STEMTASTIC TAKEOVERS
LASER TAG & STEM EDUCATION FIELD TRIPS BROUGHT TO YOU

www.stratumHQ.com • 480.545.5500
SPACE EXPLORERES
Have you ever wanted to be an astronaut? Take an adventure into the depths of space and explore mysteries of the unknown. Students will have an out of this world experience as they step into the mobile planetarium! Imagine the allure and excitement we'll create about astronomy & space as students learn what it takes to be an astronaut, build a stomp rocket, & take a journey into outer space themed laser tag.

LUMINESCENT LIGHT ADVENTURE
Why do some things glow in the dark? Students will explore and examine the science behind what makes things glow. Create glow in the dark slime, learn what makes colors complementary, and delve into the difference between bioluminescence and fluorescence. Turn up the music, black lights, & complete the glow in the dark experience in a luminescent laser tag arena.

MIRRORS & MAZES
How does a mirror reflect what you see? Explore the science behind mirrors as students use the power of mirrors to complete challenges such as handwriting backwards, building a kaleidoscope, and creating a piece of art! Students will strategize as a team to beat a mirror maze. Then challenge your laser tag skills while using reflection to tag opponents.

AWESOME ADAPTATIONS
In every habitat, animals must adapt to their surroundings to survive, thrive, & stay alive! Students will take an adventure into a variety of habitats across the world and probe into the vast expanses of the arctic, desert, deep sea, & rainforest. Through a variety of hands-on activities and discussion, students will learn about animals in the wild, their camouflage, and how they can adapt to their surroundings. Then, students will apply their knowledge about camouflage and adaptation to a game of laser tag.
STEMTASTIC TAKEOVER

Let us take over your site for a half day of fun, engaging, hands-on learning. Students will enjoy rotating through assemblies, science demonstrations, & hands-on activities for up to 400 students. This model can be customized based on number of learners, space, & theme.

All programs include a topic related to laser tag technology such as circuitry, the light spectrum, mazes, along with activities that incorporate engineering, brain games, astronomy, coding, ecology and conservation, physics, bioscience and medicine, integrated mathematics, literacy, & the arts to name a few!

SUPERHERO SCIENCE

Work the mind & body with hands-on learning! Students will learn about the science behind superhero powers through an engaging & entertaining assembly. Engage your body to learn about how laser tag impacts certain physiological processes in their bodies. Next, engage your mind to test puzzles that focus on using different parts of the brain. Learn about how healthy mental & physical stimulation can be good for your body!

A”MAZE”ING ENGINEERING

Students will use invention, design, creative problem solving, communication, and explorative adventures to create their own life-size laser tag arena! By using the Engineering Design Process, hands-on discovery, and their imagination students will learn about concepts like engineering, reflection, and refraction. Teamwork is key as students work together to design walls and ways to move light. Imagine the fun students will have as they learn about the role engineering plays in everyday life as well as in a game of laser tag! [large space required]

CODE ME IF YOU CAN

Have you ever wondered what it takes to be a software engineer? Students will learn the basics of coding through a variety of hands on exploratory coding activities. Experiment with offline coding by programming a human robot to aim and tag a target; then apply those learned skills to program an Ozobot. These challenges will teach students about the integral role of circuits in both coding and laser tag!
“DINO”MITE DETECTIVE
Explore paleontology as students are transformed into dinosaur detectives! Students will don a vest and be taken back in time to the pre-historic ages and land of the dinosaurs. Learn about the various classifications of dinosaurs, how to excavate dinosaur eggs, and examine the fossil inside! Fascinate students as they create their own fossil and dinosaur skeleton during this dinomite adventure!

WEATHER MASTERS
Brave the elements for an epic engineering challenge and learn about weather’s wild ways! Students will master how to predict weather conditions by building a weather instrument and learn how wind, rain, tornados, and other variables in the atmosphere can impact weather. Students will be engaged in a weathering good time as they invent how to tsunami proof a house and engineer a way to make a laser tag vest waterproof.

FASCINATING FOOD SCIENCE
How many calories does it take for your body to function? Junior scientists will have the opportunity to view sugar under a microscope and analyze how the body digests food. Experiment with foods to determine which ones contain protein or sugar and learn how to calculate the number of calories in each item. Students will complete “My Plate” and calculate how many calories your body burns while playing laser tag.

STUDENT DIRECTED, PROJECT-BASED LEARNING & STEM INSTRUCTION
Through a partnership between Stratum & Arizona Science Center students can now experience “STEM on the Go” field trips! Limitless Learning programs bring learning to life through educational play that we bring to you! We will deliver, set-up, teach, & engage your students in a variety of fun, interactive hands-on STEM activities, experiments, & demonstrations. Students will learn about the science behind laser tag, lasers, the light spectrum, engineering, mazes, technology, & more. Choose from a variety of programs for groups of 100 to 400 or more!