

MAGNUS GLIDER VISUAL INSTRUCTIONS

Materials: What you need

- 2 – 12 oz. Styrofoam cups (note, the cups in the picture are paper. Styrofoam is recommended)
- 4 – Rubber bands, #19
- Masking Tape



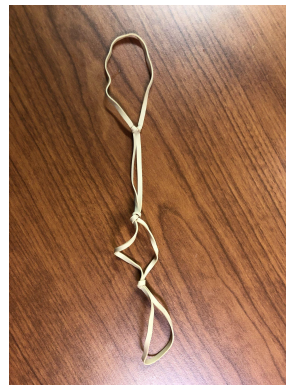
Step 1: Build the glider

- Tape the bottoms of the cups together so that the open mouths face away from each other.
- Make sure the cup bottoms line up evenly with each other. Use several wraps of tape.



Step 2: Make a rubber band chain

- Take two rubber bands and loop one around the edge of a second, then back through itself.
- Pull to make the knot tight. Repeat to connect the other bands to the chain.



Step 3: Wrap the rubber band

- Use your thumb to hold one end of the chain in the center of the cups.
- Stretching the rubber bands, but not so tight they damage the cups, wrap the chain around the taped part of the cups while holding onto the end of the chain.
- Once almost completely wrapped, hook the other end of the chain over your other thumb so that the chain is coming out under the cups.



Step 4: The launch

- To launch, hold the hand with the cups behind the other hand. Make sure the rubber band chain is coming out under the cups.
- Aim your forward hand up in the air, pull the cups back (unwind a little if needed) and let go of the cups.
- It won't fly high, but rather glide gently to the ground. It is especially cool if you do it at the top of the stairs or off a balcony!



Variations: Try the following changes and compare your results

- Try creating a magnus glider with four cups instead of two
- Try different size cups
- Try longer or shorter rubber band chains
- Try different types of cups (paper, plastic, etc.)