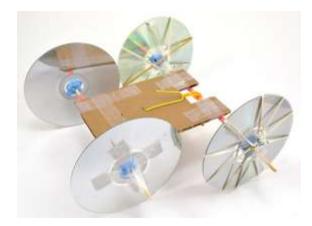
## RUBBER BAND CD CAR

## Materials you will need:

- Corrugated cardboard
- Two drinking straws
- Two wooden skewers
- Four CDs (that are okay to get scratched)
- Sponge
- Paper clip
- Assorted rubber bands
- Tape
- Scissors
- Flat, hard surface for testing your car



## Assembling Instructions:

- 1. Carefully cut a piece of corrugated cardboard that is slightly longer and wider than the length of one straw.
- 2. Tape the two straws to the cardboard, parallel to each other, one at each end.
- 3. Cut a rectangular notch in the cardboard on one end, about one inch by one inch. This will also cut a segment out of the middle of one of the straws.
- 4. Insert a wooden skewer through each straw. These will be your car's axles.
- 5. Cut four small squares from the sponge and carefully press them onto the ends of the skewers.
- 6. Attach CDs to the axles to form wheels. Do this by stuffing a piece of sponge into the hole in the middle of the CD, then using tape to secure the CD and prevent it from wobbling.
- 7. Make sure your car can roll smoothly. Put it down on a flat surface and give it a push. If necessary, adjust the wheels so they are all parallel and don't wobble.
- 8. Loop a rubber band through itself around the middle, exposed part of the wooden skewer (where you cut out a notch in the cardboard and straw).
- 9. Tape the rubber band to the skewer to prevent it from slipping—when the skewer rotates, the rubber band should rotate with it.
- 10. Cut a small slot in the middle of the piece of cardboard.
- 11. Hook a paper clip through the slot.
- 12. Hook the free end of the rubber band onto the paper clip.
- 13. Wind up the axle that's connected to the rubber band. If necessary, pinch the rubber band on the axle when you start, to prevent it from slipping.
- 14. Put your car down and release the axle.

## **Troubleshooting:**

- If the rubber band didn't unwind at all, wind it more tightly and try again. You can also try changing the location of the slot for the paper clip to adjust the rubber band's tightness.
- If the rubber band unwound but the axle didn't spin, then the rubber band might not have been attached securely enough to the skewer. Try attaching it to the skewer by tying a tight knot or using hot glue.
- If the wheels spun but the car didn't move forward at all, there might not have been enough friction between the CDs and the ground. Try using the car on a different surface. If that still doesn't work, try giving your CDs more grip by stretching rubber bands around them or by putting a bead of hot glue along the edges. (Let the glue dry completely before you test your car again.)