

Balance Bird

Discover what it means when something is balanced.

Materials Needed

Balance Bird Template from:

https://www.msichicago.org/fileadmin/assets/online_science/summer_brain_games/201 9/SBG19_template-bird.pdf, scissors, straw, pennies, crayons, tape, paper or cardstock

Procedure

- 1. Download and print the balance bird template onto card stock. Alternatively, you can print it on regular paper, cut it out, and trace the bird onto card stock or light cardboard such as from a file folder or empty cereal box.
- 2. As you cut out the bird, make sure there are no folds or creases. Color if you wish.
- 3. Does the bird balance on your finger?
- 4. Fold the straw in half. Tape it to the underside of the bird so the center of the straw is just behind the head and the bent sides extend under the wings.
- 5. Tape one penny near the tip of one wing on the underside of the bird, and another penny near the tip of the other wing on the underside. Try to put them the same distances from the edges on both sides.
- 6. Flip the bird over. Place the tip of the bird's beak on your finger to make it balance.

Teacher Notes

Discussion Questions

What makes an object balance? (The center of gravity is the point where all the weight is evenly dispersed on all sides)

What do the pennies do to make the bird balance? (Without the pennies, the bird cannot be balanced on its beak because the center of gravity is near the middle of the bird. When the pennies are put on the wings, the center of gravity is now located at the tip of the beak and it can be balanced on a fingertip)

What would happen if you moved the pennies to different spots on the bird?

Resources

Museum of Science and Industry <u>www.msichicago.org</u> More Balancing Birds <u>http://cdn.teachersource.com/downloads/lesson_pdf/CTR-200.pdf</u>