MAKEit:
PAPER-WALKER

Step by step instructions by:
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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:

- Moving Foot
- Fixed Foot
- Left Side
- Right Side
STEP 1
Cut the 6 main pieces with scissors.

STEP 2
Fold and glue pivot bars.

STEP 3
Fold and glue moving foot (use super glue if needed).

STEP 4
Fold the fixed foot.

CUT ON SOLID LINES AND FOLD ON DASHED LINES.
**STEP 7**

Glue the rest of the fixed foot to the left side of body (Flaps 3/4).

**STEP 6**

Glue the remainder of the fixed foot to the right side of body (Flaps 1 & 2).

**STEP 8**

Glue a pivot bar to the moving foot flap.

**STEP 5**

Glue the fixed foot to the right side of body (Flap1).
Insert the pivot bars (1 and 2) into the triangle cutouts as shown below:

**STEP 9**

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!

**STEP 11**

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.