

MAKEit:

PAPER-WALKER

Step by step instructions by:
Christian L. Treviño

Average activity time:
40 mins to 1 hour
Age group w/adult assistance:
7 yrs and up

With inspiration and modified patterns from the book:
“Walking Automata” by Magdalen Bear

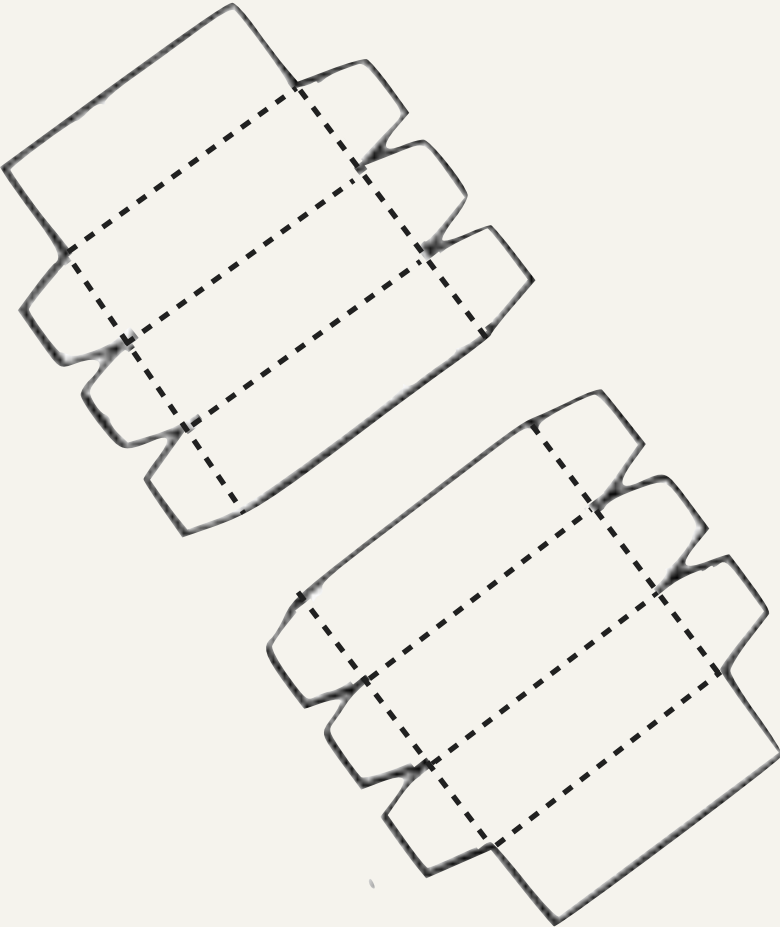
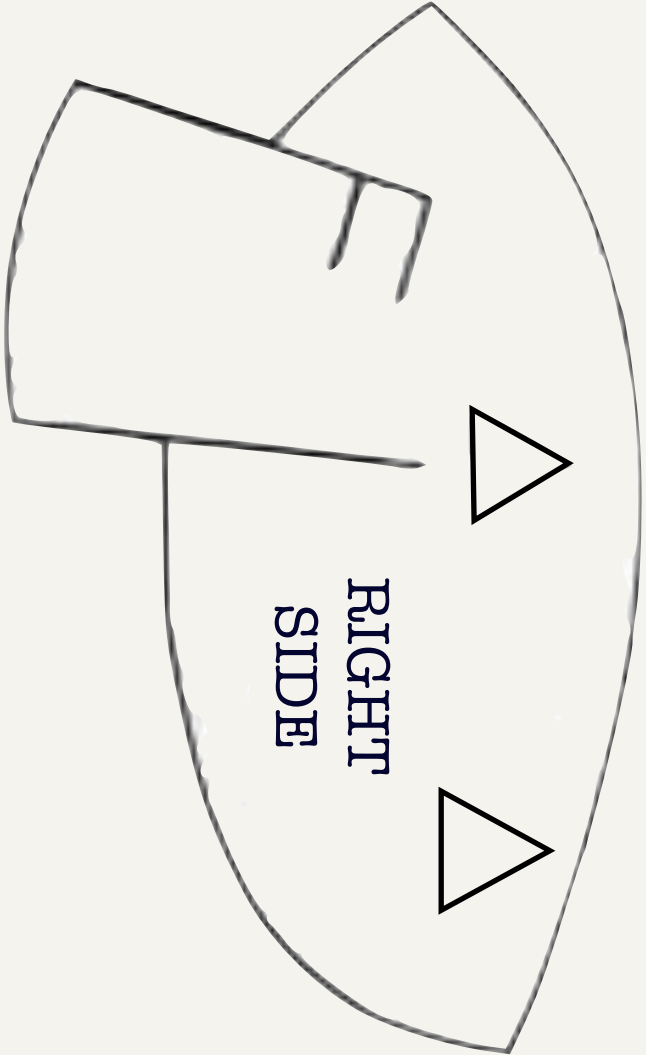
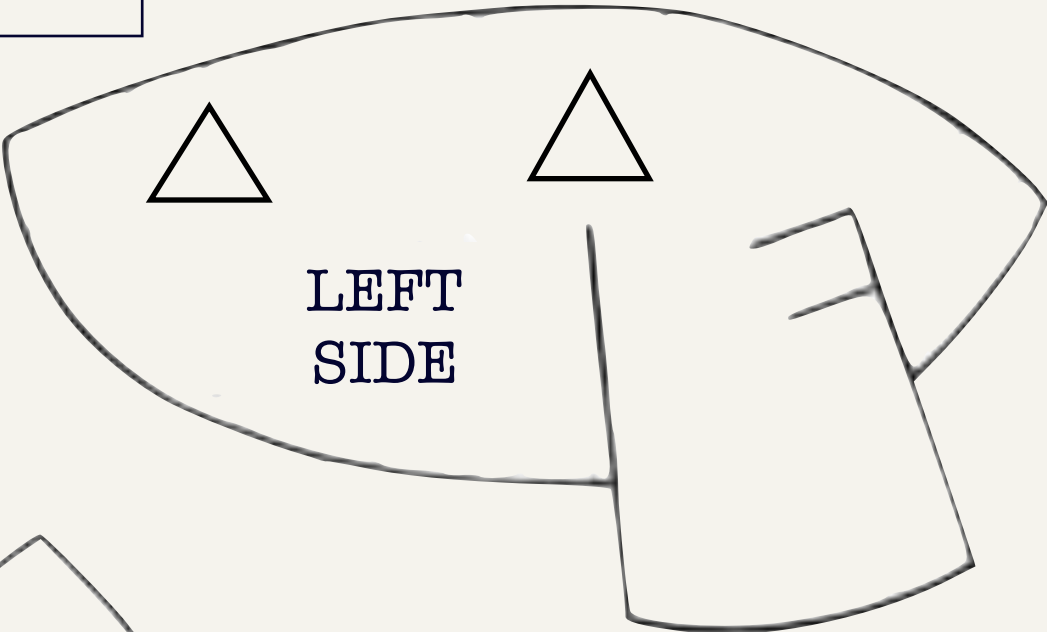
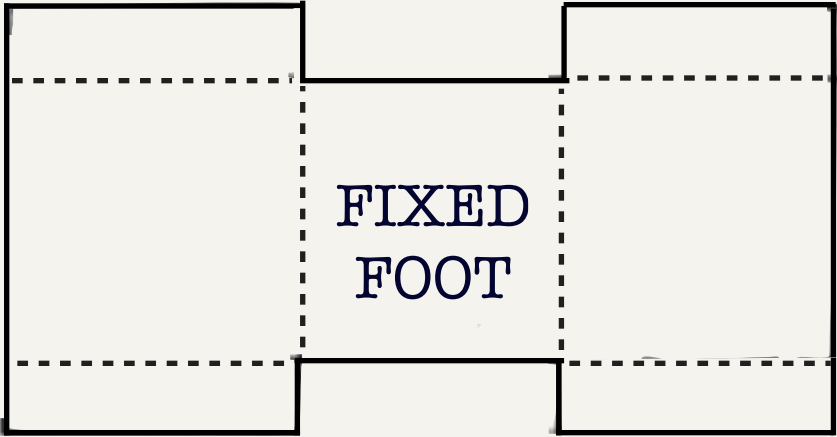
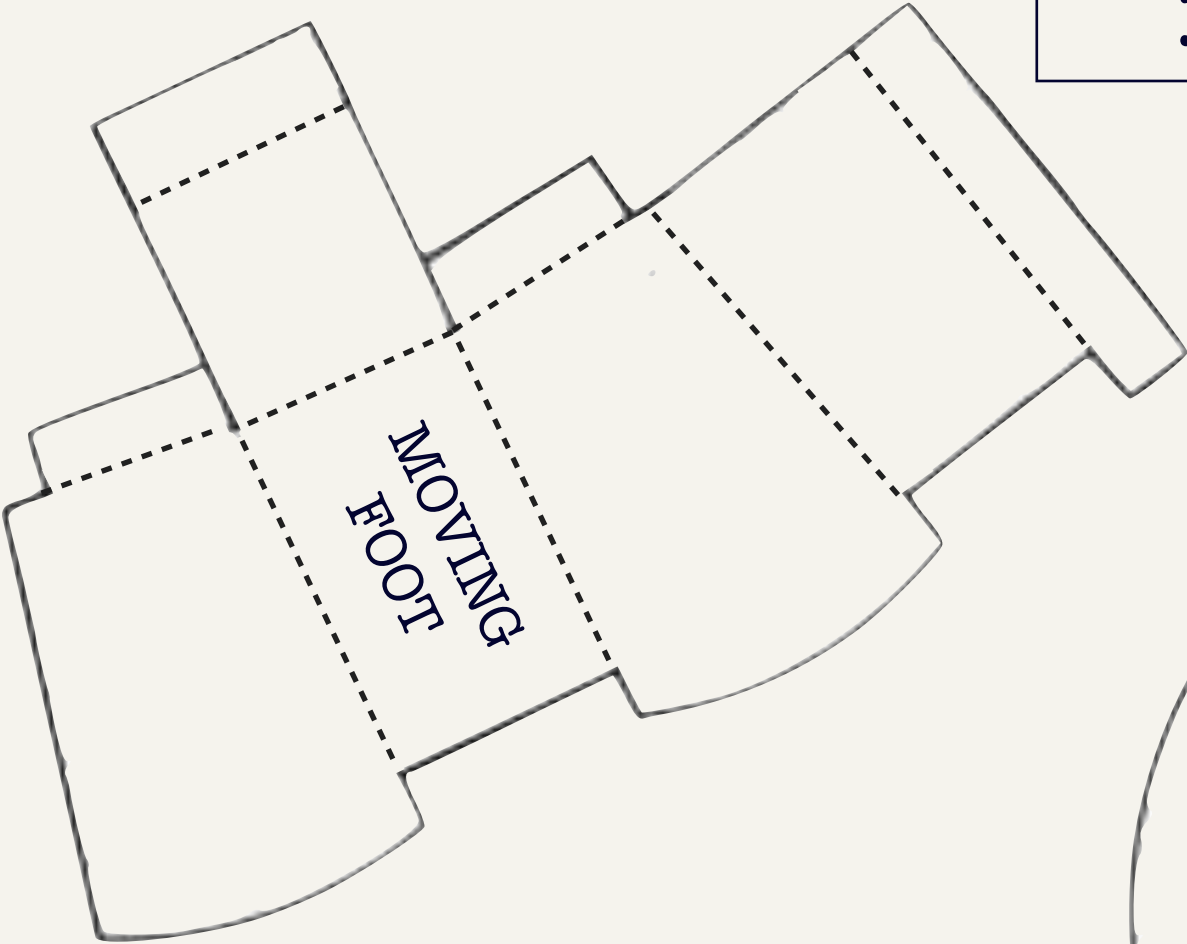
List of Supplies:

