## Wright Flyer Evaluation  **Name:** _____ **Period:** _____

### A. Mechanics

20 pts – Flies without touching ground
18 pts – Flies but touches down occasionally
16 pts – Only skids along the ground, never gets into the air, flies a little but flips upside down
14 pts – Airplane built and wired, but never flown
0 pts – Airplane never completed

Total = _____ / 20 points

### B. Find the speed of your airplance:

1. Distance (Circumference) = 3.14 x 2 x radius = _____ feet.
2. Time = _____ seconds for 1 lap.
3. Speed = Distance ÷ Time = _____ feet per second
4. Convert to miles per hour = speed x 60 x 60÷ 5280 = _____ mph

### C. Quiz :

1. Bernouli's Principle states that the pressure of a fluid _____ as the speed of the fluid increases.
   a. Increases  b. decreases  c. stays the same

2. Label on the air foil: Low Pressure, High Pressure

3. The power power pole is an example of which subsystem of transportation?
   a. suspension  b. control  c. structure  d. guidance

4. The motor with a propeller is an example of which subsystem of transportation?
   a. Control  b. structure  c. propulsion  d. suspension

5. In 1903, which brother became the first to record over 1 minute of flight in North Carolina?
   a. Montgolfier brothers  b. Edison brothers  c. Newton brothers  d. Wright brothers

6. Newton's 3rd law helps explain why an airfoil needs the proper _____
   a. Straight angle  b. angle of attack  c. angle of elevation  d. obtuse angle

_____ / 6 points

**Total = Part A + Part B + Part C = _____ / 30 points**