

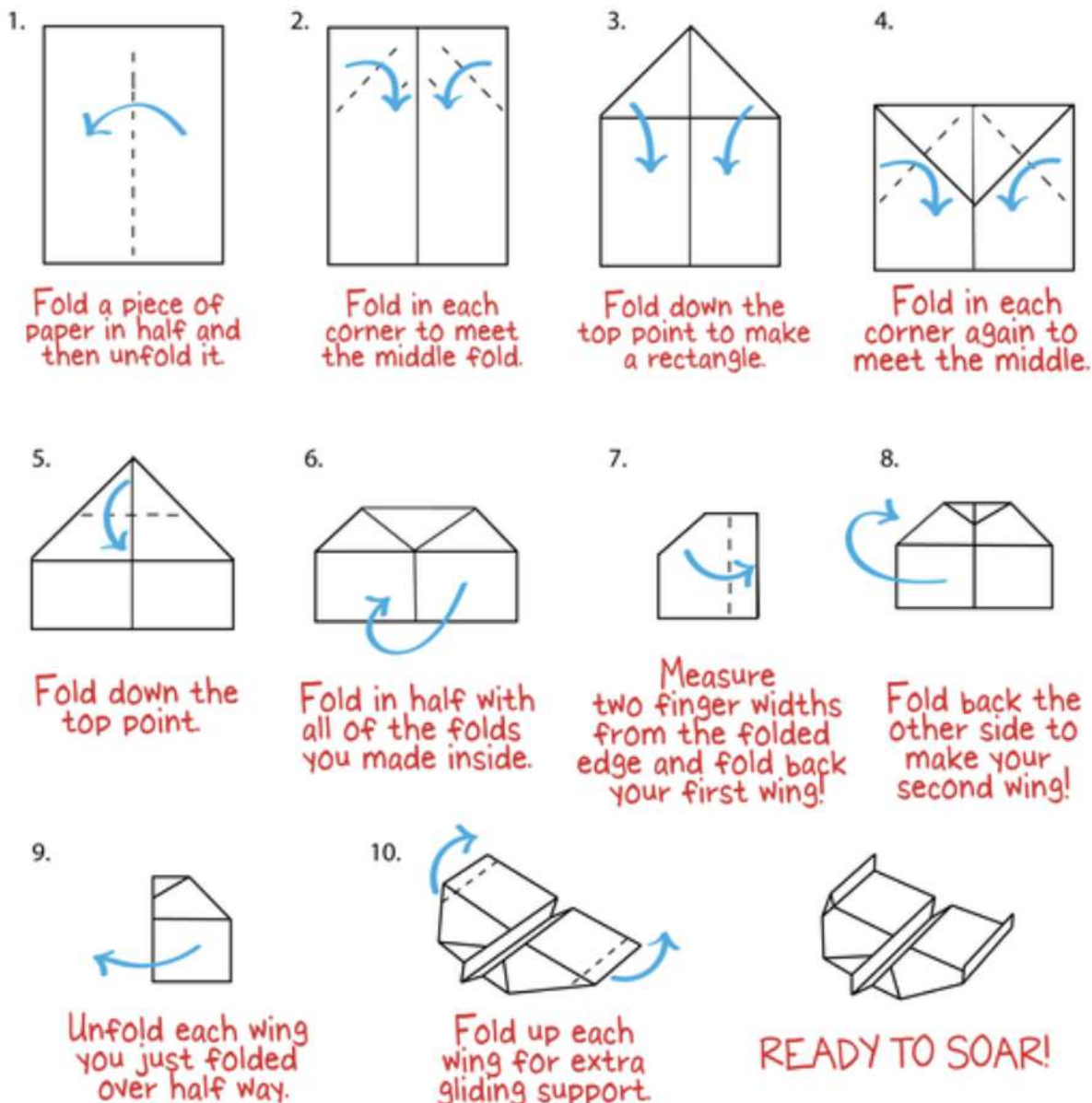
Airplane Lab - Data and Conclusion

Procedure (Helicopter):

1. Cut out the helicopter and fold according to the instructions.
2. Place a paper clip on the bottom. Get on top of one of the lab tables by the wall (not a lab table with wheels in the center of the room).
3. Drop the helicopter and time how long it takes to land. Record the time in the data table. Measure the displacement from the ceiling to the floor. Record that in the data table also.