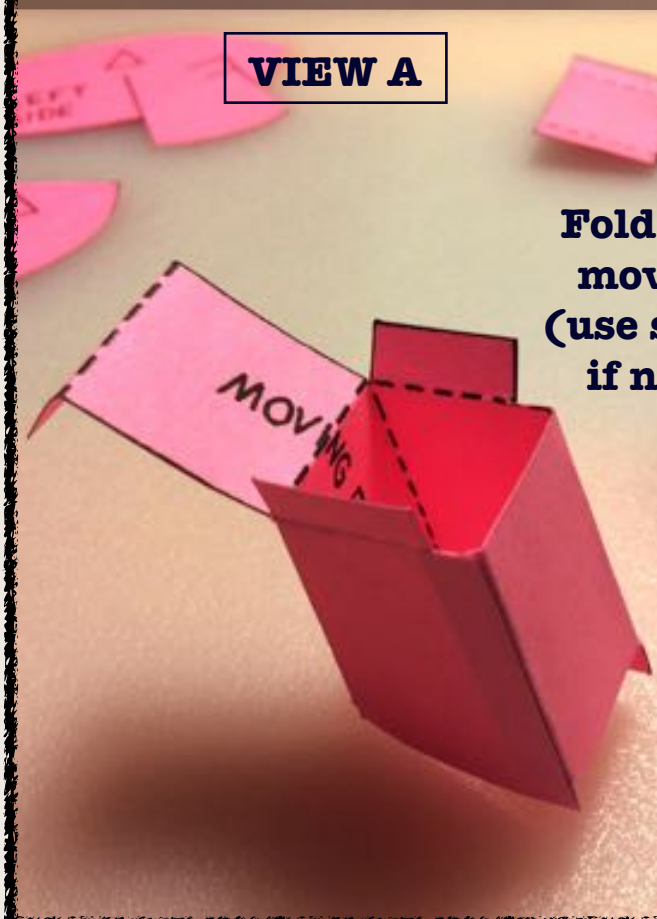
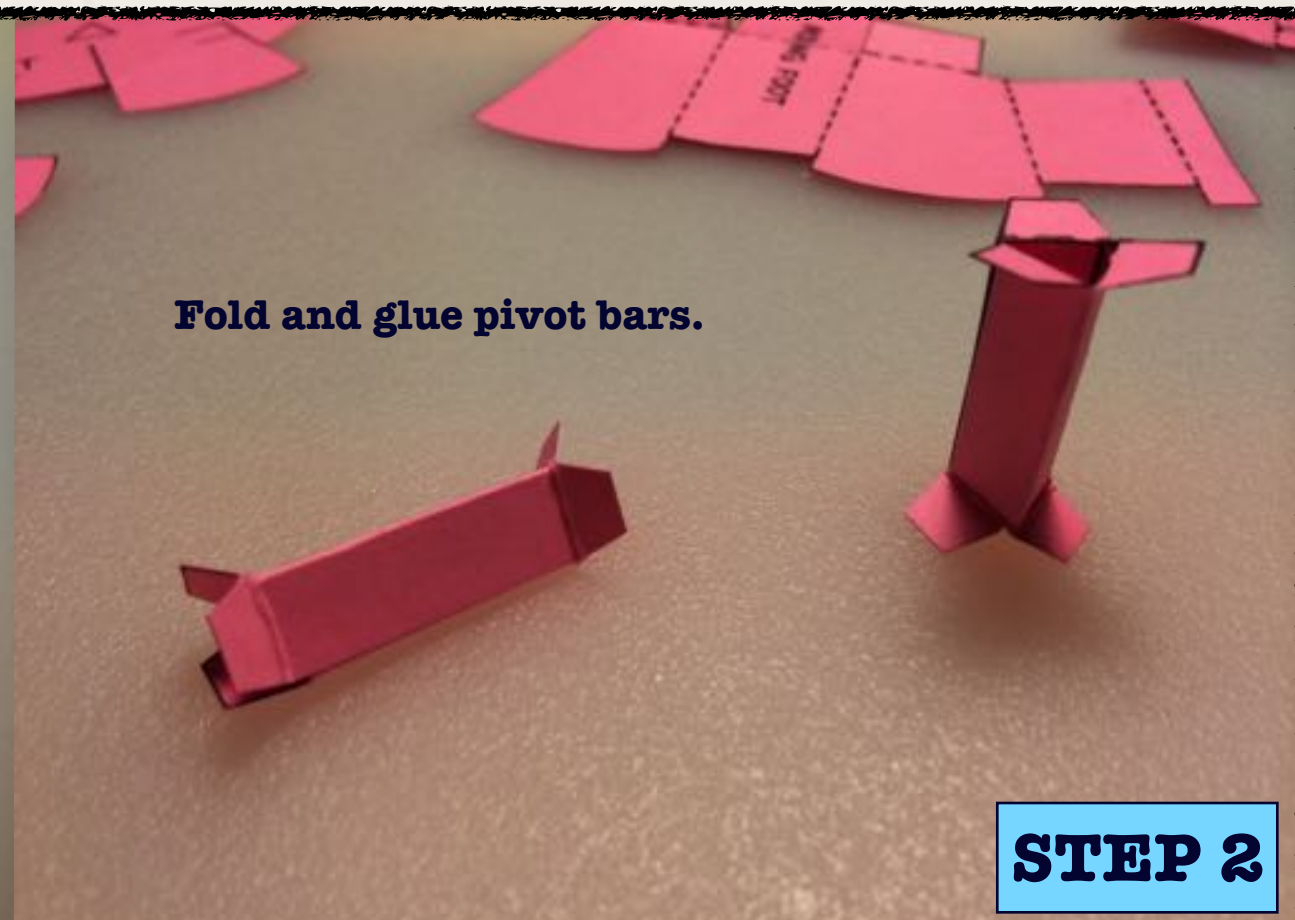
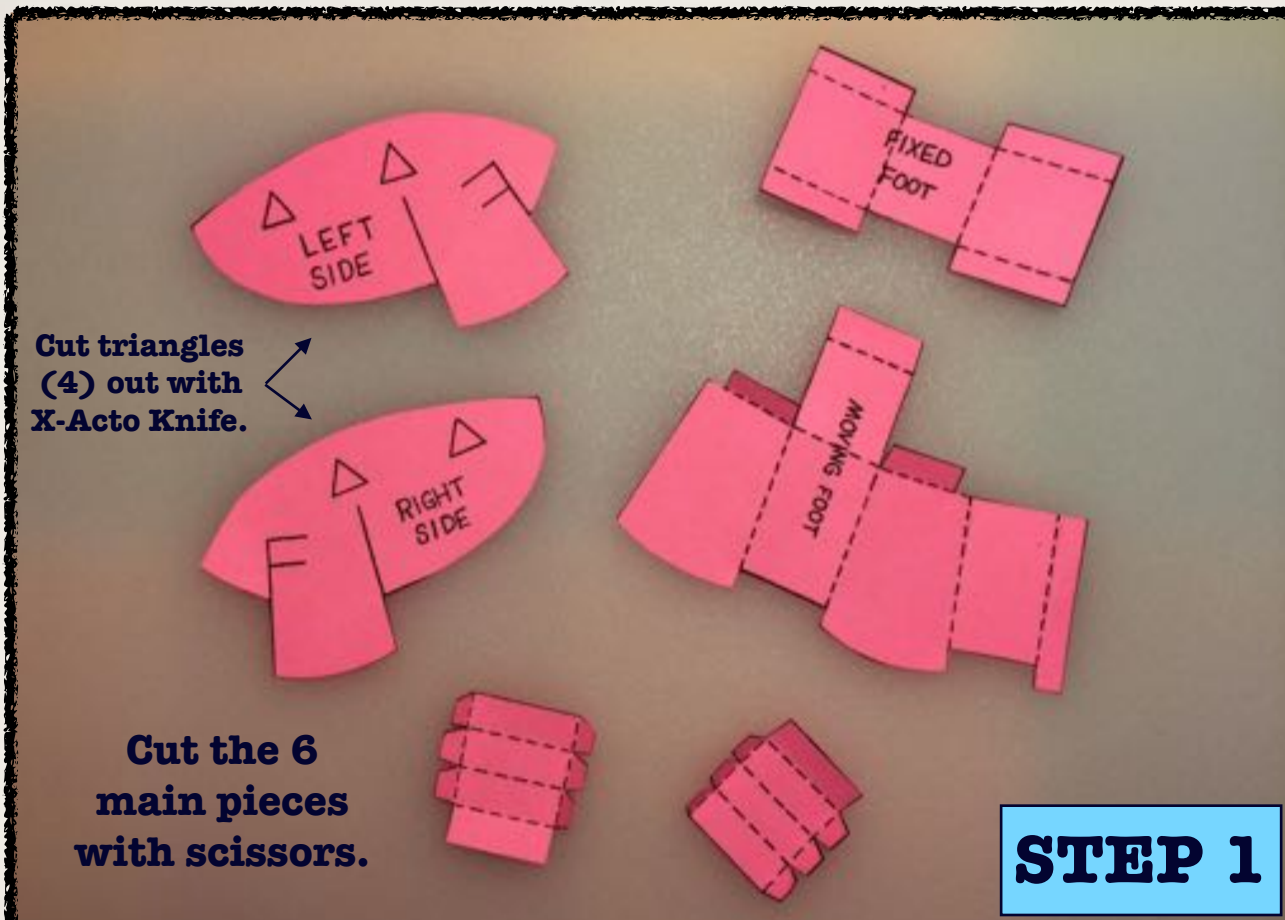
1. **Cardstock paper** (1 sheet)- Print the “Paper-Walker pattern” on this.
2. **Small washers or pennies** (Set of 2)
3. **Scissors** (1 pair)*
4. **Glue stick** (1 stick)
5. **Tape** (1 roll)
6. **Hobby knife** (1) *
7. **Fast dry Super Glue** (1 bottle)*
8. **Ramp** (1)- A few books stacked make a great ramp and allow for easy slope adjustment. If the walker begins to slide, try using a surface with more friction such as: foam, wood, or thick paper.

