PAPER AIRPLANE FLIGHT TEST

PURPOSE

I would like to learn how far different airplanes can fly using different types of paper.

QUESTION

What type of plane flys the farthest with which kind of paper?

HYPOTHESIS

I think the heavy paper with the skinny jet style will fly the farthest.

MATERIALS

1. Heavy, medium, light paper
2. tape measure

Photo taken by: Vanessa Potts

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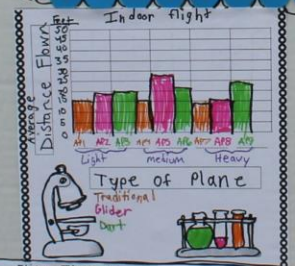
Procedures

Step 1: GET THE MATERIALS.
Step 2: MAKE THE AIR Planes.
Step 3: GO TO AN OPEN AREA.
Step 4: Find A Starting point.
Step 5: Grab The Air Planes.
Step 6: Throw them
Step 7: MEASURE Distance
Step 8: Record MEASurement

Photo taken by: Chad Rassamento



AP 1	Traditional	Construction (Light)	14.2	14.8	18.0	9.1	12.4	19.6
AP 2	Glider	Construction (Light)	17.1	18.7	21.3	22.7	17.0	13.1
AP 3	Dart	Construction (Light)	17.2	22.6	20.10	17.8	15.3	17.7
AP 4	Traditional	Printer (Medium)	17.9	13.7	15.0	9.6	13.4	10.2
AP 5	Glider	Printer (Medium)	17.3	36.9	29.5	4.3	10.8	21.0
AP 6	Dart	Printer (Medium)	17.10	21.5	27.4	20.1	18.0	16.3
AP 7	Traditional	Card Stock (Heavy)	10.9	7.0	24.8	1.8	7.2	6.4
AP 8	Glider	Card Stock (Heavy)	13.8	13.8	17.8	18.4	23.2	32.7
AP 9	Dart	Card Stock (Heavy)	21.2	23.9	29.6	17.8	16.6	14.6

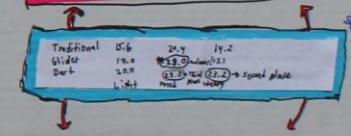
Independent Variable = Indoor vs. Outdoor.

Controlled Variable = Same paper airplanes.

Dependent Variable = measuring the distance the plane flew in feet. Outdoors in the wind.

