

Science

AR

**Field Trip Destination Type**

Science Museum

**Field Trip Destination Name**

Museum of Discovery

**Field Trip Date**

April 2015

**Field Trip Description**

Have you ever walked across a rug, reached for the doorknob and ....Zap. Or, have you came inside from the cold, puled off your hat and.....BOING!!! What makes your hair stand straight up? Want to know why? Of course you do, everyone does! During this field trip, students will finally learn the science behind static electricity.

The objective of the field trip is to enhance the unit "Get a CHARGE Out of Learning" by exposing students to several hands-on science experiments aligned with the curriculum and having them build upon this knowledge by engaging them in a real world experience. To understand static electricity, students have to learn a little bit about the nature of matter. Or in other words, what is all the stuff around us made of? Through these hands-on activities, student swill learn about atoms, parts of an atom, electrical charges, and magnets. This unit will introduce students to the main principles to be considered while experiencing static electricity and to get a deeper understanding of the elements involved.

Another objective is to strengthen the unit by allowing students to apply their skills by interacting with a live presenter who will demonstrate the key information in the curriculum in a performance , "Is the Magic or Science?". Students will be challenged to discuss how each of the demonstrations of "magic" are actually static electricity at work. This will give the students the opportunity to apply what they have learned to a real world situation.

This field trip experience is important, because it enables students to expand their learning in a way that is impossible in the normal classroom. It's also important for students to have this opportunity outside the classroom because the majority are low performing, low income students who live in an area that lacks recreational activities. 83% of the students qualify for free and reduced lunch, and 23% live in poverty. Often, students from low income families aren't exposed to museums.

**How many students, staff, and volunteers will be participating?****Students****Staff** 10**Volunteers** 10**Benefits of Proposed Field Trip**

Students will benefit from the field trip, because when more than one method of learning is accessed as in hands-on learning and real world application, the information has a better chance of being stored in their memory for useful retrieval. Students who have difficulty in learning for reason of ESL barriers, learning disabilities, or behavioral interference can be found to be on task more often because they are part of the learning process and not just spectators.

This experience will benefit the curriculum by building on the knowledge taught in the unit "Get a CHARGE Out of Learning". Students will explore in hands-on learning activities to help better understand a strand of the Arkansas Science Frameworks.

Students will discover the basics of electricity and the science behind static electricity. Students will use different techniques and methods to build knowledge and skills obtained in the regular classroom.

To better understand the properties of electricity and the students will begin by watching teacher demonstrations. Then students will work through experiments on their own with lab groups. Students will produce their own static electricity and be able to find the science behind the mystery. Students will use these skills to identify the science behind the magic in the presenter's magic show and be able to explain why the magic is truly simple science.

These activities will take the unit to another level. All of the activities will be evaluated on a rubric by participation, procedures, observations, conclusions, presentation, and self-evaluation. These activities will be further assessed informally on in class assignments, homework, and group work. They will also be assessed on the state mandated test that aligns with the state frameworks.

After this experience, students will never forget how to find the science in magic!

**Use of Funds**

**Transportation** \$240  
**Activity Fees** \$400