



Pack 118 Water Rocket Derby

A rocket derby uses water rockets that are propelled by water and air pressure. The rockets can fly up to 50-60 feet in the air.

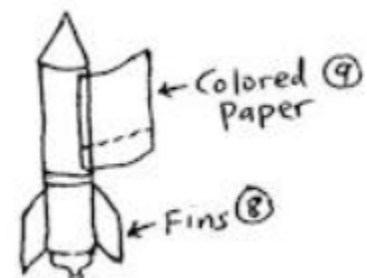
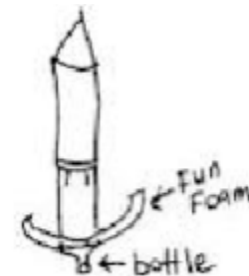
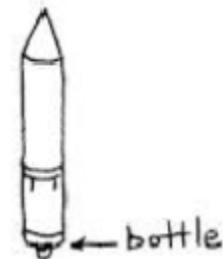
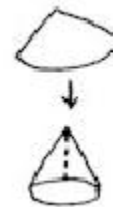
Rocket Materials

18 inch cardboard mailing tube with cap
24 oz. plastic soda bottle (empty)
Paper or card
Matte or cardboard
Fun Foam

Cap is pushed inside tube
Must be soda bottle not water bottle
Bright colors for the nosecone
For the fins
To wrap round soda bottle

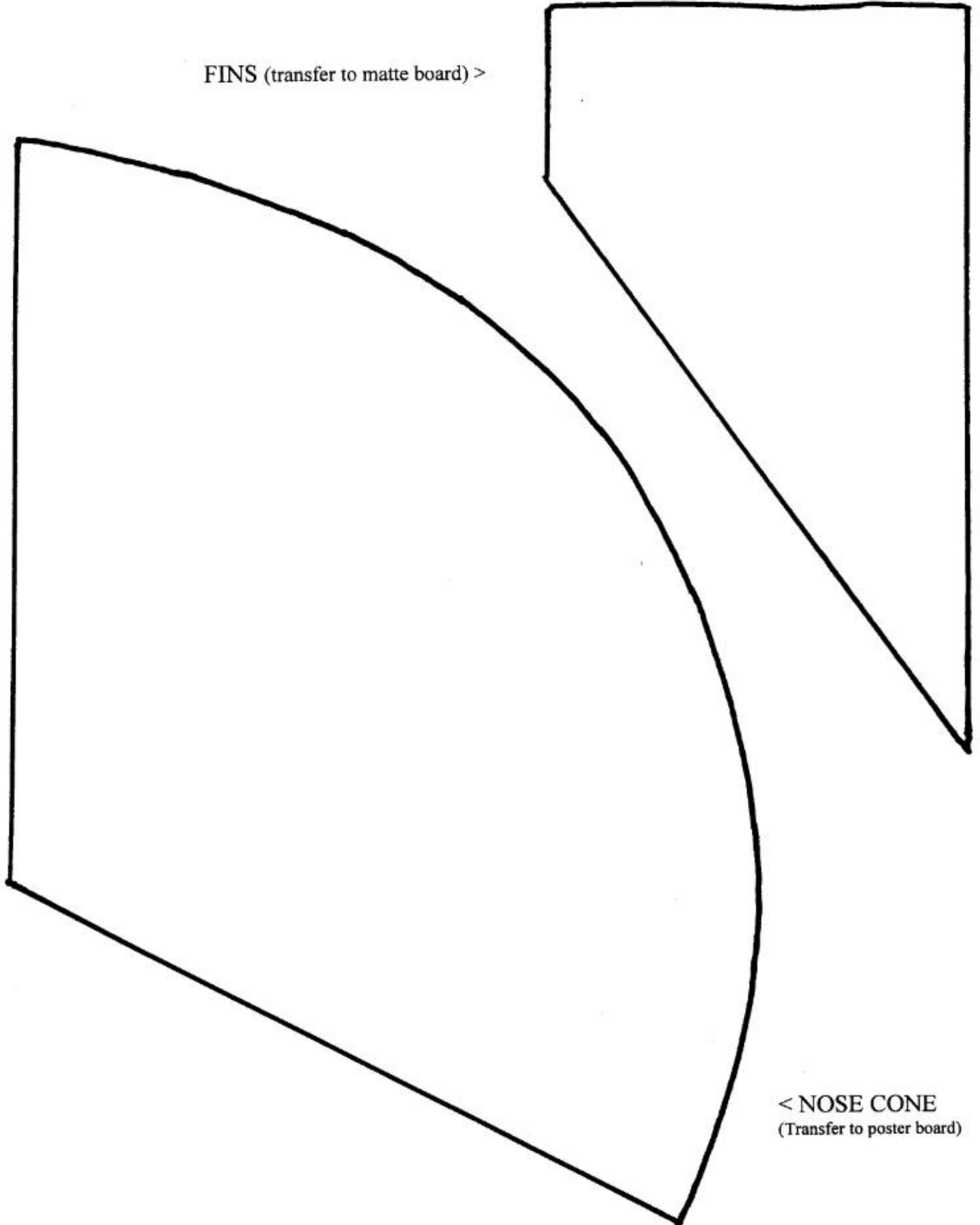
Rocket Construction

1. Shape the fan-shaped cardboard into a nosecone and tape together, making sure that the opening fits onto the cardboard tube.
2. Center the nosecone on the end of the tube, and tape the nosecone on to the tube. Completely cover the nosecone with tape.
3. Wrap a strip of fun foam around the top of the plastic soda bottle. The fun foam keeps the bottle from moving around in the tube. Insert the bottle into the tube, with the bottle neck sticking out. Seal the bottle in the tube with tape.
4. Tape three or four fins on to the tube. The fin point should be pointing toward the nosecone. Tape fins **SECURELY** onto tube, and cover completely with tape. Decorate the rocket with markers, stickers, colored paper etc.



TUBE ROCKET PATTERNS

FINS (transfer to matte board) >



< NOSE CONE
(Transfer to poster board)