

## "The Nose Knows"

Bird Olympics

## Challenge: <br> How well do you smell?



How close do you have to get to smell the mystery scent in the canister?
Use the tape measure to record your distance.
Fun Fact:
Turkey Vultures can "sniff out" their food from up to 200 yards away. The Turkey Vulture's sense of smell is so acute that engineers have used them to find leaks in a pipeline 42 miles long. They do this by pumping a chemical that smells like rotting meat (the smell that Turkey Vultures use to locate their food) through the pipe and then see where the vultures gather.

Scientists believe that both Turkey Vultures and Kiwi have an excellent sense of smell that helps them locate food and that Storm Petrels use smell to locate their nests in dense breeding colonies. Although there is some controversy, most scientist believe that the majority of birds do not have a good sense of smell and rely more on their keen senses of sight and hearing to find food.

## "Winging It!"

Bird Olympics

Challenge:
See how your "flapping rate" compares with different birds.

Count the number of times you can flap your arms in 10 seconds. Have someone with a stopwatch or second hand tell you when to start and stop as you count your flaps. Record the number of flaps.

How do you compare? Species Wing beats / 10 seconds
Crow....................................... 20
Pigeon ................................... 30
Peregrine Falcon .................. 43
Carolina Chickadee ................ 270
Rufous Hummingbird ............ 700
The master flapper award goes to the Rufous Hummingbird which is able to flap its wings 700 times in 10 seconds - that's 70 times per second!


## "What's Your Wingspan!" Bird Olympics

Challenge:
Hold your arms out straight to either side and see how your "arm span" compares to the wingspan of different birds.

Have your partner measure your "arm span" using a measuring tape, record the length.

How do you compare?
Ruby-throated Hummingbird .................. 4 inches
American Robin ...................................... 15 inches
Crow ....................................................... 40 inches
Bald Eagle............................................... 7 feet
Andean Condor and Marabou Stork ...... 10 feet
Wandering Albatross.............................. 12 feet
Fun Fact:
The largest bird in the world is the Ostrich, which can stand over 8 feet tall and weigh more that 300 pounds. The smallest is the Bee Hummingbird, which is only 2 inches long, including its bill and tail. It weighs only as much as a ping pong ball.

## Track and Field ....and Air! <br> Bird Olympics



Begin at the starting line and see how long it takes you to reach the finish line 20 yards away. Have your partner time you and then time your partner.

Check your speed on the 20 - Yard Dash Conversion Chart.
Compare it to how fast some species of birds fly.

> Species $\quad$ Flight Speed in Miles per Hour
> House Sparrow >>>>>>>>>>>>>20 mph
> Crow $\ggg \ggg \ggg \ggg \ggg \gg 30-45 \mathrm{mph}$ Mallard >>>>>>>>>>>>>>>>45-60 mph

## SUPER CHALLENGE!!

How long so you think you it would take you to run a distance of 600 miles? (Washington DC to Atlanta, GA is about 600 miles)

It takes most students about 10 minutes to run a mile. At this speed and without stopping to rest, it would take you about 4 days! A Ruby - Throated Hummingbird can complete the nonstop flight across the Gulf of Mexico in as little as 18 hours!


## 20 - Yard Dash Conversion Chart

Use this chart to determine your running speed for 20 yards.


| Finish Time <br> in Seconds | Miles / Hour |
| :---: | :---: |
| 3.0 | 13.6 |
| 3.1 | 13.2 |
| 3.2 | 12.8 |
| 3.3 | 12.4 |
| 3.4 | 12.0 |
| 3.5 | 11.7 |
| 3.6 | 11.4 |
| 3.7 | 11.1 |
| 3.8 | 10.8 |
| 3.9 | 10.5 |
| 4.0 | 10.2 |
| 4.1 | 10.0 |
| 4.2 | 9.7 |
| 4.3 | 9.5 |
| 4.4 | 9.3 |
| 4.5 | 9.1 |
| 4.6 | 8.9 |
| 4.7 | 8.7 |
| 4.8 | 8.5 |
| 4.9 | 8.3 |
| 5.0 | 8.2 |
| 5.1 | 8.0 |
| 5.2 | 7.9 |
| 5.3 | 7.7 |
| 5.4 | 7.6 |
| 5.5 | 7.4 |
| 5.6 | 7.3 |
| 5.7 | 7.2 |
| 5.8 | 7.1 |
| 5.9 | 6.9 |
|  |  |


| Finish Time <br> in Seconds | Miles / Hour |
| :---: | :---: |
| 6.0 | 6.8 |
| 6.1 | 6.7 |
| 6.2 | 6.6 |
| 6.3 | 6.5 |
| 6.4 | 6.4 |
| 6.5 | 6.3 |
| 6.6 | 6.2 |
| 6.7 | 6.1 |
| 6.8 | 6.0 |
| 6.9 | 5.9 |
| 7.0 | 5.8 |
| 7.1 | 5.8 |
| 7.2 | 5.7 |
| 7.3 | 5.6 |
| 7.4 | 5.5 |
| 7.5 | 5.5 |
| 7.6 | 5.4 |
| 7.7 | 5.3 |
| 7.8 | 5.2 |
| 7.9 | 5.2 |
| 8.0 | 5.1 |
| 8.1 | 5.1 |
| 8.2 | 5.0 |
| 8.3 | 4.9 |
| 8.4 | 4.9 |
| 8.5 | 4.8 |
| 8.6 | 4.8 |
| 8.7 | 4.7 |
| 8.8. | 4.6 |
| 8.9 | 4.6 |
|  |  |

Note: numbers have been rounded.


## Bird Olympics

With a partner do each of the Bird Olympic events. Record the results for each member of your team below.

| Event $\downarrow$ Names $\rightarrow$ |  |  |
| :--- | :--- | :--- |
| Winging It |  |  |
| Flaps/10 sec. |  |  |
| Wingspan |  |  |
| In Inches |  |  | | Nose Knows in Feet |
| :--- |
| Scent? |



