WHAT YOU’LL NEED
• Cardboard tea box
• Hole punch
• Cardstock
• Tacky glue
• Duct tape in various colors
• Orange, red, and yellow tissue paper

WHAT TO DO
1. With the lid closed, cut the tea box in half. Rotate so that the opening is at the top and punch holes in two opposite sides.
2. Cut out the templates. Trace the body pieces onto cardstock and cut out. Fold back the tabs on the wings, then sandwich two together with glue; repeat with the other pair. Glue the body, front, back and bottom to the tea box as shown, then apply glue to the wing tabs and attach to the rocket body. Punch holes through the cardstock at each opening.
3. To make duct tape stickers for the stripes and windows: Tape strips of tape to parchment paper, overlapping the edges slightly. Flip over, then trace the templates onto the back; cut out. Peel the parchment paper off the back and press them onto the sides of the rocket.
4. For tissue paper flames: Layer a few colors of tissue paper, trace the templates and cut out. Roll the large flames first and wrap the smaller ones around it; secure with tape. Glue to rocket.
Adjust the position of the can to change how far the ping-pong balls travel.

WHAT YOU’LL NEED
• Removable adhesive wall hook (like a Command Hook)
• Cardboard tea box
• Hole punch
• Cardstock
• Tacky glue
• 11½ feet of parachute cord, cut into two pieces: 10 feet and 16 inches
• Swivel-eye pulley
• Duct tape

WHAT TO DO
1. Attach the hook to a wall, about as high as your child can reach; let set.
2. Cut the box in half lengthwise, punch holes in two opposite sides, then use our template (find it at familyfunmag.com/printables) to create the rocket from cardstock and adhere it to the box. Tie one end of the 16-inch rope to one hole, loop it through the eye of the pulley, and tie it to the hole on the other side.
3. Run the 10-foot piece of rope through the block (wheel) of the pulley. Tie a loop onto one end, then hang it on the wall hook. Pull the other end of the rope until it’s taut, then use duct tape to secure it to the floor at a 45-degree angle from the wall (or hold it in place for your child).
4. Have your child push the rocket all the way up to the top of the line, then let go and watch the rocket fly!

HOW DOES IT WORK?
A pulley is a wheel with a grooved rim that helps it grip the rope. As the wheel turns, it encounters very little friction as it travels, so it moves quickly. Because the far end of the rope is lower than the anchor point in the wall, gravity pulls the rocket toward the ground—super fast!

WHAT YOU’LL NEED
• Clean metal can (like a coffee can)
• Scrapbook paper
• Tape
• Yardstick
• Acrylic paint and paintbrush
• Hot glue
• 4 plastic party cups
• Rubber band
• Ping-pong balls or other small objects

WHAT TO DO
1. Cover the can with scrapbook paper and secure with tape. Paint the yardstick; let dry.
2. Use hot glue to attach the plastic party cups to one end of the yardstick (an adult’s job). Secure the can to the middle of the yardstick with a rubber band.
3. Place ping-pong balls or other small objects in the cups, then stomp or press down firmly on the free end of the yardstick to launch the projectiles across the room.

HOW DOES IT WORK?
A lever is a simple machine made from a rigid beam (the yardstick) and a fulcrum (the can). When your child applies downward force to one side, it elicits an opposite reaction, sending the unattached load (the ping-pong balls) flying. You can change the amount of effort it takes to move those balls: The closer the can is to the cups, the less work it takes to move the projectiles.