## **Paper Plane Design Trials**

Plane 1 - Name: Delta URL:
<u>Trial 1</u>
Distance17 Ft.
Flight Path – It flew mostly straight, but then rapidly curved to the left, and hit the ground.
Observations – It flew pretty well for a simple plane.
Design Tweaks Applied – For trial 2, I will add a small paper clip to the back of the plane, to keep the center from opening up.
Trial 2
Distance16 Ft.
Flight Path – It flew straight, but very low to the ground.
Observations – The paper clip could be why it flew lower because it weighed it down.
Design Tweaks Applied – For trial 3, I will change the small paper clip to 2 staples, on the nose, and on the tail. I'm hoping this will make it fly a little higher and farther
Trial 3
Distance22 Ft.
Flight Path – Pretty straight, higher than last time.
Observations – My design tweaks improved the plane's travel distance by 5 feet since trial 1.

Name 3D Design Period 4 Date

## **Paper Plane Design Trials**

Plane 2 - Name: Bullet URL:
<u>Trial 1</u>
Distance8 Ft.
Flight Path – It flew straight, but low to the ground.
Observations – It was flying well, then suddenly jerked and "died".
Design Tweaks Applied – I will fix the planes nose, which is sticking out. I am adding a (small) paper clip to the front.
<u>Trial 2</u>
Distance9.5 Ft.
Flight Path – Straight, but it stopped suddenly.
Observations – It still jerked suddenly like last time.
Design Tweaks Applied – I am moving the paper clip to the back of the plane.
<u>Trial 3</u>
Distance11 Ft.
Flight Path – It flew higher that the last two times, then it nose-dived.
Observations – This plane is not the best.

Name 3D Design Period 4 Date

## **Paper Plane Design Trials**

Plane 3 - Name: Arrow URL:
<u>Trial 1</u>
Distance10 Ft.
Flight Path – It flew high, then curved to the left and smashed into the lockers.
Observations – It would have flown farther, but it hit the lockers.
Design Tweaks Applied – I will fix the folds and add more "elevator" to the back.
Trial 2
Distance23 Ft.
Flight Path – Flew mostly straight, but up high.
Observations – I aimed it towards the right, to fix the problem of it curving to the left.
Design Tweaks Applied – Add a staple.
Trial 3
Distance19 Ft.
Flight Path – Flew high then
Observations – The staple didn't help.

Which plane do you recommend and why?

I recommend the Delta because even though it was simple, it flew 22 feet. (The Arrow flew further by one foot, but then I added a staple and ruined it.)