

Hiller Aviation Museum Exhibit Safari

Aerodynamics

The Forces of Flight

My Name: _____

Visit Date: _____

Welcome to the Hiller Aviation Museum! Your mission is to scour the main Exhibit Gallery of the Museum on a search for answers to the following questions. All of the answers can be found in the Atrium or on the main floor of the Gallery. Stay with your chaperones and have fun!

1. Both the 1903 Wright Flyer and the 1869 Marriott Avitor had _____ engine(s) and _____ propeller(s).

2. Name three aircraft in the Museum that have pusher propellers.

3. Name two airplanes in the Museum that have tractor propellers.

4. What powered the Avitor?

5. What kind of device was used to stop Eugene Ely's plane when he landed on the cruiser *Pennsylvania* in 1911?

6. What is the biggest difference between the Curtiss biplanes flown by Lincoln Beachey and Eugene Ely?

7. Push the button for the Little Looper's propeller and carefully watch what happens. What moves when the engine runs?

8. What is unusual about the rotor systems for the XH-44 and UH-4 helicopters compared to most helicopters today?

9. Name three ways an Autogiro is different from a Helicopter.

1. _____

2. _____

3. _____

10. The L-39 uses a _____ engine.

11. Why might the Grumman Albatross experience more aerodynamic drag than an airplane that does not have to land in the water?

Congratulations! You did a terrific job!