

# STEM

## EDUCATIONAL FIELD TRIPS!



ALL OF OUR  
**S.T.E.M.**  
LESSONS  
**FOLLOW**  
STATE-LEVEL  
**CURRICULUM**  
STANDARDS

WE OFFER **5 UNIQUE ACTIVITY-BASED STEM LESSONS**  
THAT MATCH WHAT YOU ARE TEACHING IN THE CLASSROOM!

## ELEMENTARY SCHOOL STEM LESSONS

### LESSON 1: THE SCIENCE OF ROLLER SKATING \*

Students will learn about the parts of a roller skate/inline skate and how each part functions to make the skate. They will discuss how surfaces in the rink are made of different materials and how that affects the skate in motion. Students will have a chance to showcase their creativity and design a new feature for a skate.

Topics Like: Geometry, Friction, Reverse Engineering, Design

### LESSON 2: MUSIC, MATH & ROLLER SKATING

Students will learn how to count using the beats of the music played in a roller rink and will learn how the type of music affects the speed of the skater. Fourth and fifth graders will also learn how to control the speed of skaters using the beat of the music.

Topics Like: Sound Waves, Beats per Minute, Frequency

### LESSON 3: HEART, HEALTH & FITNESS

Students will learn about basic human biology and how the body works from the inside out. Students will focus on heart related anatomy, nutrition, and exercise. Students will have fun exploring through heart healthy activities, such as finding and calculating an average heart rate. Students will also learn about the importance of making heart healthy food choices by identifying and understanding nutritional labels and facts.

Topics Like: Basic Anatomy, Heart Health, Calculating an Average, Labeling a Graph

### LESSON 4: FORMULAS, FRACTIONS, AND FUN; THE RELATIONSHIP BETWEEN MATH & ROLLER SKATING

Students will learn how math concepts can be found all over the skating rink. Students will measure and calculate the speed of a skater, use mean, median, and mode to talk about skate sizes, and study all of the shapes that can be found in a skating rink.

Topics Like: Mean, Median, and Mode, Geometry, Calculating Speed

### LESSON 5: NEWTON'S LAWS OF MOTION \*

*\* Great for wider range of student grade levels*

Students will learn about Newton's three laws, how they relate to real world experiences and roller skating. They will learn how force and mass play a large role in motion and construct a balloon rocket.

Topics Like: Motion, Inertia, Force



## RESERVE YOUR SCHOOL TODAY!