

1

Field Trip Program

Table of Contents

Field Trip Structure	pg. 3
Ways to Incorporate Rigamajig Into Your Field Trip	Pg. 4
Terms & Pricing	pg. 5
Room Rental	pg. 6
A few Easy Steps to Arrange Your Field Trip	pg. 7
Exhibits Correlated to Missouri Show-Me Standards	pg. 8-10
<u>Rigamajig - Additional Details</u>	pg. 11-12
Photos	pg. 13
Myseum FunQuest Challenge	Pg. 14
Tips for a Great Myseum Field Trip	pg. 15
Designated Bus Parking	pg. 16
Photos	Pg. 17

Field Trip Structure

Myseum field trips are unique, highly interactive, educational and FUN. Our field trips are great for school groups, scouts, private parties, home school groups, religious groups, camps and more. All Myseum field trips are self-guided and at your own pace. You choose your type of field trip:

- 1) Free Play Explore Myseum and have fun.
- 2) Myseum FunQuest Challenge Complete a scavenger hunt quiz by answering exhibit-related questions to add structure to the outing.
- 3) Rigamajig Incorporate Rigamajig into your field trip! Rigamajig encourage kids to work together and complete challenging engineering tasks.

Rigamajig – A field trip exclusive!

Details:

- For ages 3+
- Accommodates up to 20 kids at once. We recommend kids work in groups of two or three.
- Requires teacher/chaperone to supervise and provide prompts for building a contraption.
- Generally available Monday Friday; September 1st May 31st



Ways to incorporate Rigamajjg into your field trip:

Example Scenario #1

Class size: greater than 16-20

Divide the kids into two or more groups. As an example, one group builds with Rigamajig for 75 minutes, while the other group explores the rest of Myseum. The groups may rotate, and then the remaining 30 minutes of the 3-hour field trip can be used for lunch, getting ready to leave, etc.

Example Scenario #2

Class size: less than or equal to 16-20

Build with Rigamajig for 1 hour and then kids can explore at their own pace for the remaining 1.5 hours. The remaining 30 minutes of the 3-hour field trip can be used for lunch, getting ready to leave, etc.

Example Scenario #3

Class size: Any

Allow students to come and go as they please. A teacher or chaperone must be available to provide build prompts and oversee use.

You decide the type of field trip you want based on your objectives, the number of kids, etc.

Toward the end of your field trip, please help us cleanup by asking kids to disassemble their fantastic Rigamajjg creations and sort/store like pieces together. Thank you!

Terms & Pricing

All groups must pre-register and provide a 50% deposit to receive group rates and to ensure availability. Booking must be completed at least 24 hours in advance of your planned visit. If you do not cancel/reschedule greater than 24 hours of your scheduled visit, your deposit is not refundable.

Terms:

- A minimum of 12 children is required to receive field trip pricing. If, on the day of the field trip less than 12 children attend, the price charged will be the lower of 12 children at the field trip rate or general admission pricing for all children and adults.
- 1 adult chaperone for every 5 children is required.
- Weekend availability is dependent upon the size of the group and the anticipated number of general admission visitors. Usually, weekend field trips are no larger than 20 kids. Additionally, party rooms are generally not available for weekend field trips.
- Field trips are limited to a 3-hour stay.

Socks are required for the slide and the inflatables. Please remind parents to send socks with the children. Socks are available for \$2.00 a pair.

Pricing:

- \$7.95/child for Non-Profit (501(C)(3). A Missouri Limited Exemption form is required for tax exempt status.
- \$8.95+tax/child for other groups.
- No charge for the adult chaperones (except as stated above in Terms).

For more information or to schedule a field trip, please call Myseum at 636-220-7930 or e-mail at info@stlmyseum.com

Room Rental

Have a Myseum party room for lunch, store your stuff or for educational uses.

Pricing	\$40.00	
Number of Rooms (included in the \$40.00 price)	12-20 paying field trip kids: 1 room21-40 paying field trip kids: 2 rooms41 & up paying field trip kids: 3 rooms	
	Note: If an additional room(s) is desired (outside of the above parameters), each additional room is \$40.00.	