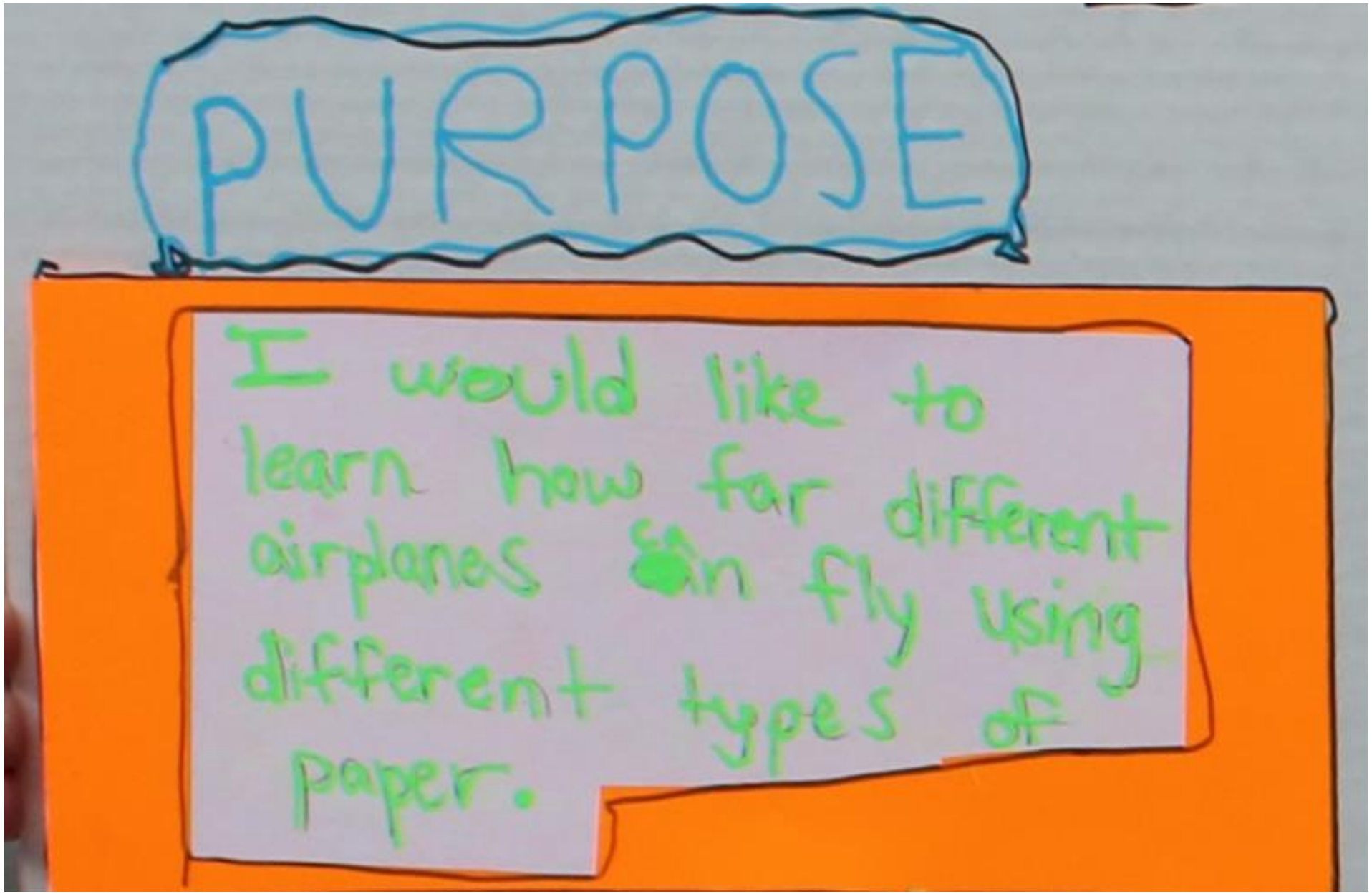
RESULTS

The indoor test had better results than the outdoor test. Almost all of the indoor flight tests flew further than the outdoor based on the flight test chart. Glider with the medium paper were the farthest. It flew 28ft.!!



