpret scientific information.
- Students can understand concepts and relationships in life science.
 - Students can understand structures of living things.
- Students can understand concepts and relationships in Earth/space sciences.
 - Students can understand ideas about Earth's composition and structure.
- Students can understand concepts and relationships in physical science.
 - Students can understand and apply concepts related to mechanics, forces, and motion.
 - Students can understand and apply the concept of energy.
 - Students can understand and identify properties and changes of matter.



Some classes may also branch over to other standards/benchmarks in the Iowa Core Standards, worksheets and readings can be adjusted to meet such standards.

Math Standards:

- Students can understand and apply a variety of math concepts
- Students can understand and apply methods of estimation.
- Students can solve a variety of math problems
- Students can interpret data presented in a variety of ways.

Literacy Standards:

- Students can comprehend what they read in a variety of literary and informational texts.

QUICK REFERENCES

Location

5824 Council St NE
Cedar Rapids, IA 52402

Contact Us

Ph:319-363-STEM (7836)
Fax: 319-366-4590
www.crsciencecenter.org

Hours

Tuesday-Saturday

10:00am-5:00pm

Sunday

12:00-5:00pm

Closed Mondays

(Field Trips are welcome on Mondays by appointment only)

- For scheduling or curriculum questions, please call the Science Center at 319-363-STEM (7836).
- Please contact us at least 7 days prior to your visit if you should need to reschedule or cancel your Field Trip or D.A.S.H Program. Cancelled trips/outreach programs without a 7-day notice will be charged a cancellation fee.
- A minimum of 12 students OR \$48 program fee.
- The Science Center requires that adult chaperones accompany all students on field trips.
 - Preschool students need 1 adult per 5 children.
 - School-age students need 1 adult per 10 children.

QUICK REFERENCES

SCIENCE CENTER LOCATION

- We are located at 5824 Council St NE
- This is next to (north of) the Shriners building on the corner of Blair's Ferry & Council St.

- We do not offer food services in our Exhibit Gallery or Education Center.
- There is a wide variety of food choices in the area surrounding the Science Center.

FIELD TRIPS

FIELD TRIPS / GROUP VISITS (In Center Programming)

The Science Center offers field trips for students preschool age through sixth grade. All field trips include a visit to our Exhibit Gallery with the option to add on a **one hour education program** to fit your students' needs.

Minimum is 12 students OR a \$48 program fee.

*Field Trips are welcome on Mondays by appointment only.

	Cost	Additional
Normal Admission		
	\$4.00 per child	\$2.00 per adult
Field Trip Admission		
Exhibit Gallery Only (60-90 minutes)	\$3.00 per student	Chaperones Free
Exhibit Gallery (60 minutes) and Education Program (60 minutes)	\$4.00 per student	Chaperones Free with a minimum of 12 students. (if minimum requirement is not met, a \$48 program fee is added.)

Membership	Price	Benefits
Teacher Membership	\$45.00	Admission only for one year to the Gallery only. Unlimited visits for up to 3 guests each time. Discounts on group bookings. Must show teaching license.

Please browse through this guide to find a variety of field trip options that the Science Center has to offer. If you don't see what you are looking for, please call our Education Center and speak with the Education staff.

We also have reading material for before your visit and after along with worksheets to assist in the education of children about STEM education.

Preschool students need 1 adult per 5 children.
School-age students need 1 adult per 10 children.

D.A.S.H PROGRAMS

D.A.S.H PROGRAMS (Outreach) (Discovery And Science Happens)

Can't come to us? We will bring the Science Center to you!!

Our D.A.S.H Programs are **one hour** in length. Our educator will arrive to the site 15 minutes prior to start time in order to set up. Consecutive programs at the same location on the same day will be charged an additional \$60.00 each.

Maximum is 25 students per class.*

D.A.S.H Programs	Cost	Additional
1 Program (about 50-60 minutes)	\$75.00	<ul style="list-style-type: none"> ◦ \$60.00 per consecutive program; \$0.45 per mile surcharge added to cost if further than 30 miles round trip from the Science Center. ◦ Groups of more than 25 children may require an additional educator. Additional fees will apply in this instance.
Planetarium Programming (about 50-60 minutes)	\$75.00	<ul style="list-style-type: none"> ◦ \$60.00 per consecutive program; \$0.45 per mile surcharge added to cost if further than 30 miles round trip from the Science Center ◦ Groups of more than 25 children may require an additional educator. Additional fees will apply in this instance.
The Really Big Science Show (about 50-60 minutes)	\$250.00	<ul style="list-style-type: none"> ◦ \$0.45 per mile surcharge added to cost if further than 30 miles round trip from the Science Center.

PLANNING YOUR VISIT

The Science Center is dedicated to bringing the exciting world of science and technology to your students! To guarantee that each group receives the best program, please adhere to the following policies:

Before calling to schedule an trip:

- Fill out the event reservation form located in the back of the Educator's Guide or find it on our website (www.crsciencecenter.org).
- Look through the Educator's Guide to find the program that best fits your students' needs.
- Have a specific date and an alternative date on hand, as well as a time of arrival.
- Have the contact name and phone number of the teacher in charge.
- Have the mailing address and telephone number for the school.
- Know the grade level, number of students, and number of chaperones that will be present.