A Few Easy Steps to Arrange Your Field Trip

- ✓ Determine date ↓ arrival time
 - Field trips are limited to three hours
- ✓ Estimate the number of kids and adults
 - ► 1 adult Chaperone for every five kids is needed
 - ► Twelve kids minimum are required for field trip pricing

✓ Would you like to have a party room reservation?

✓ Determine type of field trip:

- Free play
- ► Add structure We'll use the FunQuest Challenge
- ► We'll use Rigamajig
 - Choose your prompt
 - If greater than 16-20 kids, decide when to rotate one group out and the other in or let them use Rigamajig as they please.

Call Myseum at 636-220-7930 to book your field trip!

Exhibits

This information is designed to help educators identify learning opportunities at Myseum. Myseum is ideal for educational field trips with unique hands-on experiences.

Many schools and school districts have educational requirements for field trips, and we believe our exhibits meet those of the Show-Me Standards. Please see the following list of exhibits.

Properties and Principles of Matter and Energy				
Exhibit	Description			
Magnetic Bridge	This exhibit uses two large Neodymium magnets to attract steel pellets to form a moldable mound between the poles. Children learn about magnetism, plus it's a great sensory experience as they feel the tug of the magnetic mound.			
Ferrofluid	Ferrofluid is an oily liquid with nano-sized iron particles suspended in the oil. Students control powerful magnets to move the magnets closer to and further away from the ferrofluid. When the magnetic held interacts with the ferrofluid, beautiful and strange pattern. emerge from the liquid.			
Video Link:				
Opposing Magnets	Opposing Magnets contains small & medium neodymium ring magnets mounted on stainless steel rods with like poles facing each other. Moving the floating magnets dramatically demonstrates the force of the opposing poles.			
Magnet Table	Children play with large nuts & bolts to construct magnificent magnetic sculptures. The properties of magnetism are discovered through this playful and fun exhibit.			
Eddy Currents Video Link:	Eddy Currents generate magnetic fields which oppose the motion of the magnet. See a magnet fall dramatically slower than it does in ordinary free fall. Each of the three exhibits (Levitating Magnet, Swinging Magnet & Falling Magnets) demonstrate eddy currents in a different manner. https://www.youtube.com/watch?v=8rmH0Y-0OJM			
Liquid Crystal Wall	Explore how different temperatures affect liquid crystals. Small changes in temperature impact the crystals resulting in the various colors.			
Plasma & Crackle Tubes	Large tubes filled with various gasses with electric current running through. Children can put their hands on the tubes and directly impact the direction of the dancing plasma.			
Shadow Wall	The Shadow Room "freezes" movement in time against a phosphorescent wall. Children often question "how does that work". Glow pens are also provided to doodle on the walls.			
GLO-SHAPES	GLO-SHAPES offers an open-ended interactive use of brightly colored fluorescent pieces which children can easily affix to a large carpeted wall to create their own graphic and artistic designs. Parents/teachers - See your young ones learn to use numbers, letters, landscape pieces and different geometric shapes in glowing fun.			

