



STREAM
MONTESSORI SCHOOL

Learn basics →

Build machines →

Add power →

Think & solve

STEM EXPLORERS

908 626 2800

StreamMontessoriSchool.org

258 King George Road, Warren NJ 07059



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Intro to Tools & Building

Kids learn how everyday tools like a hammer, screwdriver, and wrench work and how they apply force to build and fix things. Through hands-on construction, they explore basic engineering concepts such as pushing, pulling, tightening, turning, and simple mechanical connections.



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Intro to Gears

Kids learn how gears transfer motion and make things move by exploring gear trains, gear ratios, power, and torque in a hands-on way.



As they build four different geared machines, they discover how changing gear size affects speed and force, and how multiple gears work together in a system. Through experimenting and adjusting their models, kids develop an understanding of cause and effect, basic mechanical engineering principles, and problem-solving strategies.

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Intro to Engineering

Kids explore real-world engineering through hands-on experiments with levers, pulleys, and forces, then build land vehicles, flying machines, watercraft, and simple home technology models—learning how engineers design machines that move on land, in air, and in water.



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Automobile

Kids learn how different vehicles are designed to solve real-world problems. As they build models like a crane truck or fire truck, they explore basic engineering concepts such as wheels and axles, lifting mechanisms, motion, balance, and simple machines.



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Aircraft Engineer

Kids build exciting flying machines—from a passenger jet and helicopter to a glider and supersonic jet. Using large, colorful pieces, Kids strengthen fine motor skills and learn basic engineering concepts like pushes, pulls, and how forces help objects move through the air.



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Robot Engineer

The robots have moving parts, wheels, and gears, so kids can learn firsthand about simple machines and gear trains. It helps develop fine motor skills, science and math skills, visual-spatial skills, and reasoning and concept development skills.



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Boat Engineer

Kids build boats like a sailboat, tugboat, catamaran, and hydroplane while learning how they work. They learn how boats float by exploring buoyancy and balance, and how push and pull forces help boats move. They discover why some boats go faster, how water resistance affects speed, and why certain designs improve stability.



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Coding & Robotics

Kids learn essential programming concepts such as sequencing, loops, events, conditionals, functions, and variables through hands-on, screen-free play. Kids develop computational thinking, logical reasoning, and problem-solving skills as they build, test, and debug their programs.

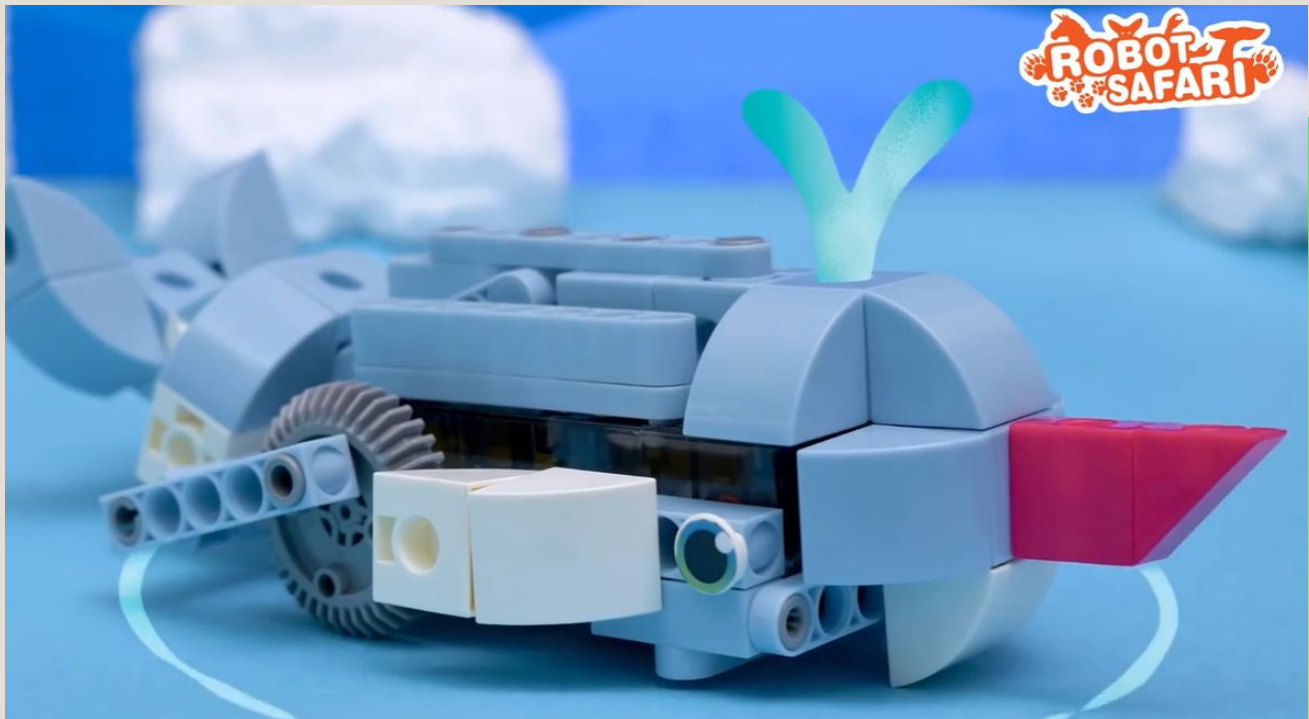


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Robot Safari -Introduction to Motoriz

Kids can build models of these robots and experiment with them to see how each one uses the battery-powered motor and mechanical parts to move in a different way. Model building and experiments develop fine motor skills, mechanical engineering skills, and visual-spatial skills.





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Wacky, Misfit, Rogue Robots

Kids can build models of eight different robots and experiment to see how each one uses the battery -powered motor, gears, and other mechanical parts. Each robot moves its arms or legs in a different way, creating funny walking and moving behaviors, and also teaching kids how simple mechanical systems work.

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Ubongo 3D

Kids develop spatial reasoning by fitting 3D blocks into specific shapes and fully filling puzzle spaces. They strengthen problem-solving, logical thinking, and mental rotation skills while racing against time. It also builds focus, perseverance, strategic thinking, and flexible thinking across multiple difficulty levels, supporting brain development through fun, hands-on challenges.



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Thank you

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