*USE ONLY WITH ADULT SUPERVISION.



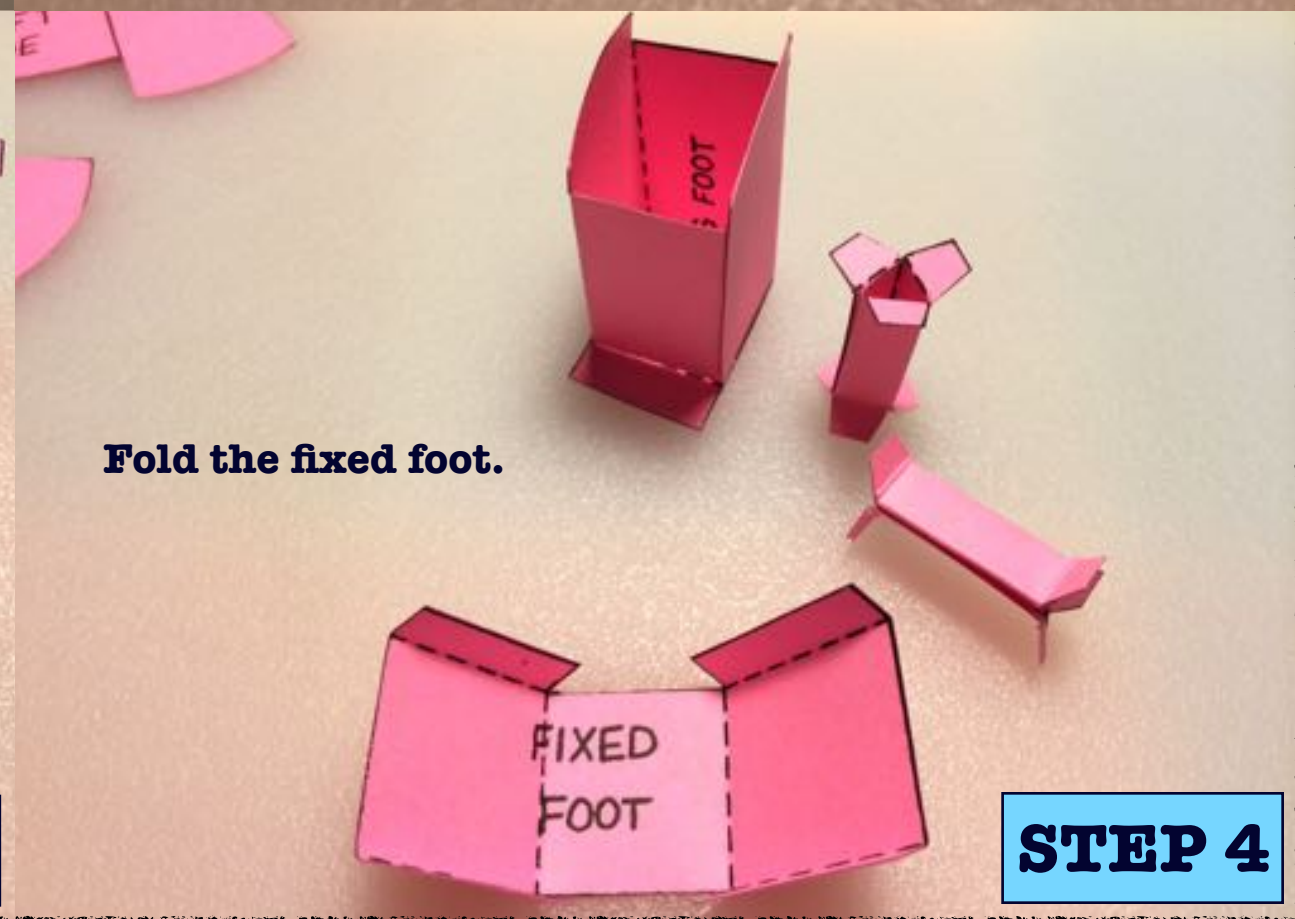
Paper-Walker Pattern:



