

Bird Competition

Audience

Activity is designed for Ages 8 years old and up.

Goal

Students will learn about some amazing bird adaptations.

Objective

- To learn about bird specific traits.
- To compare their abilities to the abilities of bird species.
- To get up and get moving!

Conservation Message

Birds are found on every continent in the world. They are all unique in their own ways and perfectly adapted to certain habitats, that is why it is important we protect these habitats.

Background Information

Birds come in all shapes and sizes; some birds have well adapted traits for very specific habitats or food items. For example, Bearded Vultures found in Africa, Europe, and parts of Asia are perfectly made for eating bones! Some species of large parrots eat mostly fruits and nuts, to be able to crack open the nuts they have around 500-700 pounds per square inch of pressure. The Arctic Tern has one of the longest migration paths, they will go from pole to pole making their annual migrations around 44,000 miles.

Materials Needed

- Bird Competition Worksheet
- Tape measure
- Timer/ stopwatch
- Cup or bowl
- Spoon
- Scissors

- Clothespin
- Tweezers
- Uncooked rice
- Popped popcorn
- Beads
- Large seeds (walnuts, cashews, almonds, brazil nuts)
- Small seeds (peanuts with no shell, sunflower seeds, pine nuts, sesame seeds)

Length of Activity

30 minutes

Procedure

- Read through the challenges before starting the activity.
- Gather the items listed above in "Materials Needed".
- Set up all items for each challenge, you can do the challenges all at once or split them up throughout the day.



Bird Competition

Winging it!

Hummingbirds can flap their wings 70 times per second! Use a timer or stopwatch to time yourself flapping your arms (like a bird flaps their wings) as fast as you can.

Count how many arm flaps you can do in 10 seconds.

Trial 1: ______

Trial 2: _____

Trial 3: _____

Some species of migratory birds can stay in the air for 200 days straight!

Use a timer or stopwatch and time yourself flapping your arms for as long as you can.

How many minutes can you flap your arms before you become tired?

Number of minutes: ______

Track and field...and air!

Peregrine falcons can fly at over 200mph when in pursuit for prey! Use a tape measure and measure out 20 yards/60 feet marking a starting and stopping point. Use a timer or stopwatch to time your fastest run.

How fast did you run the 20-yard dash?
seconds
Now calculate how fast that is in miles per hour:
$\frac{20 \text{ yards}}{\text{seconds}} \times \frac{1 \text{ mile}}{1760 \text{ yards}} \times \frac{3600 \text{ seconds}}{1 \text{ hour}} = \underline{\qquad} \text{miles per hour}$
To solve, multiple all the numbers on the top of the fractions together. Next, multiple all the numbers on the bottom of the fractions together. Divide the total you got from the top with the total you got from the bottom!
What's your wingspan? The Wandering albatross has the longest wingspan of any bird, ranging from 8 feet to 11 feet. Use the tape measure to measure the length from fingertip to fingertip.
Measure your wingspan from fingertip to fingertip.
inches or feet

The Best Beak

Bird beaks vary by the type of food they eat. Each item below will represent a type of bird beak.

<u>Spoon</u>- Mallard duck, pelican, and spoon bill are fish eating birds; their spoon like beak can scoop up large numbers of fish or strain plant material from mud.

<u>Scissors</u>- Terns and birds of prey use their scissor like beaks to tear prey into smaller pieces.

<u>Clothespin</u>- blue jays, chickadees and parrots all have beaks that can crush open the hard coverings of seeds.

<u>Tweezers</u>- kingfishers, herons, and hummingbirds have tweezer like beaks that allow them to reach animals or nectar that is hard to obtain.

Use the items (spoon, scissors, clothespin, and tweezers) listed below to pick up each "food" type, drop each "food" type into a cup or bowl. Use the table below to write down how many of each "food" type you can pick up in 30 seconds.

	Spoon	Scissors	Clothespin	Tweezers
Beads				
Large seeds				
Small seeds				
Rice				
Popcorn				

Which item collected the most "food" types?

Why do you think that item was best at collecting the most "food" types?