Properties and	Principles of Force and Motion		
Pendulum	The glowing pendulum behaves like a regular pendulum with smooth, predictable motion, but is different because it also glows. What makes this pendulum special is the LED light mounted in the Bob and the glow-in-the-dark material mounted on the base.		
Falling Washers	Large washers on a $\frac{3}{4}$ " threaded rod. Lift the washers, let them go and watch them spin to the bottom. This exhibit demonstrates, at minimum, gravity, friction, & kinetic energy.		
Catenary Arch	The Catenary Arch exhibit demonstrates engineering and gravity. Children work as a team to put together large foam blocks to create a 5-foot tall freestanding arch.		
Magnetic Ball Wall	This exhibit also demonstrates engineering and gravity. This popular exhibit encourages children to build and experiment as they direct the path of a ball down the face of a wall. Children learn from hands-on experience about angles and the force of gravity.		
Video Link Radar Slide	https://www.youtube.com/watch?v=LTgtns-D_mE Children zoom down the slide with their speed displayed at the bottom. They experiment with various techniques and different types of mat materials to increase their speed.		
Wrecking Ball	Build a structure and destroy it with the wrecking ball. Experiment with principles of physics by adjusting ball position and rope length. This exhibit is a great example of potential and kinetic energy.		
Kinetic Woodpeckers	The woodpecker is at rest at the top of the rod. When you give the woodpecker a small push, the woodpecker will move down the rod using a jerky stick/slip motion. This exhibit is another great example of potential and kinetic energy.		
Video Link:	https://www.youtube.com/watch?v=RDHeLESZIYg		
Processes (such			
Vertical Wind Tubes	The Vertical Wind Tube is a wonderful hands-on inquiry based exhibit that lets children use their imagination to build flying machines. Place the object into the wind tube and watching it fly 9 feet. Then, back to the design table for problem solving and design changes.		
Air Vortex	Children are able to create a vortex burst of air out of a large cylinder. They are able to		
Cannons	knock over a pyramid of empty cups from many feet away.		
Bernoulli Principle	This exhibit demonstrates Bernoulli's Principle by showing how weighted balloons can hover in the air in the presence of a powerful airflow.		
.	ad Structure of the Universe and the Motions of the Objects within it		
Interactive Video System	This exhibit fuses science and art together. The gesture recognition projection system is a wonderful display of an interactive technology. This platform uses the body's shadow to interact with the digital projection. Two programs are available: Sand and Mercury Bubbles.		
Digital Microscope	Magnification is between 50X-200X. A bin of miscellaneous items are available for viewing. Bring in your own objects to viewflat items work best.		
Dino Dig Video Microscope :	Our high definition video microscope is in the dino dig area. So now kids can dig for dinosaur bones and then view and read all about real fossils.		

}

Fine Arts			
Musical Trash	Electronic drum pads mounted into trash cans. Touch-sensitive pads will activate the		
Cans	percussion sounds.		
Laser Harp	By breaking the path of each of the twelve beams, this laser trigger-based instrument will		
1	play 100+ instruments and sound variations. This harp plays entire songs and breaking the		
	laser invokes an instrument into the song.		
Unique musical	Custom made unusual instruments such as: Amadindas, Whale Drum, Stonaphone,		
instruments	Wrenchaphone, and Boltophone. All of these unique instruments are perfectly tuned.		
Misc. Science			
Dino Dig	This pretend play exhibit allows children to		
	dress up as a paleontologist, dig for and study		
	fossils and learn about dinosaurs.		
Faces	This exhibit allows the child to create faces by choosing individual facial features using		
	forensics software. They can create the face of any person, real or fictional, from any		
	time, present or past.		
Einstein's Face	Move to the left, Albert Einstein is watching. Move to the right, up or down, Albert's		
	watching. A little spooky, but a whole lot of fun. How does it work? Einstein's face in		
	actually concave, but your brain thinks it's convex and tries to make sense of it all.		
Video Link:	https://www.youtube.com/watch?v=pPFXrmAjwvM		
Concave/Convex	Both concave and convex mirrors are side by side. Children can immediately determine		
Mirrors	the impacts on images due to the curvature of the mirrors. Nearby funhouse mirrors (both		
	concave & convex) can reinforce the principles in a fun way.		
Free Play			
Jumbo Blocks	Build it big with almost 1,000 jumbo blocks.		
Seaweed Swamp	Wander through our Seaweed Swamp for a fun & exciting experience. Can you find the		
	friendly swamp monster who lives there?		
Zoo Vet Center	You're the vet! Put on your vet lab coat, grab a stethoscope and examine		
	the wild zoo animal stuffies to make sure they're in the best of health. Look		
	at real animal x-rays, test reflexes, and even feed the patients.		
Rigamajig	Rigamajig is a new large-scale building kit designed for hands-on free play and playful		
	STE(A)M learning. This collection of wooden planks, wheels, pulleys, nuts, bolts and		
	rope allows children to follow their curiosity through play while learning 21st century		
	skills. There are no right or wrong answers; the act of playing and building is the goal, not		
	the finished product.		
Video Link:	https://www.youtube.com/watch?v=zzS9gZF99yA <i>Exclusively for field trips</i>		
Imagination	Imagination Playground is an innovative playground that transforms any space into a play		
Playground	space that encourages learning, social development, movement, and above all fun. Using		
Imagination Playground blocks, kids build a new world every day. They make ob animals, rocket ships, and robots. They make imaginary places like houses, factor			
	directed and open-ended, it encourages self-expression through deep, joyful play.		
Video Link	https://www.youtube.com/user/imgplayground		