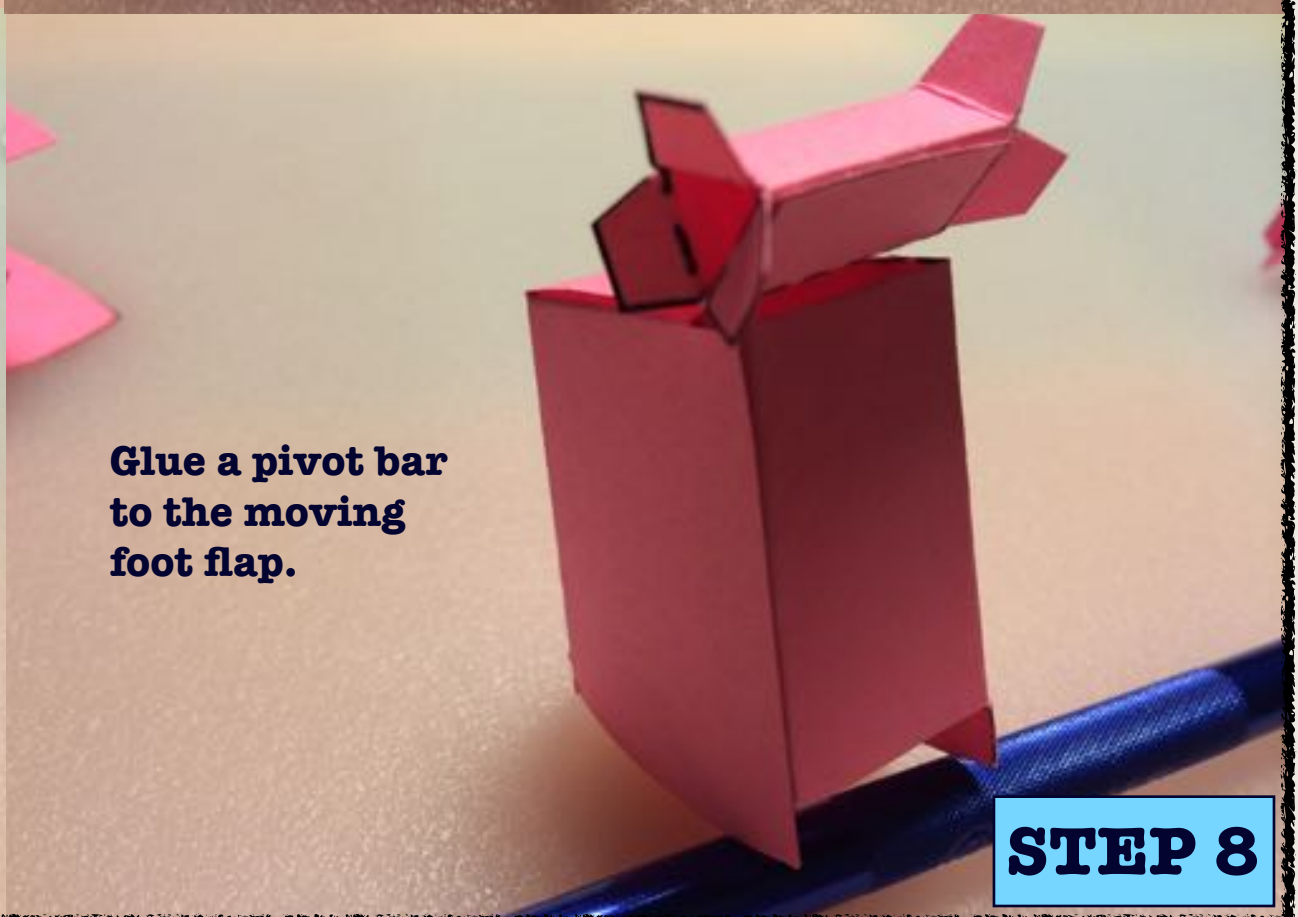
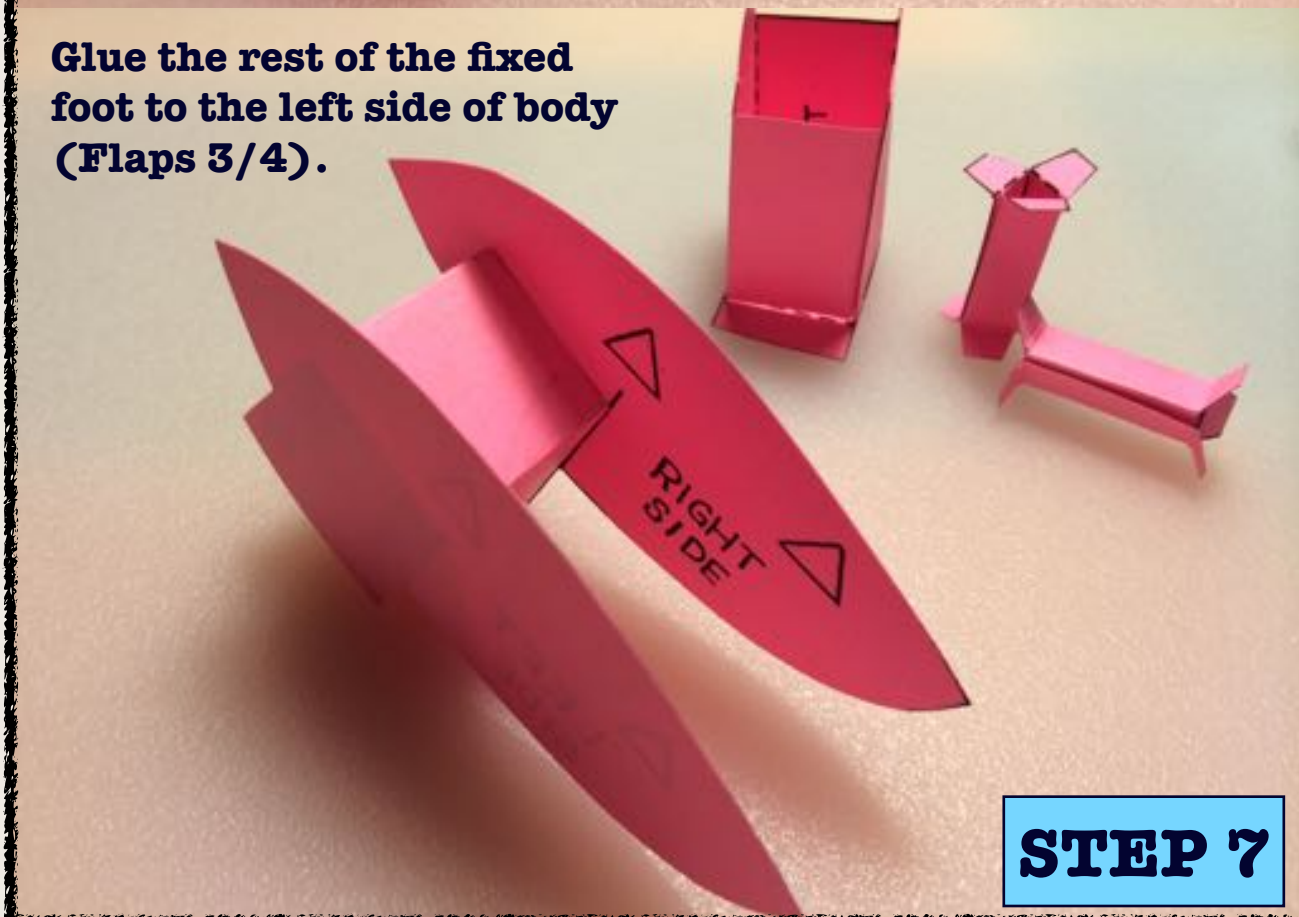