CONCLUSION

My conclusion is that the glider with the medium paper flew the farthest. I thought the dart with the heavy paper would go the farthest, but it came in second. The relationship between the independent and dependent variable is when I test the plane outside there is more wind which makes the paper airplane not fly as well. Next time I will wait until it's not so windy.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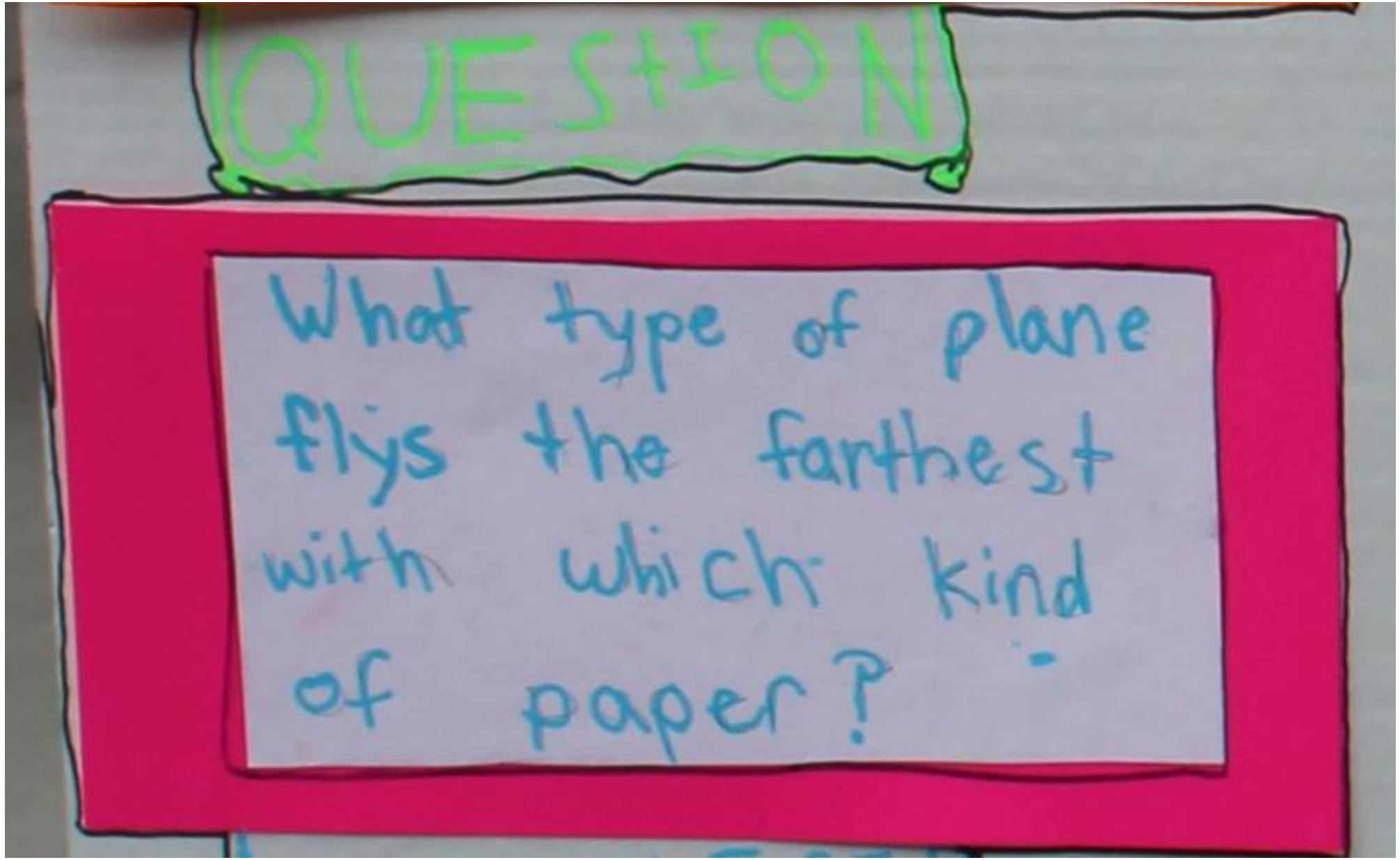
