Explore Make It Go! at home!

Our Make It Go exhibit offers children the opportunity to make it go with bicycles, a hot air balloon, and a race track. Try these activities at home to explore the science of motion.

Explore push and pull
With your child, explore the difference between push and pull. Use cars, linking blocks, or anything else you can find that your child can push or pull.

Make a ramp!
Use blocks, a book, wooden planks, a cutting board or any material you can find that will create a ramp and race some cars! You can also use any item that rolls and race them! Make the ramps higher or lower and see how fast they go!

Balloon rocket
Blow up a balloon, let the balloon go, and measure how far it goes! Try adding different amounts of air to the balloon to see if that makes a difference in how far it travels!

Learn your name with cars
Using an old box as the garage, create spaces for each letter of your child’s name. Then, write the same letters on tape and attach to cars, or anything with wheels. Your child can match the car to the parking spot, at the same time spelling their name!

Icy car rescue
Freeze several cars, boats, or airplanes in a large block of ice. Work together with your child to pour hot water, use a blow dryer, or any other creative idea they might have to rescue the vehicles from the ice!

Wind moves
Collect different objects from around your house, like cotton balls, rocks, beans, or any other creative ideas you may have. Line the objects on the table and allow your child to blow them away. Notice what blows the easiest, what traveled the farthest, etc. together.

For your infant and young toddler

Wheel sensory box
Go to your local thrift store and collect different types of wheels. Put them in a treasure basket and let the open exploration begin.

Drawing with cars
Attach a marker, low enough so it reaches the ground, to a car or vehicle. Allow your child to push their marker car around on paper to create their own vehicle art!

Vehicle match
Print or draw a simple vehicle on a card, offer your child 3 different types of vehicles and support them to match the vehicle that is most like the vehicle on the card.

Car wash
Using a water table, the bathtub, or a sensory bin, add vehicles, water, and a scrub brush and let your child clean the vehicles.

Peek-a-boo board
Using a poster board, print or draw pictures of different vehicles (we recommend printing real life pictures for better learning purposes), cover each picture with a piece of fabric, attached to the board only at one end, and let your child lift the fabric and discover what is underneath. Help them name the vehicles together.

Mud painting with wheels
After a rain fall or if you can create your own mud, allow your child to dip the wheels of their vehicle in the mud and make tracks on the sidewalk or a piece of paper with the wheels. A fun process art based activity!
Paper towel roll train
(age 2-6)

What you’ll need:
• Paper towel rolls, cut into the sizes of trains your child would like
• Clothespin
• Cotton ball
• Paperclips
• Black construction paper
• Glue stick
• 1-hole punch
• Scissors
• Various paint colors
• Paint brushes

What to do:
1. Cut your paper towel rolls and paint them (or have your child paint them) the colors your child desires
2. Paint the clothespin black, after it dries, press it through the front end of the top of your train, pinching side down
3. Trace and cut out wheels for your train using the construction paper, glue to your trains
4. Using black paint or a black marker, color the cotton ball (the cotton ball is the steam!), place or glue it between the open ends of your clothespin
5. Hole punch the front and back of each side of each train car (except the engine and caboose of the train), use the paperclips to attach the train cars together.

What it all represents:
Trains are vehicles your child likely sees frequently. The next time you see a train, discuss what the train might be transporting, and the things that trains do transport. Talk about the noises the train makes, make those sounds together! This is a great way to introduce new vocabulary into your child’s lexicon, like conductor, coal, engine, caboose, railroad, etc. to help them gain understanding of what it means to transport items across the world. If your child is really interested, you can take them to your local train depot for a visit!

Baking soda powered boat
(age 3-8)

What you’ll need:
• Piece of Styrofoam cut into a triangle, boat shape (a Styrofoam egg carton works well)
• Strong tape
• Straws, cut into 2 small pieces
• Plastic bottle lid
• Vinegar
• Baking soda
• Tub for water

What to do:
1. Tape or glue your bottle lid to the back of your boat
2. Tape your straw pieces to the back of the boat, coming from the lid (a tip: make sure the straws are securely taped to the lid and parallel to the water)
3. Fill the lid with baking soda
4. Carefully pour the vinegar into the lid
5. Watch your boat go flying! If your boat is unsuccessful in its travel, try adjusting the amount of baking soda, vinegar, or the angle of the straws. Persevere until you get it really going!

What it all represents:
Note to your child the relationship between baking soda and vinegar, and how their chemical reaction powers your boat. Try different vehicles to see if you can make something else go. Add weight to your boat, change the variables of this experiment to notice different actions.

Penny pass bicycle game
(age 18 months-10)

What you’ll need:
• Bicycle/Strider/tricycle
• Soup cans or jars (as many as you want)
• Cones or objects to create an "obstacle course"
• Sidewalk, driveway, or safe area for your child to ride
• Pennies or any other item that can be dropped into the jars (as many of these as there are jars--i.e. if you have 4 jars, use 4 pennies)

What to do:
1. Create your course. Make this as simple or challenging as the bike rider can handle. You can add loops, turns, zigzags, etc.
2. Place your jars or cans along your course
3. Your rider will drop the pennies into the jars as they move along!
4. Course can be changed as the rider masters it!

What it all represents:
This is a gross motor and fine motor activity combined into one. Gross motor activities can help your child build balance, strengthen large muscle groups, and build posture. Fine motor movements aide your child in hand writing skills, pincer grasp skills, and eye sight coordination. Support your child in their success on this course! This will help get your child outside and moving!

Note: this game can be altered for any child that can use a tricycle/Strider bike or a bicycle

Reading Connections
Cars and Trucks from A to Z by Richard Scarry
Freight Train by Donald Crews
This is the Way We Go to School: A Book About Children Around the World by Edith Baer