Additional Details:

Rigamajig

Rigamajig is a large-scale building kit conceived for hands-on, interactive free play and learning. This collection of wooden planks, wheels, pulleys, nuts, bolts and rope allows children to follow their curiosity through play. There are no right or wrong answers. Children create contraptions from their imagination or work to solve a problem as presented by the teacher. The act of playing and building is the goal, not so much the finished product.

Teachers have the option of providing the kids with **prompts** to solve a problem. Prompts may be:

- Build a contraption that allows you to send a bucket from one place to another.
- Using 15 pieces, make a contraption that can hold a 10 lb. bag of potatoes.
- Build a Rigamajig that can lift objects.
- How many different ways can you join three pieces?
- Make a machine that will take you to the center of the earth.
- Now that you have made a structure, look at your neighbor's creation and find a way to join your two structures to make a new one. What might it do?
- Make a contraption that incorporates a balloon (we have balloons; inquire at the front desk).

Have each team present their creation and demonstrate its function.

Rigamajig Benefits:

Social Studies

For young children, social studies is about learning to live, work and play within a community. The Rigamajjg teaches working in small groups; developing social skills for negotiating, learning and listening to peers, and finding a voice. Have children share stories about their creations.

STE(A)M

STE(A)M goals are built into the design and use of Rigamajjg. By adding ART to STEM learning, each of the disciplines benefit from a creative approach and the advantages of an art process. Multiple iterations, thinking 3-dimensionally, visualizing ideas, and critical making are a few of the methods art brings.

Science

Designing, analyzing and constructing products is at the heart of the Rigamajjg. As they build, children are analyzing form and function to satisfy human and environmental needs. They construct and use simple machines, think about compression and tension, balance, properties of wood, and think about how parts relate to each other to create small systems to perform functions.

Technology

As they are designing and playing with these technological inventions, children practice problem solving. They create and play "work" with simple machines, i.e. pulleys, ramps and screws, as well as invent new forms and functions.

Engineering

Through their play, children experience the process of research, understanding, design, model building and testing and modifying that is part of every inventors process. Have children to draw their creations.

Art

Art goes beyond creativity, and art process involves the study of the materials, prototyping, testing and changing. Art practices thinking outside the box, and approaching problems playfully and with an open mind.

Math

The modularity of the planks helps bring math language into children's play. The parts work intuitively as units for easy building. Two small planks are equidistant to one large plank. This allows for geometric understandings. Clean up time is always a counting and sorting opportunity.

Video Link: https://www.youtube.com/watch?v=zzS9gZF99yA

Safety with Rigamajig:

- Children should be supervised at all times while playing with or around Rigamajjg.
- Rigamajjg contraptions should never be climbed on, stood upon, or ridden.
- We believe that large, solid wooden parts are an empowering way for children to explore constructive and imaginative play. Encourage children to be aware of their surroundings and play cooperatively.
- Children and adults should be cautious during the disassembly of Rigamajjg contraptions. Encourage children to work together when taking things apart. The deconstruction of Rigamajjg creations becomes a great learning opportunity. Cause and effect, balance, planning ahead, counting, sorting, and organizing are just a few things that can be practiced during clean-up.

Also at Myseum - Imagination Playground

Description:

This new playground equipment system encourages learning, social development, movement, and above all, FUN! Myseum's new exhibit helps to inspire young builders in STEM (science, technology, engineering and math) while allowing them to be creative and imaginative. The exhibit features larger-than-life blocks for giant scale buildings.