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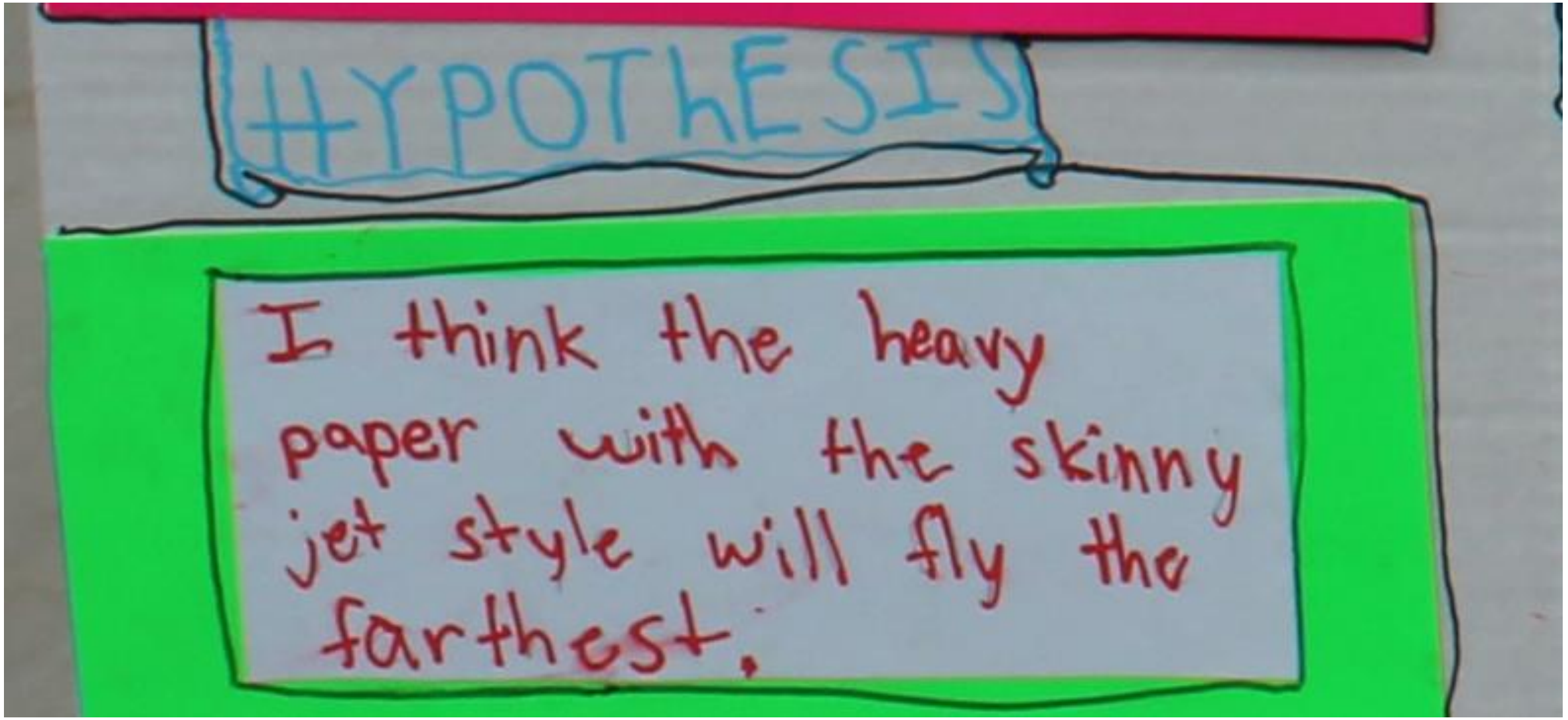
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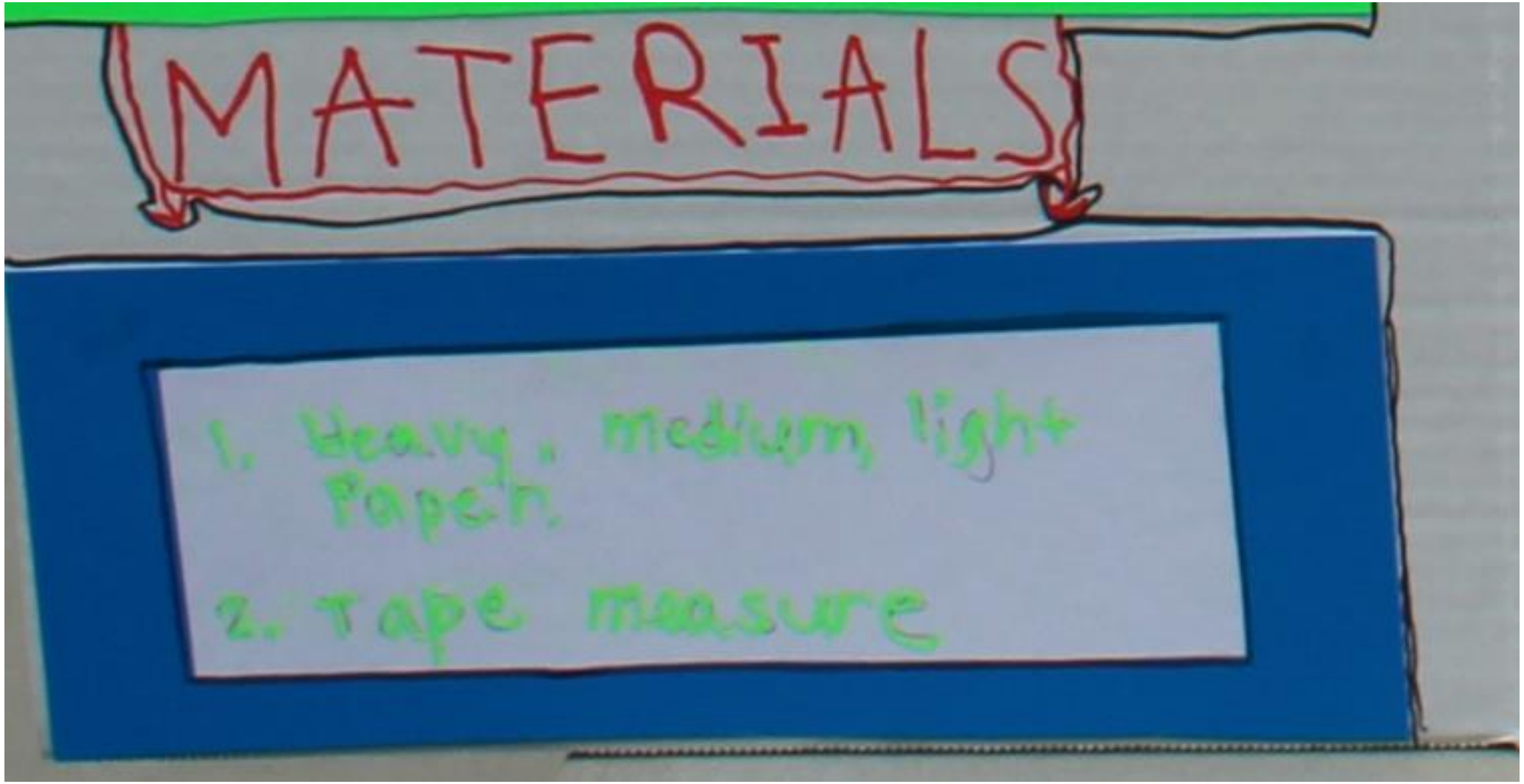
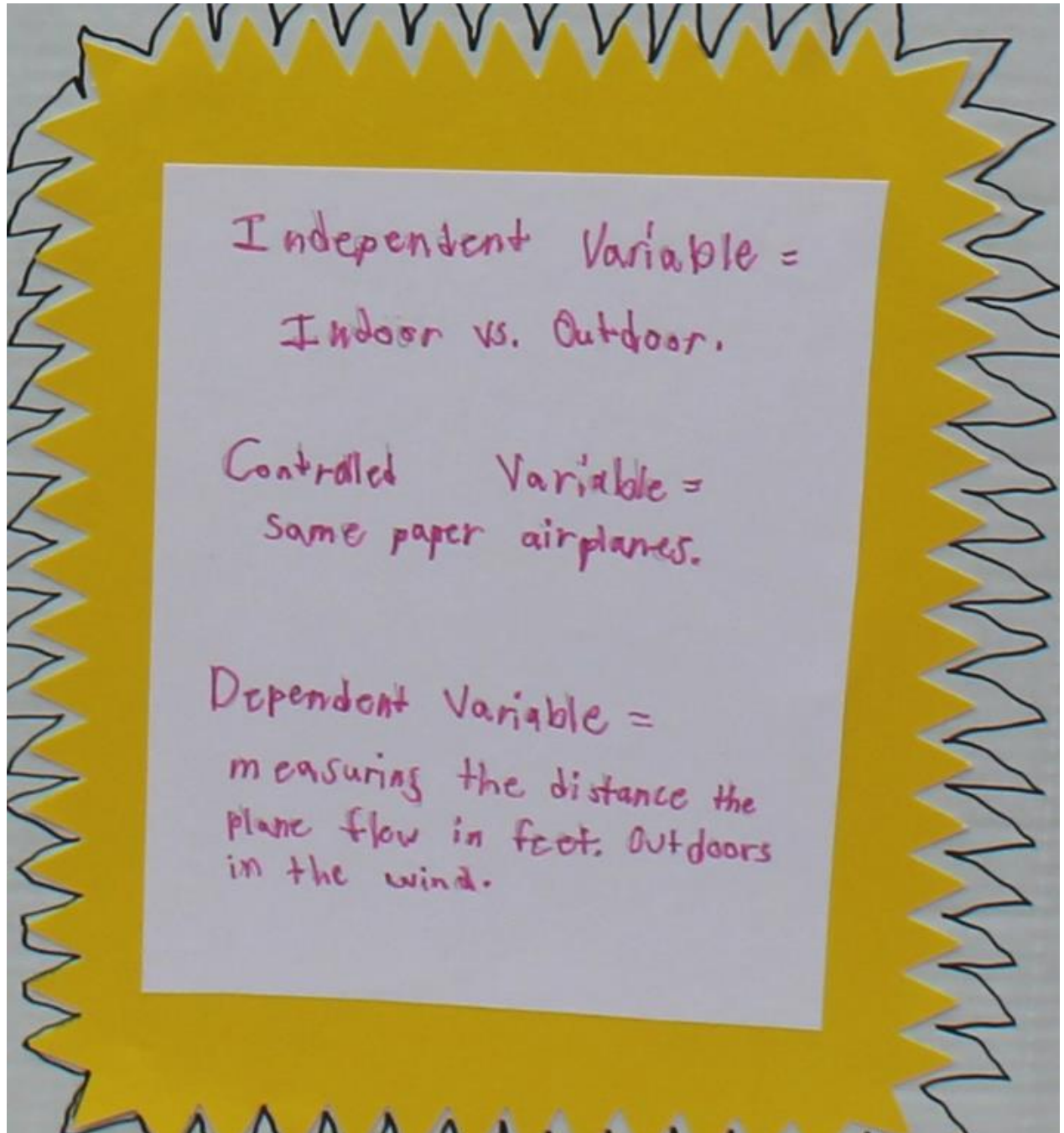