Here are some simple steps to help you plan your visit.

1. Fill out the event reservation form (located in back of the Educator's Guide or found on our website <http://www.crsciencecenter.org/resources.html>) and send it into the Science Center, 3 weeks in advance. You may call the Science Center (319-363-7836) to check on available dates and times. All forms must be filled out and sent in prior to any visits.
2. You will receive a conformation email. Event reservations are not guaranteed unless you receive a conformation email. You may pay on the day of your visit by check or credit card (We except Visa, MasterCard, and Discover)
3. Before arriving at the Science Center you may want to do a reading or go over any vocabulary they may hear at the Science Center. (readings and vocabulary list may be found at the Science Center)
4. Please go over rules and expectation of students prior to arrival, this may be done the day of before going on the bus. (rules may be found on page 8)
5. When you arrive please make sure to arrive 10– 15 minutes early for check in and to ensure everyone is ready to start.
6. Discuss with chaperones what is expected of them.

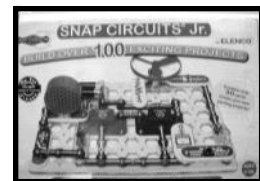
PLANNING YOUR VISIT

Please go over these rules with children before arriving at the museum:

1. Children must be accompanied by an adult.
2. Adults are responsible for children at all times.
3. No food, drinks or gum are allowed in the Science Center.
4. Share and take turns.
5. No pushing or roughhousing, everyone will get a turn.
6. Please help clean up after you have made a mess.
7. Items in the store are not toys to play with, please respect our property.
8. We encourage you to interact with our exhibits, but please treat them gently.
9. If you are not able to follow these rules, you will be asked to leave the Science Center without a refund.

Chaperones Expectations are:

1. Stay with your assigned group at all times.
2. Help students with the exhibits and activities.
3. Remind students of the safety rules and behavior.
4. Assist students in the gift shop at the end of your visit.



CURIOSITY SHOP

(Products by Intelligent Life Toys)

End your visit to the Science Center by stopping by our gift shop where we have items for all ages. The Curiosity Shop has many items below \$5.00 that make GREAT souvenirs from your Science Center trip!

When your group visits our gift shop:

- Please make sure a chaperone is accompanying the students.
- Remind students to keep their money in their pockets until they are at the register to avoid any lost money.
- Help students stay within their spending limit.

PLANETARIUM PROGRAMMING

Bring the night sky inside in our inflatable planetarium! Inside our planetarium's 16 by 11 foot dome, a projector displays the night sky as it looks from anywhere on the Earth and any time of the night or year.

Design your own planetarium show to best fit your needs! Choose from a variety of dynamic show topics such as:

- Shapes, constellations, and monthly change in the sky
- Phases of the moon
- Star Color
- Planets
- Greek/African/or North American mythology
- Chinese seasons and legends
- Ancient Egyptian culture and legends
- Earth and lunar cycles
- Using a star map at home

We can make the planetarium available to your whole school in one day! All you need is an indoor area at least 21 x 21 x 11 feet. A cafeteria, gym, state or library could be used. We will provide an instructor and all other necessary materials.

Planetarium Fees: \$75 programming fee. \$60.00 per consecutive program; \$0.45 per mile surcharge added to cost if further than 30 miles round trip from the Science Center. *Groups of more than 25 children may require an additional educator. Additional fees will apply in this instance.



PROGRAMS OFFERED

THE ILLUSTRATION BELOW SHOWS WHICH PROGRAMS ARE OFFERED FOR EACH GRADE.

	Pre-K	K	1st	2nd	3rd	4th	5th	6th
Air Pressure			√	√	√	√	√	
Big Backyard 1	√	√						
Big Backyard 2			√	√				
Catch A Rainbow	√							
Crazy Chemistry			√	√	√	√	√	√
Dig Into Dinos	√	√	√	√				
Earth Day is Every Day!				√	√	√	√	√
Floods and Suds	√	√	√	√				
Machine Mania							√	√
Magnets Mania			√	√	√	√		
Out of This World!			√	√	√	√	√	√
STEMulate Your Students							√	√
Stuffee™— Human Body	√	√	√	√				
Wacky Weather	√	√	√	√				
What's The Matter?					√	√	√	√
ZAP! That's Electricity					√	√		

PROGRAM DESCRIPTIONS

Air Pressure | 1st Grade - 5th Grade

Air pressure is all around us; find out how it works and how it helps us every day!

Big Backyard 1 | Pre-K - Kindergarten

If your students love bugs, this is the class for them! Explore different critters that crawl, wiggle, and squirm. What makes an insect special? What do worms do for our soil? Find the answer to these questions and more!



Big Backyard 2 | 1st Grade - 2nd Grade

If your students love bugs and plants, this is the class for them! Explore different insects, plants and flowers. Your students will have the opportunity to plant their own seed!

Catch A Rainbow | Pre-K

What makes a rainbow? Who is ROY-G-BIV? Explore the colors of the rainbow and find out how red, yellow, and blue can be mixed to make all sorts of different colors!