Kids of all ages will be able to experience a whole new world- engineering new structures using the curved blocks, attachments and more! From animals to robots, houses to rocket ships, kids are encouraged to think outside the box, while working together.





MySEUM FunQuest Challenge

Use the exhibit information to find the correct answers. When you're done, come back to the front desk and check your answers.

Exhibit: Super Radar Slide (Optional) Go down the slide three times and record your speeds: a)	 Exhibit: Opposing Magnets How are the magnets arranged (more than one answer may apply)? a) North Pole to North Pole b) North Pole to South Pole c) South Pole to South Pole 	Exhibit: Magnetic Bridge The Magnetic Bridge uses how many large Super Magnets? a) 5 b) 3 c) 1 d) 2
 Exhibit: Air Vortex Cannon Choose all that are correct A vortex is similar to a) Tornado b) Whirlpool c) Hurricane Try This: Can you build a structure out of the cups so strong that cannot be blown over? 	Exhibit: Falling WashersWhat makes the washers fall?a) Air Pressureb) Gravityc) Electricity	Exhibit: Convex & Concave Mirrors Concave Mirrors a) Bulge Outward b) Bulge Inward c) Are flat like a wall mirror
 Exhibit: Catenary Arch A great example of a catenary arch in St. Louis is a) The Zoo b) Busch Stadium c) The St. Louis Arch Try This: Build the arch with your friends without the help of a parent or teacher. 	 Exhibit: Amadinda What country in Africa does the Amadinda come from? a) South Carolina b) Chile c) Uganda d) Canada 	Exhibit: Digital Microscope What kind of bug is magnified on the wall? a) Moth b) Ant c) Beetle d) Ladybug
 Exhibit: Vertical Wind Tubes & Air Vortex Cannon What common invisible gas pushes object up in the Vertical Wind Tube and knocks objects over at the Air Vortex Cannon? a) Water Pressure b) Light Energy c) Air d) Magnetic Field 	 Exhibit: Whale Drum The drum is made from an a) Old Missile b) Old Propane Tank c) Old Submarine 	 Exhibit: Laser Harps Choose all that are correct. What three other helpful inventions use lasers beside the Laser Harps? a) Hearing Aids b) DVD Players c) Doctors use this devise to do surgery d) Microwave Oven e) Clothing factories use this to cut through hundreds of layers of fabric

Tips for a Great Myseum Field Trip

Myseum Layout

Myseum is all on one level; there are three doors: Main entrance (ingress/egress)

- ✓ Fire exit (egress only) next to toddler area
- ✓ Fire exit with a safety bar in the dino dig area
- ✓ All doors are alarmed.

Lunch/Snacks

Myseum allows food to be brought in for lunch or snacks; however, a party room must be used (a small additional Charge applies).

Safety

One chaperone for every five kids is required. Chaperones work together with Myseum staff to ensure the kids have a great experience.

- Myseum recommends Chaperones be stationed in the following key areas:
 - ✓ <u>Slide</u> to ensure kids do not go up the slide (another may be coming down). Kids should go down the slide one at a time → feet first. Be sure to show the kids their speed going down the slide - it's measured by radar.
 - ✓ <u>Blue inflatable</u> to help ensure kids meet minimum height requirements, and no flips, gymnastics or tackling/ roughhousing. Encourage Hot Lava (where the kids cannot walk on the red parts).
 - ✓ <u>UFO</u> to help ensure no running. Some adults go in with the kids using the flashlight on their phone. Also, adults can assure the kids there are no aliens in the UFO.
 - ✓ <u>Seaweed Swamp</u>. Two Chaperones Could be here to help ensure no running. Be sure to ask the kids if they found the swamp monster.
 - ✓ Two front doors
 - \checkmark <u>Other areas</u> to assist kids with exhibits or answer questions.

We also recommend teachers/Chaperones work with the kids in smaller groups. This enables the kids to get the most out of our exhibits.

When your group arrives at Myseum, a staff member will explain the safety rules to the kids and adults, but feel free to provide this information ahead of time to the Chaperones.

Thank you for choosing Myseum for your field trip