Heavy, medium, light paer
Tape measure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Indoor vs. Outdoor.
Controlled Variable =
Same paper airplanes.
Dependent Variable =
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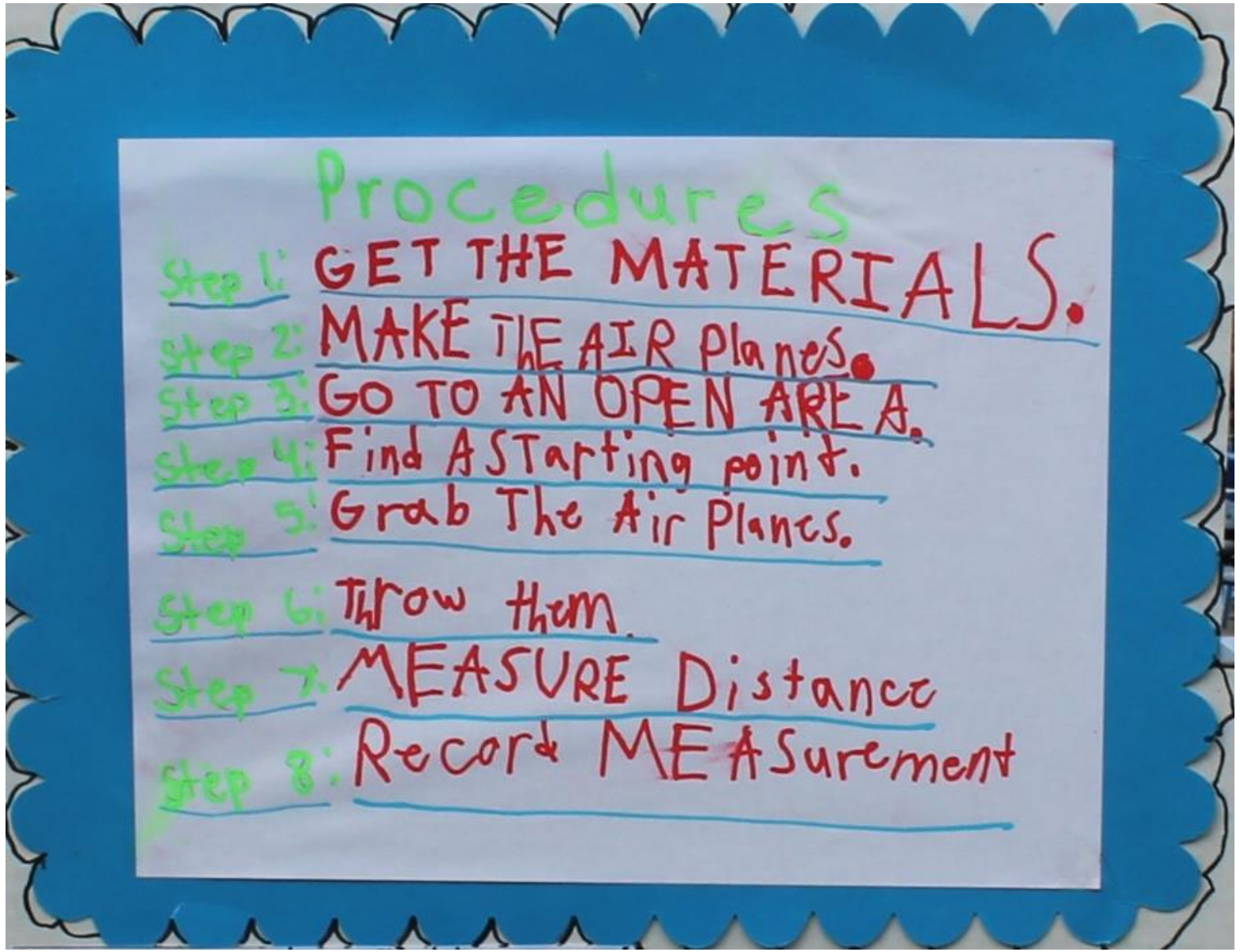
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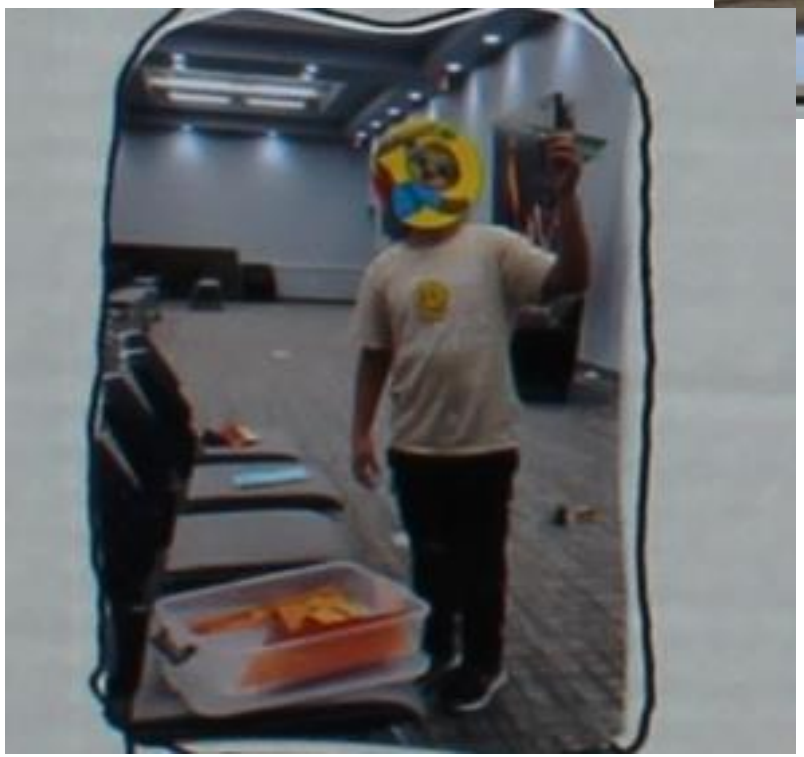

