BCPS Field Trip Request ID #8275

| Trip Request By Jason Lamont - HMS |
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| Trip Name Louisville Science Center |
| Trip Date 05-24-2018 |
| Approx. Pick-up Time 8:30AM |
| Return Date 05-24-2018 |
| Approx. Return Time 2:00PM |
| Class/Group Lamont Science and Discovery School |
| Student Count 160 |
| Chaperone Count 16 |
| Number of Vans/Buses 4 |
| Common Carrier Miller |
| Cost to Students 15 |
| How will you pay for students who cannot afford the fee? |
| Fundraising activities and parent donations will offset the cost of the students who cannot afford the trip. The school will provide the |

Place of Departure

Name: Hebron Middle School
Address: 3300 E Hebron Ln
City: Shepherdsville
State: KY

Destination

Name: Kentucky Science Center
Address: 727 W Main Street
City: Louisville
State: KY

Lesson Plans

Science:

Students will perform a variety of tasks to explore the science standards and learn through doing science. There are many different exhibits that address a lot of different standards. The students will participate by visiting the exhibits, and conducting a hands-on class offered by the museum. The science standards addressed:

MS-PS1-1. Develop models to describe the atomic composition of simple molecules and extended structures

MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.

Students will construct an extended structure using the carbon nanotubes and sketch their creation. Students will learn about the use of natural resources to create synthetic materials.

MS-PS2-2

Plan an investigation to provide evidence that the change in an object $\hat{a} \in \mathbb{T}^{M}$ s motion depends on the sum of the forces on the object and the mass of the object.

MS- ETS1-4.

Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

Students will create a rocket and experiment with the components to create the best solution based on iterations. Students will answer questions about the design, construction, and features of the rocket they designed.

MS-ESS2-2.

Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.

Students will manipulate the water table to investigate the different ways that water affects Earthâ€TMs surface through erosion and sedimentation. Students will answer questions about how water can change the geography of the land.

Students will examine the cave exhibit and compare what they see here with what they saw at Squire Boone Caverns. They will compare and contrast the different structures.

MS-ESS2-5.

Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.

MS-ESS2-6.

Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates

Students will visit the Weather and Atmosphere exhibits and learn about how different air masses combine to form the complex weather conditions found on Earth. They will learn about how tornadoes and hurricanes are formed and what the difference is between them.

Writing:

Students will write about their favorite three experiences in the museum. Students will practice writing a 3.8 paragraph to explain how going to museums is a great way to learn about scientific principles.

Math:

Students will learn about how math is inherent in everything we do. Weather and climatology use math to predict weather events before they occur. Students will explain how math is applicable.

Reading:

Students will read the signs at the exhibit and gather information from each station.