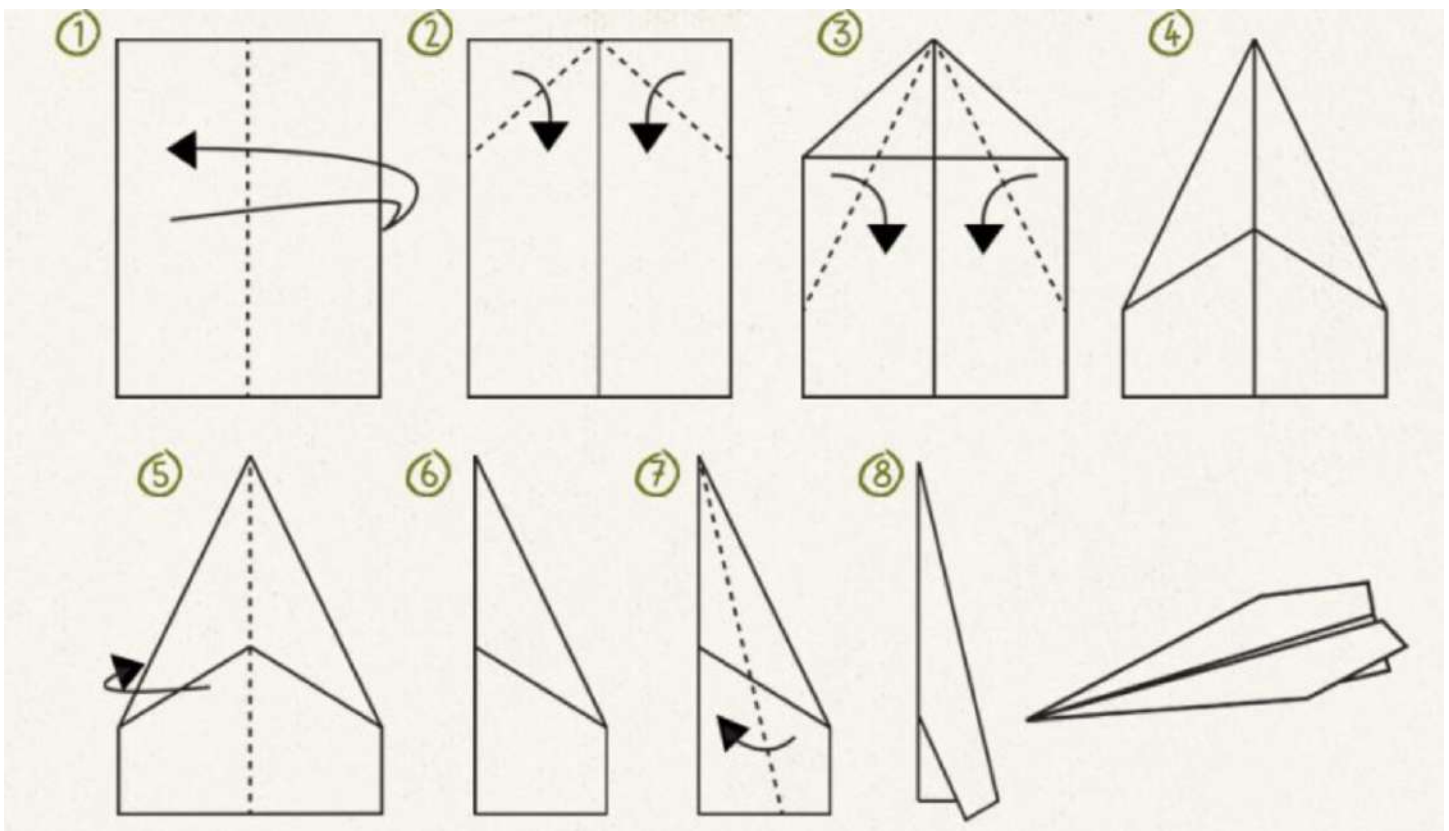
Procedure (Glider):

