***Loop Plane Speed Lab***

Name Period \_\_\_\_\_\_ Date

**Materials needed for one loop plane:**

1 plastic straw

1 strip of paper 1.5 cm x 9 cm

1 strip of paper2 cm x 12 cm

Scissors

Tape

**Additional materials provided:**

Plastic straws of various sizes

Paper of various thicknesses to make additional strips

Meter stick

Timer

Instructions:

1. Use the materials above to construct a “normal loop plane”. Make a loop out of each strip of paper. Overlap the ends of each strip of paper and tape the inside and outside of the loop. Slide the straw into the pocket formed by the overlapped ends of the straw. When given the okay to do so, fly your loop plane and record its distance, time, and speed here:
2. What changes could you make to your loop plane to make it fly faster?
3. Pick one of those changes and fly your loop plane again. Record its distance, time, and speed here:
4. Make a distance vs. time (position) graph for each of the planes.

5. Try making a speed vs. time graph for each of your planes.

6. If you have time, make a third loop plane that will fly the farther than the other two have flown. Record the distance, time, and speed here: