QUICK PROJECT
WALKALONG GLIDER
panel by the top edge at a slight angle in one hand, and hold your Walk-Along Glider in the other hand above and slightly in front of the panel.

7. Release the Walk-Along Glider and quickly readjust your grip on the panel and hold it by its sides at a roughly 30° angle.

8. Follow the Walk-Along Glider – not too quickly or slowly – and see how far you can fly it! You can even steer the Walk-Along-Glider by turning the cardboard panel left or right.

How does the Walk-Along Glider Work?
As you walk forward, the air hits your cardboard panel and is diverted upward, like air hitting a mountain or cliff. This creates something called “slope lift”.

Slope lift is generated when wind blows against some sort of obstacle, be it a hillside, cliff, or an ocean wave, causing the air to rise. This creates a region of air directly above the slope, which can and is utilized by birds and humans alike.

The strongest lift can be achieved by initiating a flight path that intersects with the rising air at a right angle.

In the Walk-Along Glider activity, the flight path intersects with the rising air at a right angle by dropping the Walk-Along Glider straight down toward the cardboard panel, which acts as the slope.

**SUPPLIES**

- Walk-Along glider template
- Scissors
- Large, flat piece of cardboard 20 x 24 inches for each student (You can use pizza boxes, storage tub lids, or deconstructed cardboard boxes.)
- Phonebook or tissue paper

**STANDARDS**

4.PS.2 Investigate the relationship of the speed of an object to the energy of that object.

4.PS.4 Describe and investigate the different ways in which energy can be generated and/or converted from one form of energy to another form of energy.

**ACTIVITY**

1. Make photocopies of the master copy of the Walk-Along Gliders and distribute one to each student. Use the template to trace out the glider from a sheet of phone-book or tissue paper.

2. Instruct the students to cut out the Walk-Along Gliders and bend up each end at a 90° angle, creating winglets.

3. Instruct the students to carefully bend the front edge, or leading edge, down and bend the back edge, or trailing edge, up.

4. To execute a test flight of the Walk-Along Glider, hold it by the trailing edge and drop it so that it flutters downward. If it doesn’t go straight down, that means the winglets are not at a 90° angle. Check your angles and readjust them as needed!

5. The Walk-Along Glider flies best in still, calm air in a large space like an auditorium or hallway.

6. To fly the Walk-Along Glider, hold the cardboard panel by the top edge at a slight angle in one hand, and hold your Walk-Along Glider in the other hand above and slightly in front of the panel.

7. Release the Walk-Along Glider and quickly readjust your grip on the panel and hold it by its sides at a roughly 30° angle.

8. Follow the Walk-Along Glider – not too quickly or slowly – and see how far you can fly it! You can even steer the Walk-Along-Glider by turning the cardboard panel left or right.

**SLOPE SOARING**

Slope Soaring gliders operate on the same principles as your walk-along glider! Check out youtube.com/watch?v=IgVEUfwLdB0

**CHALLENGE**

Check out this video for some ideas on how to create a competition in your home! youtu.be/MI9uxolFHxM
Did you know?

AMAFlightschool.org is the AMA education resource designed to answer the question...

HOW DO I?

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