1. Make a glider plane. You can make one from your own design or use your Chromebook and YouTube to make one. Throw it in the classroom to make sure it flies.
2. Take it outside and throw it. Measure the displacement and the time. Record in the data table.



Procedure (Fast):

1. Make a fast plane. You can make one from your own design or use your Chromebook and YouTube to make one. Throw it in the classroom to make sure it flies.
2. Take it outside and throw it. Measure the displacement and the time. Record in the data table.

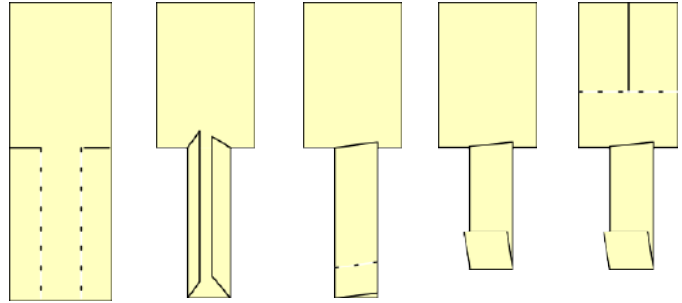
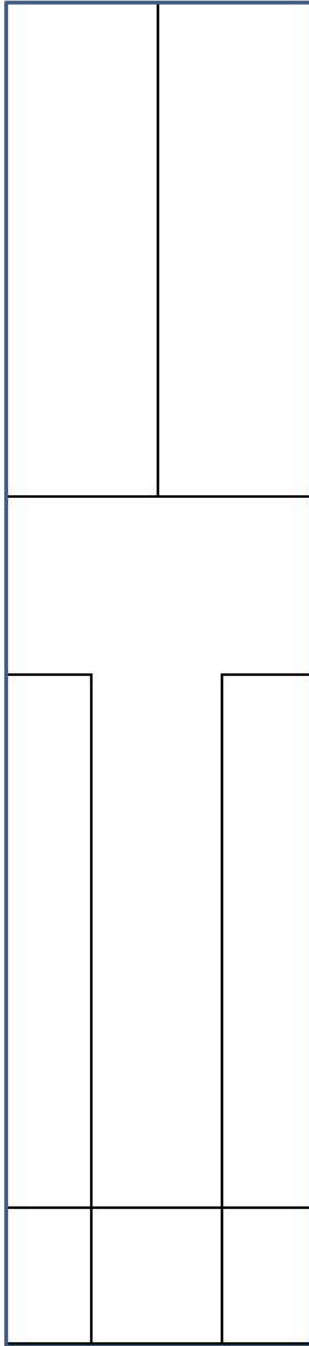
**Data:**

	Displacement (meters)	Time (seconds)	Speed (d / t)
Glider	_____	_____	_____
Fast	_____	_____	_____
Helicopter	_____	_____	_____

Conclusion:

1. Was the speed you calculated the instantaneous speed or average speed? Give the definition of both.
2. You used the displacement instead of the distance. Give the definition of both.
3. Why do you think we should use an airplane launcher (a machine that launches your planes) instead of having us throw our own airplanes?

Instructions



THE PLANE

- Cut on the two middle horizontal lines, and fold in.
- Fold the bottom flap up.
- Cut the vertical line at top to create two flaps.
- For best results, attach a paper clip to the bottom
- Drop and watch it spin!