Student: [redacted]
Teacher: Mrs. Vanderford

Flight Test Chart

INDOOR Distance by feet

OUTDOORS Distance by feet

ID	Plane Design	Paper Weight	Flight 1	Flight 2	Flight 3	Flight 4	Flight 5	Flight 6
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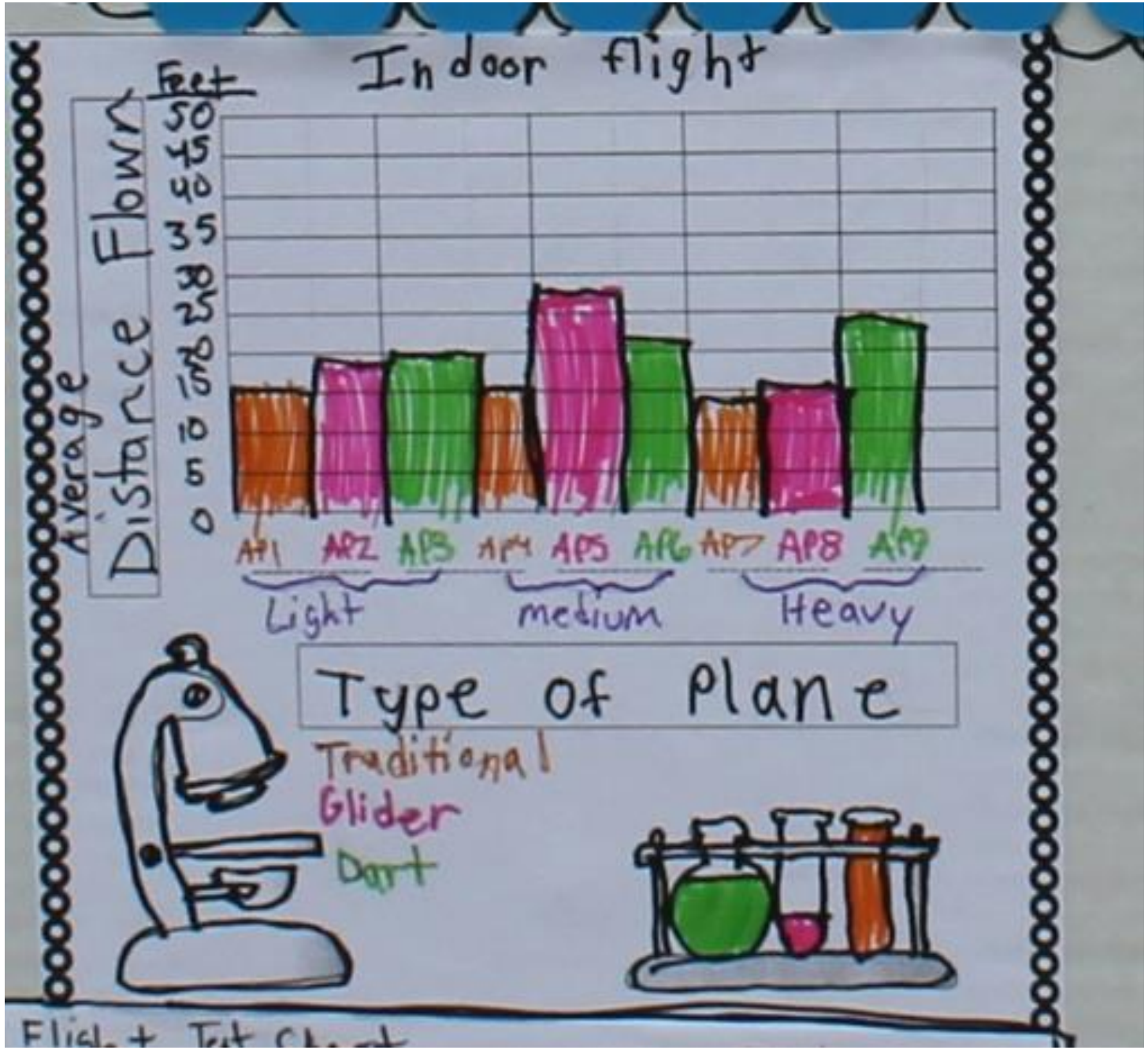
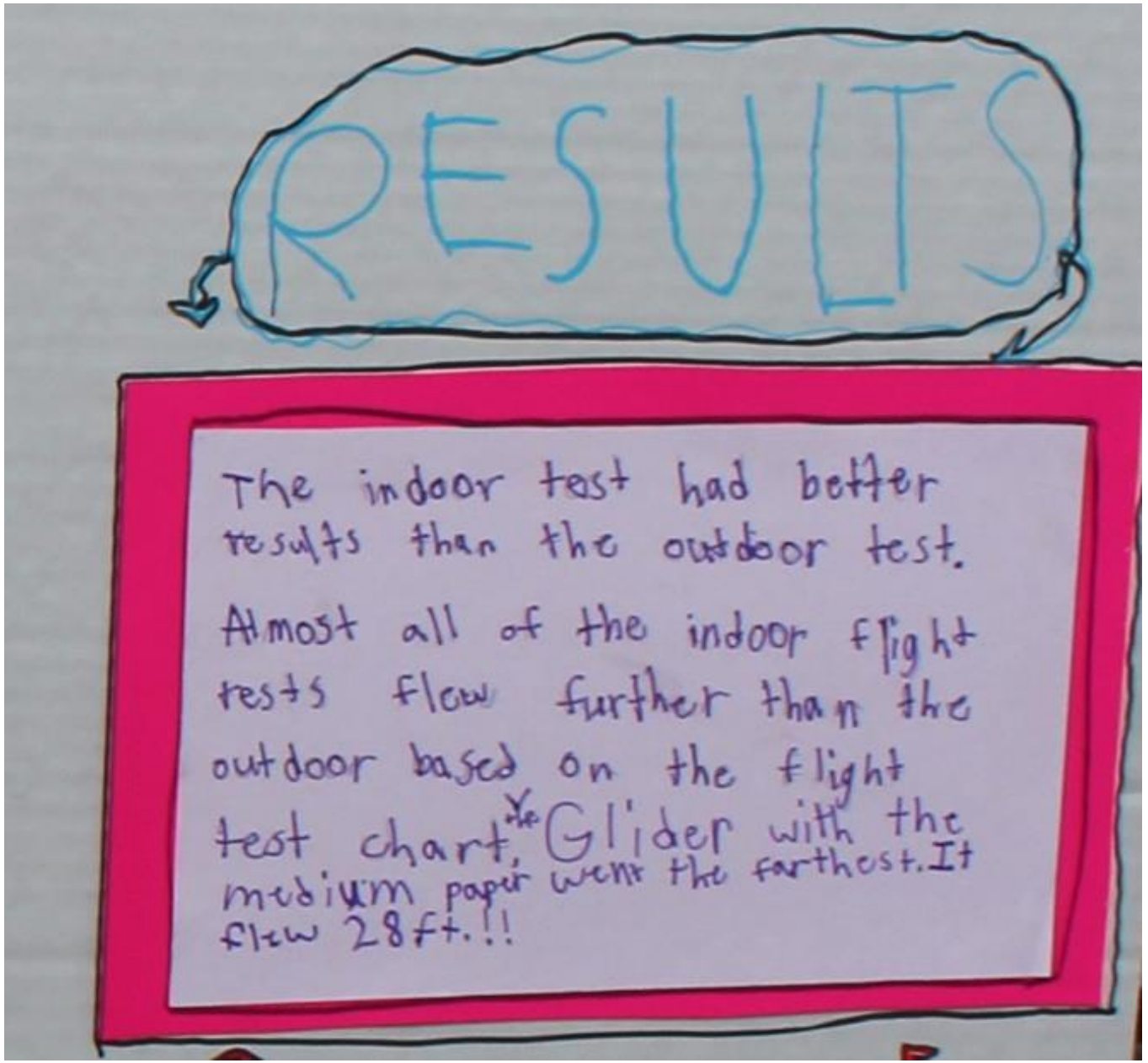