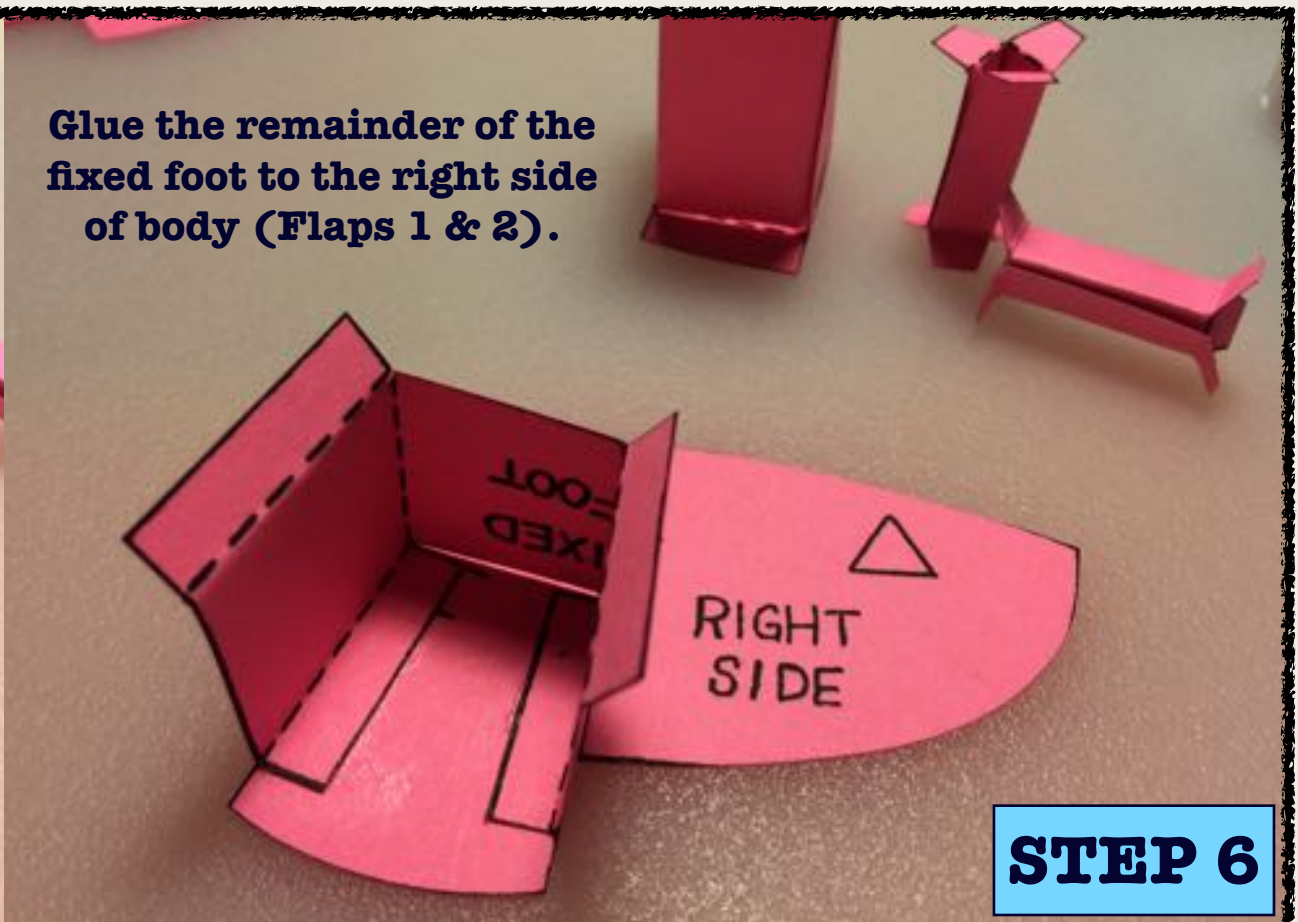
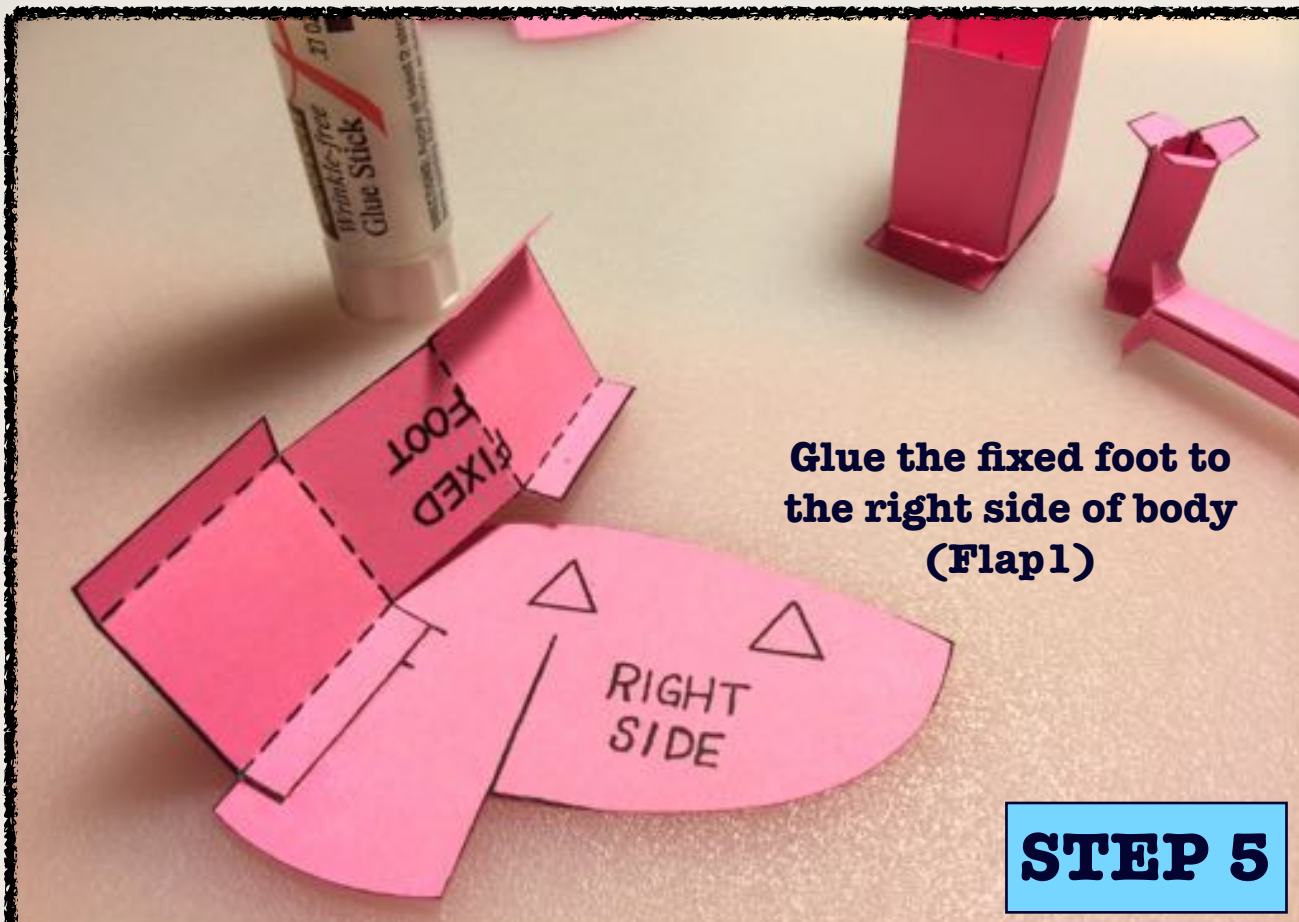


