

Helicopter Design Company

Name _____

Date _____

Period _____

Information: You will be testing different designs of helicopters with the goal of determining which of the four designs will fall from the ceiling to the ground the slowest.

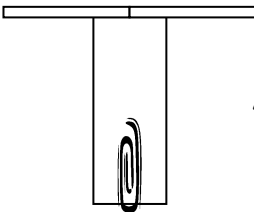
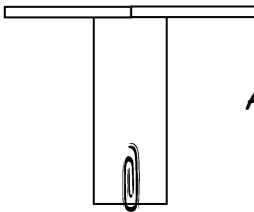
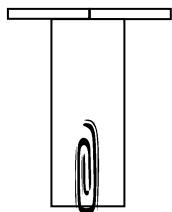
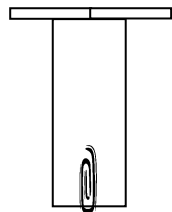
Problem: _____

Hypothesis: _____

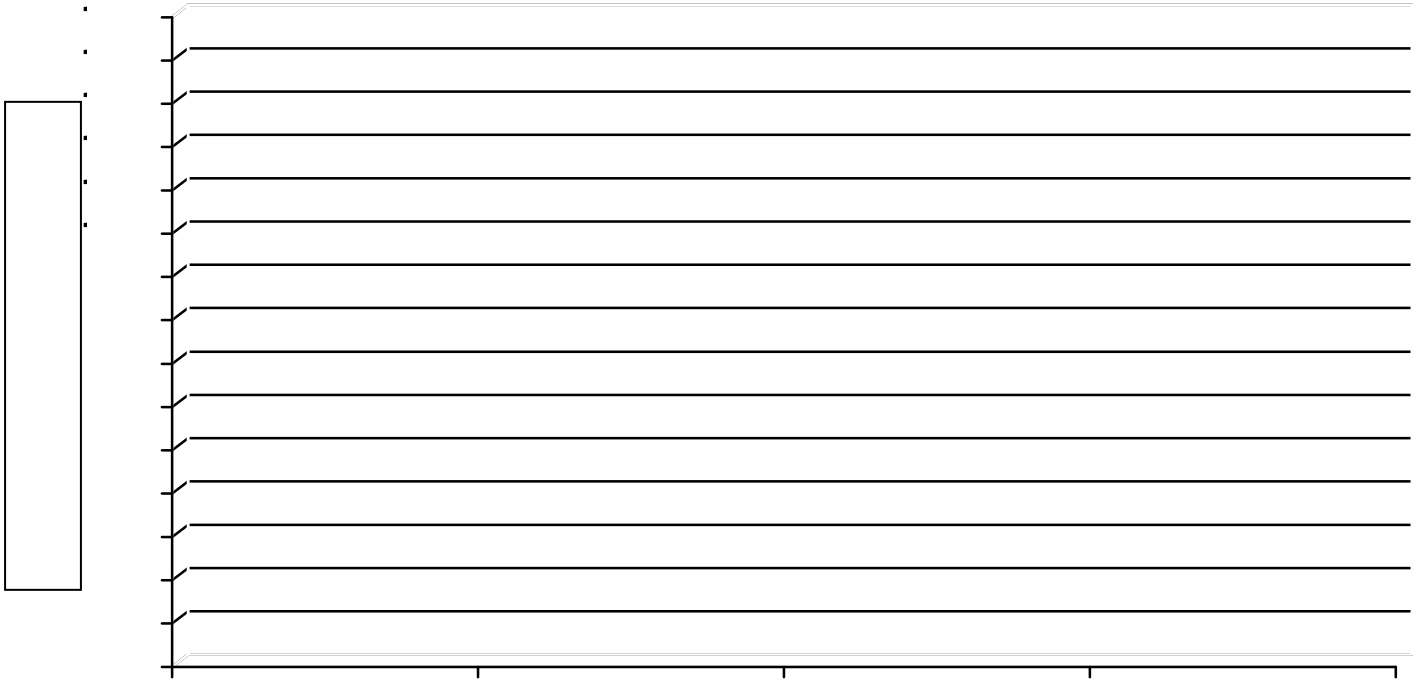
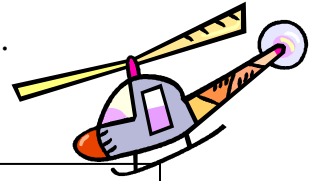
Procedure:

1. Cut out the helicopters by cutting on the dotted lines. Place the scraps in the trash.
2. Bend the wings of the first helicopter in opposite directions, in the shape of a T.
3. Fold the bottom of the helicopter on the fold line and place the large paper clip on it.
4. Test the helicopter, by dropping it, to make sure it spins.
5. Measure the distance from the floor to the ceiling and record in each helicopter design box.
6. Using the stopwatch, measure the time that helicopter design #1 takes to drop from the ceiling to the floor. Record the time in the data table.
7. Drop the helicopter a total of three times from the ceiling and record the time in the data table.

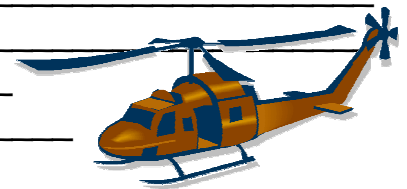


Design #1 - Long wings, large mass  Avg. Speed = _____			Design #2 - Long wings, small mass  Avg. Speed = _____		
D =	T =	S =	D =	T =	S =
D =	T =	S =	D =	T =	S =
D =	T =	S =	D =	T =	S =
Design #3 - Short wings, large mass  Avg. Speed = _____			Design #4 - Short wings, small mass  Avg. Speed = _____		
D =	T =	S =	D =	T =	S =
D =	T =	S =	D =	T =	S =
D =	T =	S =	D =	T =	S =

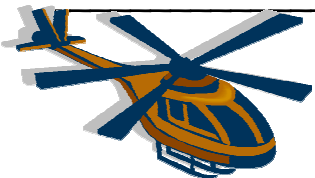
Graph: Draw a bar graph showing each helicopter designs average speed.



Results: (What happened?) _____



Conclusion: (What is the answer? Hypothesis?) _____



Cut on dotted lines.

