Testing Paper Airplanes

1. Construct a paper airplane that will fly.

2. Test your paper airplane.

3. Make any modifications to your airplane that you think will improve its flying.
   
   Describe these modifications:
   
   
   
   

4. Draw a labelled diagram of your paper airplane.

5. Fly your plane and record how well it flew.
   
   Length of flight was ___________ metres
   
   Description of flight ________________________________
6. Increasing the mass of your plane will increase the force of gravity acting upon it. Add paper clips to your plane to investigate how flight is altered. Each time you add a paper clip, describe where you placed it, test the plane, and record how it flew.

First Paper Clip
Position
Length of flight _______________ metres
Description of flight ____________________________

Second Paper Clip
Position
Length of flight _______________ metres
Description of flight ____________________________

Third Paper Clip
Position
Length of flight _______________ metres
Description of flight ____________________________

Fourth Paper Clip
Position
Length of flight _______________ metres
Description of flight ____________________________
7. Describe the effects that the paper clips had on your plane's flight. Use the following terms in your description: mass, gravity, distance, flight.

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8. Based on this investigation, describe what you think are important factors to consider when designing an airplane.

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