

Magic in Paper Engineering



Supplies:

- Cardstock template sheets
- Craft clear bonding glue
- Scissors
- Bone folders
- Jumbo Paper Clips
- Rubber bands (Size 16 and size 18)



Activity:

1. Choose one of the four animals and pick different colors for their set of templates:

- **Body (2 pages, the same color)**
- **Torso**
- **Face**

2. Cut the templates by following the dark solid lines.

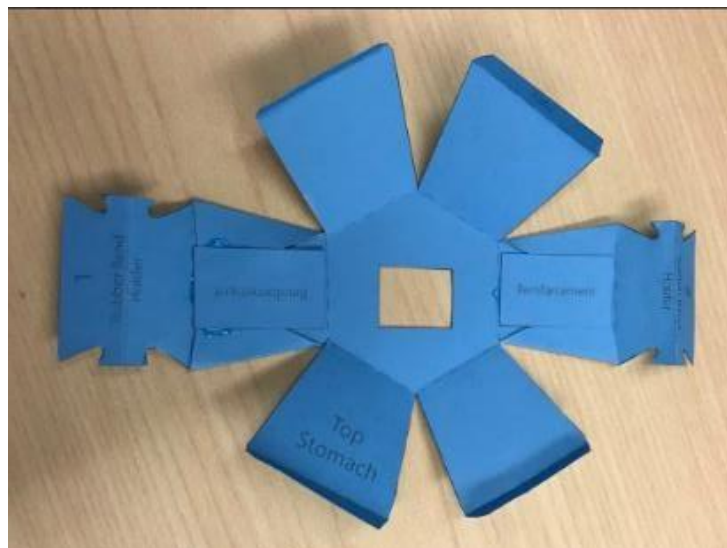


3. Score the dashed lines using a bone folder. 4. Fold upwards like valleys

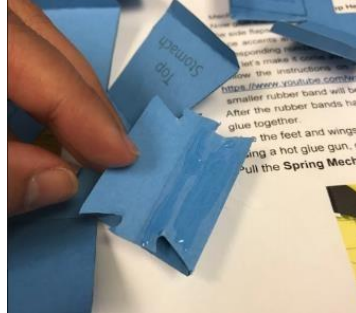
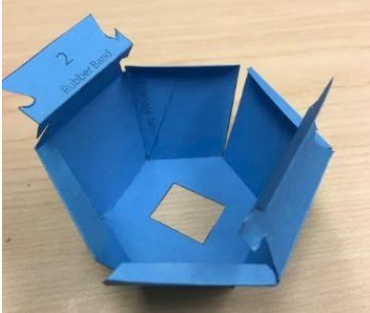
5. Fold downward like mountains

6. Fold in and glue the **Triangle Tabs**.

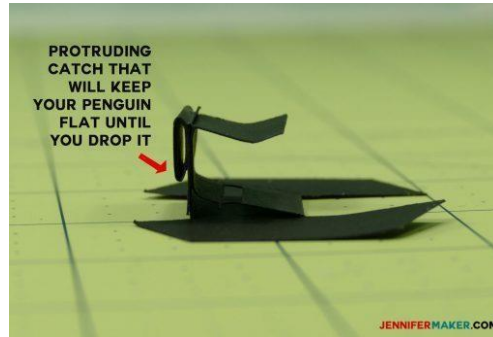
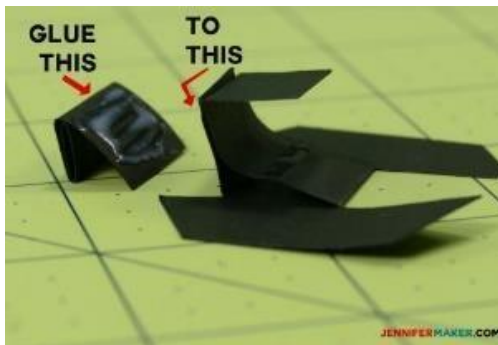
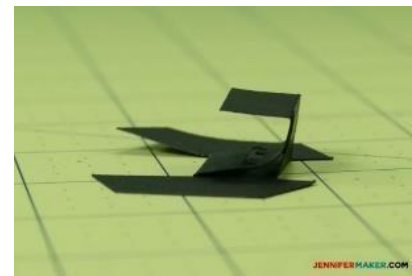
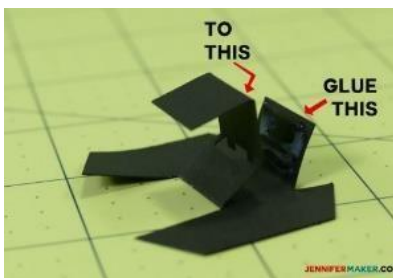
7. Above the glued **Triangle Tabs**, glue the **Reinforcement** squares



8. Fold in the **Rubber Band Holders** and glue on the back side



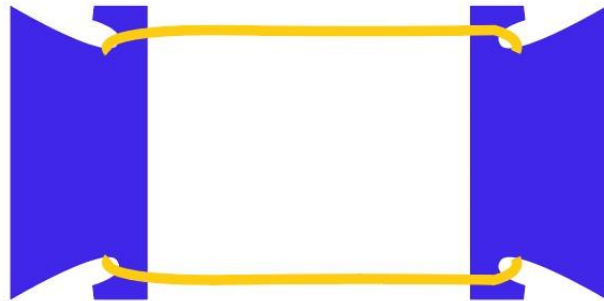
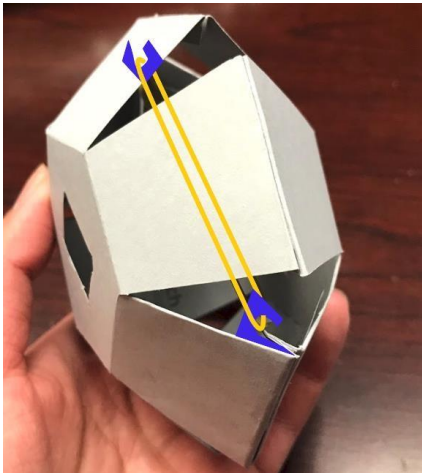
9. For the **Spring Mechanism** watch <https://www.youtube.com/watch?v=tTBH-pggvH0> (5:06-8:00)
Or <https://jennifermaker.com/penguin-paper-bomb/>



13. Glue **Spring Mechanism** on **Top Head** darkened outline.
14. Glue the **Torso** to the back of labeled flaps, with the side accents on the side flaps. After Torso is glued, glue the **Face** (eyes, nose, beaks) where they belong.
15. Once accents are glued, start gluing the **Rubber Band Holders** together with their corresponding numbers (i.e. 1 to 1, 2 to 2) then glue the remaining **Tabs** together

Now let us make it come alive!

16. Follow the instructions on “Pumpkin Popup Paper Bomb” minute-
10:41-12:08 <https://www.youtube.com/watch?v=ehcGI6ky41M>
*smaller rubber band will be used on head, larger rubber band for the body



17. After rubber bands are in correct place, align the head and the body and glue together.
18. Glue the feet and wings to the corresponding areas
19. Pull the **Spring Mechanism** into place through the bottom square



20. Flip your animal over, throw on a flat surface and watch your animal pop into life!