

Black and White Buddy

OBJECTIVES

Students will demonstrate that penguins are countershaded and show how countershading disguises a penguin. Students will identify the adaptation that gives penguins color (feathers).

MATERIALS

- black, white, and orange construction paper
- craft pattern pieces on page 13
- glue
- about 5–10 white cotton balls per student
- two plastic “googly” eyes per student (optional)



ACTION

1. For very young students, prepare the following materials. (Older students can cut out penguin body parts.)

Using the pattern pieces on page 13, cut the penguin body from black construction paper, belly (oval) from white construction paper, feet (triangles) from orange construction paper, and beak (diamond) from orange construction paper. If you aren't going to use googly eyes, cut eyeballs (circles) out of black and white construction paper.

2. Distribute penguin bodies and feet. Students glue penguin feet onto their penguins' bodies, folding the feet so that they stand out at a 90° angle.
3. Distribute beaks and show students how to fold them in half (to form triangles) and glue half to their penguins' heads, so that the other half points outward. Distribute eyes and have students glue penguin eyes in place.

4. Finally, distribute white cotton balls and have students glue these onto the white belly of their penguin. (Gluing works best if the students put a small amount of glue on their penguin and press a cotton ball onto it.)
5. Spread black construction paper on the floor. Show students how to hold their penguins facing down, as if the penguins were swimming.

To show students how countershading helps disguise penguins, have students lower penguins below their eye level. Point out that, looking down, a penguin's black back blends in with the dark ocean bottom (in this case the dark floor).

Now have students raise penguins above eye level. Point out that, looking up, the penguin's white belly blends in with the lighter surface waters (in this case the lighter ceiling).

Black and White Buddy pattern sheet



EYES

Cut eyes or use plastic "googly" eyes from a craft store.



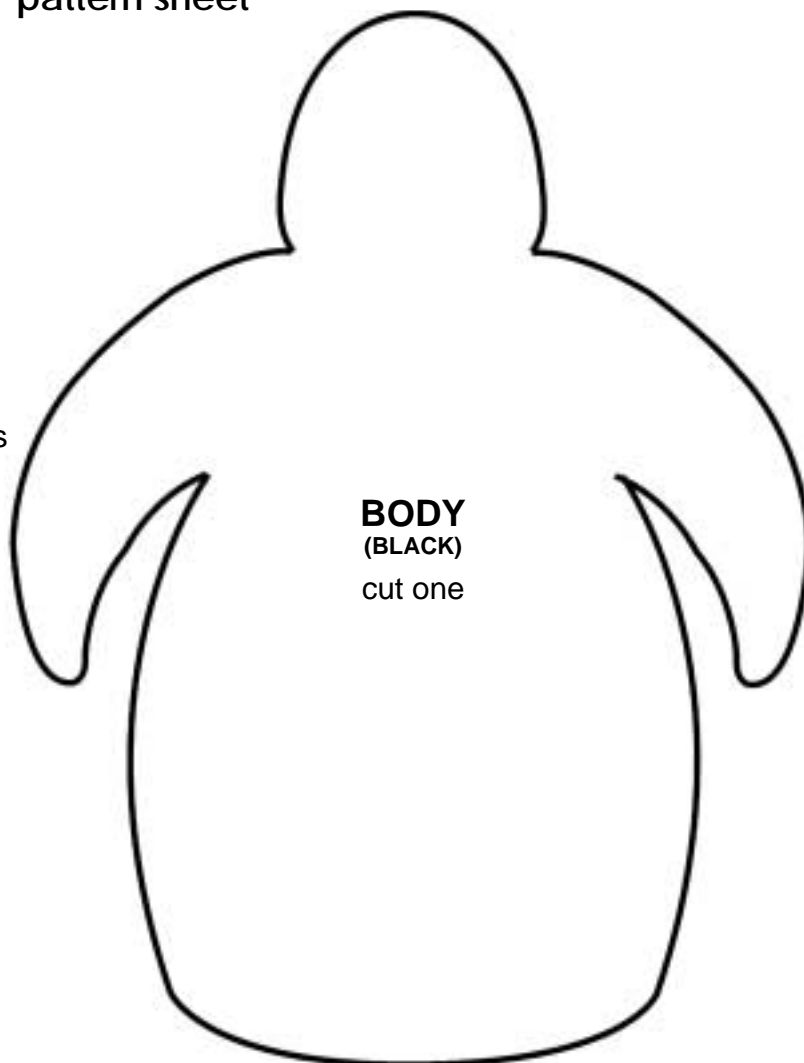
BEAK
(ORANGE)
cut one

Fold beak in half and glue half to penguin's head, giving beak a 3-D effect.

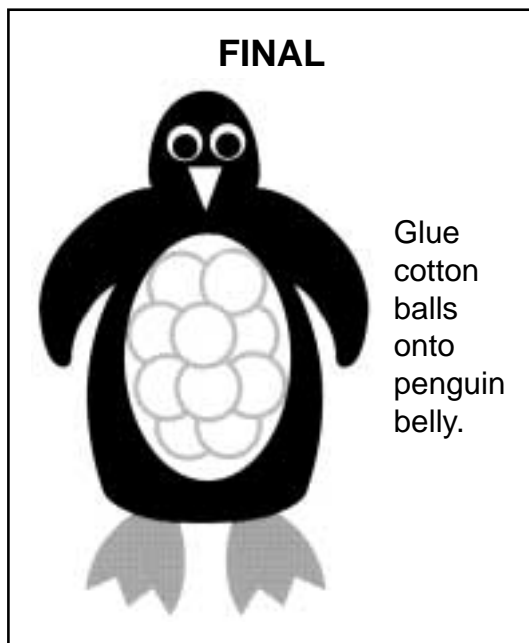


FEET
(ORANGE)
cut two

Glue feet onto body then fold them so that they stand out at a 90° angle.

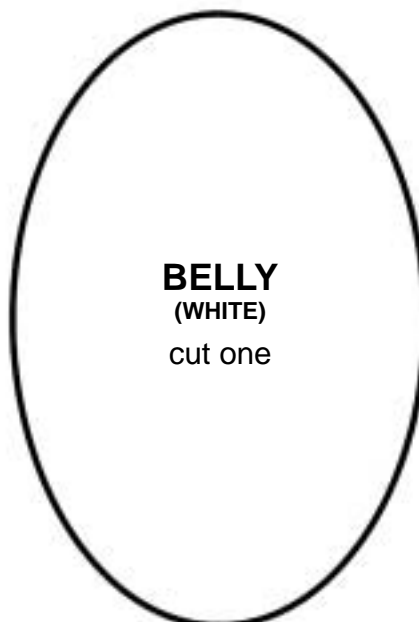


BODY
(BLACK)
cut one



FINAL

Glue cotton balls onto penguin belly.



BELLY
(WHITE)
cut one