Indoor flight
Average Distance Flown
Feet
0 5 10 15 20 25 30 35 40 45 50
AP1 AP2 AP3 AP4 AP5 AP6 AP7 AP8 AP9
Light
medium
Heavy
Type of Plane
Traditional
Glider
Dart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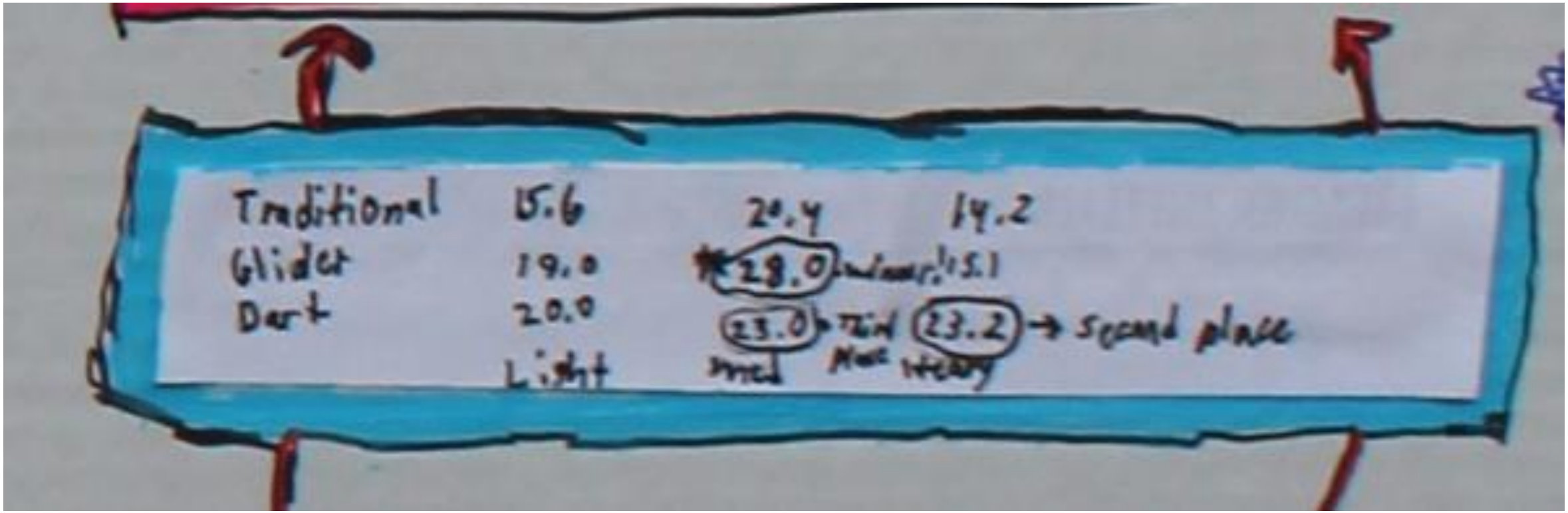
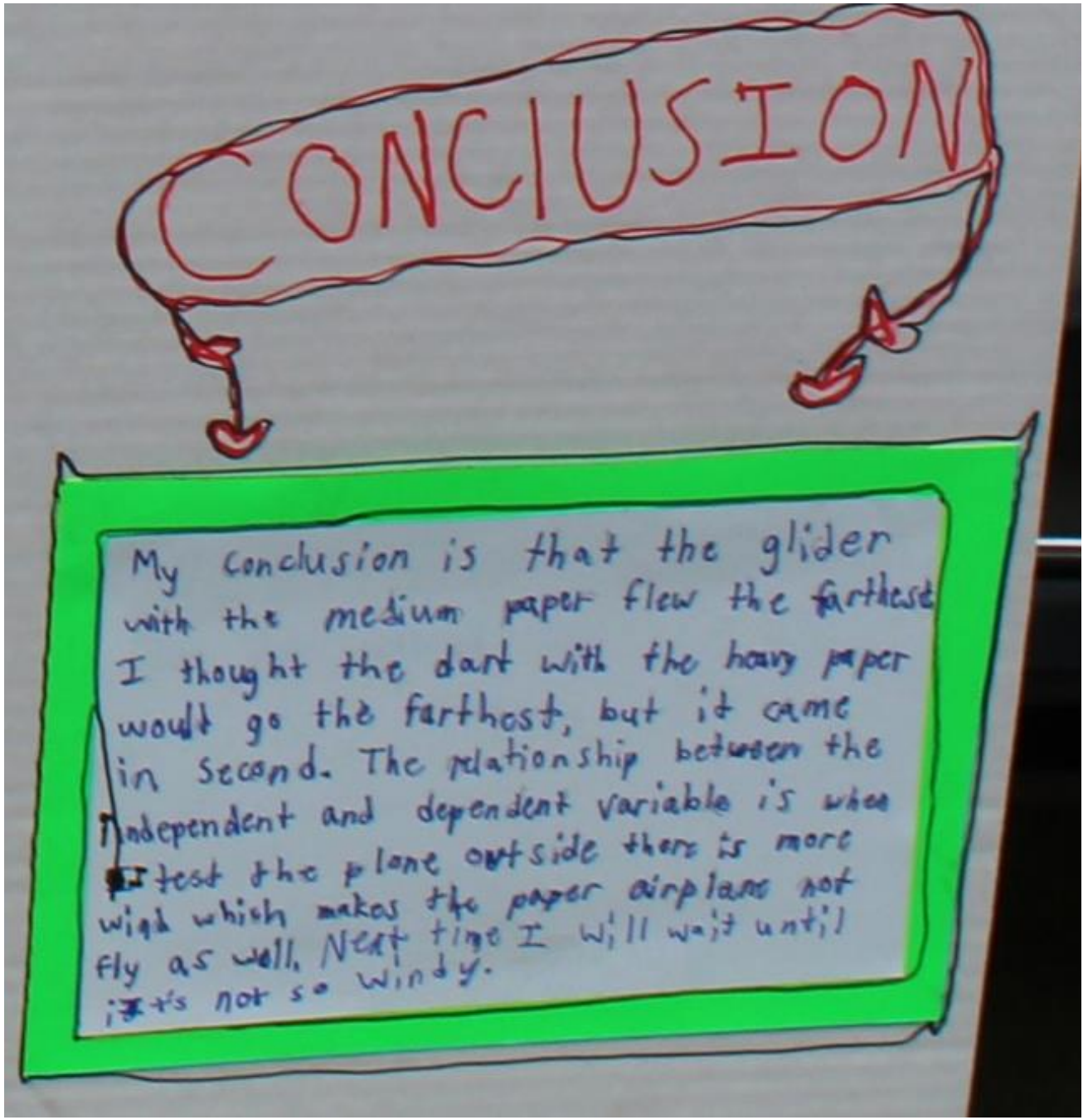

Traditional 15.6 20.4 14.2
Glider 19.0 28.0 15.1
Dart 20.0 23.0 23.2 → second place
Light
fastest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