Crazy Chemistry | 1st Grade - 6th Grade

Discover the science of solutions and create chemical concoctions, as you become a chemist for the day!



*Note: This is a messy class.

PROGRAM DESCRIPTIONS

Dig Into Dinos | Pre-K - 2nd Grade

Become a dinosaur hunter and dig for dinosaur fossils! Discover a dinosaur in our special rocks, dig it up like a real archeologist and take your fossil home!

Earth Day is Every Day! | 2nd Grade - 6th Grade

Reduce, reuse, recycle, learn! Why is the earth so important to us? What do scientists say about how waste and misuse of resources impact our world? What can we do to preserve our environment and surroundings? Learn to respect and reuse at the same time as we make new from old with cool projects that repurpose resources.

Floods and Suds | Pre-K - 2nd Grade

Get your hands wet and have some good, clean fun exploring surface tension and bubbles. Make a jar of bubble solution and design your own bubble wand to take home for more fun!

Machine Mania | 5th Grade - 6th Grade

Discover how simple machines do extraordinary things! Your students will develop an understanding of how forces, weight, and simple machines all work together. Your students will *catapult* their way into new discoveries!

Magnets Mania | 1st Grade - 4th Grade

Discover how the world around us can push, pull, drop, soar, and has its ups and downs in a variety of hands-on activities. Your students will develop an understanding of magnetic forces by building and exploring with magnets.

Out of This World! | 1st Grade - 6th Grade

Bring the night sky inside with our new planetarium! Design your own StarLab show to best fit your needs. Choose from a variety of dynamic topics: constellations, phases of the moon, planets, earth and lunar cycles, and much more!

*Please allow an indoor area of at least 21x21x11 feet for the planetarium.

PROGRAM DESCRIPTIONS

STEMulate Your Students | 5th Grade - 6th Grade

S=Science T=Technology E=Engineering M=Math

Get your students more involved with the fun elements of science and engineering activities through experiments and investigation. Your students will be exposed to all aspects of STEM. Let us tie it all together and find out how and make science fun to explore future career possibilities.

Stuffee™ - Human Body | Pre-K - 2nd Grade

Unzip Stuffee to find out what's inside our bodies. Stuffee also knows all about nutrition and how to keep the body healthy.

Wacky Weather | Pre-K - 2nd Grade

Ever wonder why clouds float or even what they're made of? Make your own cloud and learn about the water cycle!

What's the Matter? | 3rd Grade - 6th Grade

Learn how molecules act in different states, find out what "Non-Newtonian" means, and play with ice without getting wet!

ZAP! That's Electricity | 3rd Grade - 4th Grade

Explore a shocking topic! Learn about static and current electricity. Discover the difference between parallel and series circuits.



HOMESCHOOL & BADGE LABS

HOMESCHOOLERS

The Science Center is proud to present science classes designed specifically for homeschoolers! Our Education Center has all the tools and instruments necessary to provide a hands-on, highly educational, and FUN experience for your students. Visit our website to download a registration form or pick up a brochure at the Science Center Gallery. Advanced and onsite registration pricing is available. A minimum of 8 registrations must be received for a class to be held. Each student will receive a gift certificate good for one FREE admission into the Science Center Exhibit Gallery.

Other days and times may be added based on popularity.

Date	Meets once a month
Location	Science Center
Ages	2nd—5th Graders

Pricing

Registration	Per Child	Per children from same family
Advanced Registration	\$7.00	\$5.00
Onsite Registration	\$9.00	\$7.00

BADGE LABS

Let our experts help your Cub Scout/Girl Scout fulfill their badge requirements hassle-free! Each Scout will receive a Certificate of Completion and a coupon for one child's admission to the Science Center Exhibit Gallery. Pre-registration is required for each student at least 2-weeks in advance.

A minimum of 8 registrations must be received for a class to be held.



Girl Scouts®

Cub Scout Labs	Girl Scout Labs
<p>Wolves: Machine Power</p> <p>Bears: Weather</p> <p>Webelos: Scientist, Engineer, and Geologist</p>	<p>Brownies: Making Games, Senses, Home Scientist & more!</p> <p>Juniors: Who Done It, Behind the Camera, and Money Manager</p>

*Classes Meet New Girl Scout Requirements

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LARGE GROUP EVENTS

THE REALLY BIG SCIENCE SHOW (RBSS)

Let our CRAZY scientist come to your school gym and WOW your students right out of their seats! See wacky science tricks, dry ice amazements, and watch out for our DRAMATIC ENDING! We will spark your students' enthusiasm in science and provide interactive and fascinating educational experiences that make learning irresistible!

This show is an assembly-style outreach, ONE HOUR in length, and costs \$250.00. We will serve as many students as you can fit into your gym! Shows that are further than 30 miles round trip from the Science Center will have a \$0.45 per mile surcharge added on to the program cost.

Our scientist requires:

- Two 8-foot tables
- A sound system
- Outside if possible or high ceilings
- Clean up assistants
- Access to electrical outlets
- Access to water



*This may get messy

Planetarium Programming

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