Name:	Date:

Seed Dispersal: Aerodynamics

Hypothesize:

1. Collect 3 different types of seeds from the school forest.

Which of your three seeds do you think will be the most aerodynamic? Explain why you believe this to be so.

Test:

- 1. You will individually drop each seed from the same height.
- 2. Record wind velocity simultaneously as the seed is released <u>and</u> the distance the seed traveled from the point of release.
- 3. Three repeat trials should be made with each seed.
- 4. Calculate the average distance traveled for each seed.

Sketch of seed #1	Trial 1 Wind Velocity	Trial 1 Distance	Trial 2 Wind Velocity	Trial 2 Distance	Trial 3 Wind Velocity	Trial 3 Distance
Average	Wind =		Distance =			

Sketch of seed #1	Trial 1 Wind Velocity	Trial 1 Distance	Trial 2 Wind Velocity	Trial 2 Distance	Trial 3 Wind Velocity	Trial 3 Distance
Average	Wind =		Distance =			

Sketch of seed #1	Trial 1 Wind Velocity	Trial 1 Distance	Trial 2 Wind Velocity	Trial 2 Distance	Trial 3 Wind Velocity	Trial 3 Distance
Average	Wind =		Distance =			





Name:

Date: _____

Analyze and Conclude:

1. Describe the difference in the design of each of your three seeds.



- 2. What differences did you observe in how the seeds traveled through the air?
- 3. Define aerodynamics
- 4. Graph the distance for each seed trial and plot the averages for each type of seed....all on the same graph....you will need to find or make your own graph paper.
- 5. Which of your seeds proved to be the most aerodynamic?
- 6. Use the words aerodynamic, lift, gravity, drag, thrust, Bernoulli's Principal, and force to explain how the seed that traveled the greatest distance is able to travel from the seed pod of its host plant to the final landing or germination site. ...this will take more than one sentence!

7. Make a diagram of air currents, using arrows to show the direction of the air above and below your furthest flying seed. Indicate the forces involved, and where more air pressure, and less air pressure is present. Show the direction of the main forces that affect the flight of the seed once it is airborne.