Fold and glue moving foot (use super glue if needed).

STEP 3

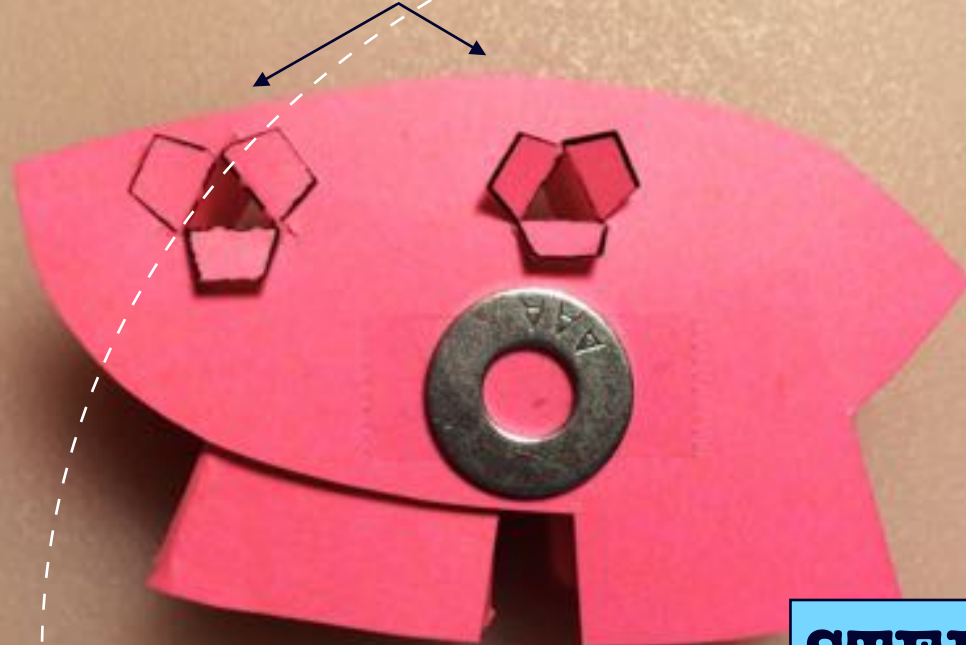


CUT ON SOLID LINES AND FOLD ON DASHED LINES.



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Insert the pivot bars (1 and 2) into the triangle cutouts as shown below:



STEP 9

(Moving Foot)

(Fixed Foot)

Add 1 washer (or a penny) to each side of the body with tape.

STEP 10

You are now ready to test your paper-walker!



NOTE: Adjust the washers (or pennies) to find your walker's Center of Mass (COM) as you test the walker on the ramp.

NOTE: Adjust the curvature of your feet by trimming with scissors while imagining a very large circle.

NOTE: The COM should be very near the walkers pivot point at which the moving leg revolves.

STEP 11